

Ph.D Thesis

**China-Russia Energy Relations: Geo Politics of Energy
Security in Caspian Sea Region**



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China-Russia Energy Relations: Geo-Politics of Energy Security in Caspian Sea Region



**Thesis Submitted in the Partial Fulfillment
of the Requirements for the Degree of Doctor of Philosophy in
International Relations**

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Declaration

I hereby declare that the thesis, I have submitted for examination for the Ph.D. degree in International Relations is solely my own research work and that it has not been submitted concurrently to any other university for any other degree.

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Dedication

Dedicated to the memory of my father, who left this world just a few days before the completion of my thesis without seeing his daughter becoming a doctor.

Abstract

Energy security has emerged as the defining factor in the twenty-first century China-Russia relations. The recent boom in their energy trade has led them to establish a strong strategic partnership never imagined in the previous century and still unbelievable in many scholarly circles. This study contends that Energy security has tied them in a complex relationship where they interact directly at bilateral levels and indirectly in a multilateral setting. Analysis of this complex two-dimensional relationship is crucial for understanding the impact of the energy sector on their relationship. Energy Security cannot be ensured without diversification of energy trade. Diversification of import routes led China to reduce reliance on the Middle East and Gulf and look for secure sources like Russia and former Soviet republics Kazakhstan and Turkmenistan in its immediate neighborhood. Diversification led Russia to look for new customers in Asia through its Asian pivot and it finds China as the greatest opportunity. Diversification led the Caspian states of Kazakhstan and Turkmenistan to establish close energy trade links with China and reduce dependence on Russian trade infrastructure. The energy security of all of them compelled them to diversify and bind them in a complex relationship, where their energy interests are closely tied with each other. Hence, China and Russia develop a multidimensional energy relationship. Interestingly, energy security has become a paradox. Their energy security not only compliments each other at the bilateral level but also create geostrategic challenges for each other at the multilateral level. This study examines these challenges and prospects, the energy sector has created and analyzes their impact on China-Russia relations. It holds that energy sector development has created more convergence in their bilateral and multilateral interaction contrary to the popular belief. Moreover, it places them in a proper theoretical context, by presenting a new theoretical model of an energy-based regional security complex.

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List of Abbreviations & Acronyms

ACG	Azeri Chirag Gunashli (Oil Field)
APERC	Asia Pacific Energy Research Centre
BBP	Billion Barrels Per day
BCF	Billion Cubic Feet
BCM	Billion Cubic Meter
BP	British Petroleum
BRI	Belt & Road Initiative
BTC	Baku Tbilisi Ceyhan
BTE	Baku Tbilisi Erzurum
CACP	Central Asia Center Pipeline
CACP	Central Asia China Pipeline
CAR	Central Asian Republics
CCP	China Communist Party
CEER	China Energy Efficiency Report
CF	Cubic Feet
CIS	Commonwealth of Independent States
CM	Cubic Meter
CNOOC	China National Offshore Oil Corporation

CNPC	China National Petroleum Corporation
CPC	Caspian Pipeline Consortium
CSTO	Collective Security Treaty Organization
EAEU	Eurasian Economic Union
EEZ	Exclusive Economic Zone
ESPO	Eastern Siberia Pacific Ocean
EC	European Commission
EU	European Union
EIA	Energy Information Administration
FSR	Former Soviet Republics
IEA	International Energy Agency
IMF	International Monetary Fund
KMT	Kou Ming Tang
LNG	Liquefied Natural Gas
MWE	Mega Watt Electricity
NATO	North Atlantic Treaty Organization
NBS	National Bureau of Statistics
NEA	National Energy Agency
OEC	Observatory of Economic Complexity
OECD	Organization for Economic Cooperation & Development

OPEC	Organization of Petroleum Exporting Countries
POS	Power of Siberia
RF	Russian Federation
RSC	Regional Security Complex
SCO	Shanghai Cooperation Organization
SOCAR	State Oil Company of Azerbaijan Republic
TAPI	Turkmenistan Afghanistan Pakistan India Gas Pipeline
TCM	Transmission Control Unit
TCP	Trans Caspian Pipeline
TWH	Tera Watt Hours
USSR	Union of Soviet Socialist Republic
WTA	World Trade Atlas
WITS	World Integrated Trade Solution

Chapter 1

Introduction

1.1 China-Russia Relations and Energy Security

China-Russia relations have always been a highly debated topic of international politics. They never enjoyed a smooth relationship. Their relations have been an interplay of many political, economic, and ideological factors in the last three centuries. Despite a troubled history, both states have been showing significant development in their bilateral relations since the last decade and the energy sector has become the most important factor in defining the contours of their relationship in the twenty-first century. Energy security is fundamental to both China's emergence as a global economic power and the reemergence of Russia as an influential regional power. Nobody can deny the significance of a secure and sustainable energy supply for the strategic strength of a state. Their importance is no less than nuclear weapons of the cold war era (Petersen & Barysch, 2011). The role of energy resources is undeniable in their contemporary relationship.

Oil and gas are equally instrumental for China and Russia but in a different way. China's status as a developed economy considerably depends on the secure supply of energy resources. That is why energy security has become the fundamental objective of its foreign policy (Downs, 2004). China's net import of petroleum resources has surpassed that of the United States of America in 2013 and it has become the largest importer of petroleum resources in the world (EIA, 2014). However, the changing geopolitical situation, especially in the aftermath of 9/11,

has greatly altered the energy security of China for two major reasons. First China overwhelmingly depends on oil supply from the Gulf region, which is an extremely volatile area for security. Secondly, most of its oil supply crosses Malacca Strait a highly vulnerable security zone in the South China Sea. The threat of terrorist attacks, piracy, and most importantly presence of the US, the biggest rival of China in both regions poses a great threat to China's energy security. Diversification of energy trade becomes the greatest priority of China's energy policy in this scenario. This situation has led China to look for more secure suppliers and supply routes. Russian Federation and its former Soviet states of the Caspian Sea region have emerged as an attractive option in this regard (Petersen & Barysch, 2011). This gives two dimensions to the China-Russia relations in the energy sector. One directs at the bilateral level and second an indirect dimension or an interaction in the multilateral setting in the Caspian region. Without an in-depth analysis of their direct and indirect interaction in the energy sector, it is unlikely to understand the impact of the energy sector in their relationship.

China shares a 4500 km long border with Russia and the former Soviet republics of the Caspian Sea region are in its west. Since the start of the new century, China has developed a strong energy relationship, especially with Kazakhstan and Turkmenistan. This region primarily retains its importance due to huge oil and gas reserves and their economies are highly dependent on oil and gas export. Secondly, as FSR (former Soviet Republics), they hold tremendous importance for Russia. The whole energy trade of the Caspian region depends on Russian pipeline infrastructure and in dire need to diversify their energy trade for their energy security. China's emergence in the region has created some good prospects for the energy trade diversification of these states. Moreover, it has created some serious challenges for Russia in the region.

Similarly, Russia depends heavily upon energy trade for its national income, which makes it the largest exporter of gas to Europe and the second-largest producer of hydrocarbon resources in the world after the USA (EIA, 2015). China is the biggest importer of oil and gas and Russia is the largest producer. Moreover, they are geographically contiguous. These facts apparently put them in a straightforward energy trade relationship without any transit from the third country. Their energy security could be the strongest reason for the development of direct and strong energy partnership. On the contrary, equally powerful factors kept them apart from developing a direct partnership for a long period. The statistical data of energy trade shows that their bilateral energy trade took almost two decades after the end of the cold war to develop. The changing geopolitical realities have become the biggest factor in the development of their relationship and the role of the energy sector is pivotal in this regard. Perhaps, the energy sector has appeared to be the backbone of their relationship (Pan, 2006). Their energy security is the strongest reason for the development of a direct and strong partnership.

Russia has always considered itself as a European power. The Atlantics School has been dominant in its foreign policy. This western-oriented foreign policy has great imprints on foreign trade relations as well. Oil and gas are the biggest export commodities in Russia. Its trade has been overwhelmingly routed towards Europe (Bolt, 2010). Russia is the biggest supplier of oil and gas to Europe (Baran, 2007). It provides Europe with almost 30% of oil and 39% of gas requirements (European Commission, 2018). The 21st century brought a noticeable change in Russia's energy policy and overall its foreign policy orientations. Russian president signaled his country's intention to increase oil and gas export towards the east by 2020 (Fernandez, 2009). According to Russia's New Energy Strategy 2030, announced in 2009, it has planned to invest over \$2 trillion for exploration of oil and gas, transportation facilities, and

other infrastructural development destined for Asian markets (Energy Security of Russia 2030, 2010). This politically and economically motivated strategy exhibits Russia's need for securing new markets for its energy security, which has become indispensable after some major changes in EU policy towards Russia. EU has shifted its energy policy towards more use of renewable energy resources. Declining demand for Russian gas and falling oil prices in 1998 and later in 2009 along with the discovery of shale gas between these years presents quite a disappointing picture for Russian energy trade with Europe. In this situation, Russian giant Gas Company Gazprom has come under pressure of the EU to reduce gas prices (Barysch, 2010). Moreover, Russian concerns over the EU's eastern partnership program and other factors have prompted a change in Russian policy towards Asia, a region where China presents a potential market for Russian energy trade. Despite such strong factors, Russia could not develop a single pipeline with China in the first decade after the cold war era and continued its energy trade with Europe. Many experts believe that in its relations with China, Russia feels a strategic imbalance and does not want its status to be reduced to a raw material provider. Besides, Russia's zero-sum approach creates problems in the development of energy ties between Moscow and Beijing. Russia fears that this relationship would benefit Beijing only and widen the gap between Chinese and Russian regional powers (Bedeski & Swanstrom, 2012). On the contrary, the recent developments in their bilateral relations, especially in the energy sector present a completely different picture. The energy trade diversification is their shared interest and consequently, Russia is looking towards Asia in general and China in particular. China is also developing relations with Russia as well as the former Soviet republics of Kazakhstan and Turkmenistan, who possess rich onshore and offshore reserves of oil and gas in the Caspian Sea region.

1.1.1 Importance of Caspian Region States for China and Russia

Caspian Sea region comprises five littoral states including, Kazakhstan, Turkmenistan, Russia, Azerbaijan, and Iran. The focus of this study will be over Russia and the former Soviet republics. This region has gained tremendous importance in regional energy politics due to its vast natural resources especially oil and gas. According to the Energy Information Administration, the Caspian Sea region possesses 48 billion barrels of oil and 292 trillion cubic feet of gas reserves. Moreover, another 20 billion barrels of oil and 243 trillion cubic feet gas reserves are still unexplored (EIA, 2013). The estimated production of oil from this region is around 2.6 million barrels per day according to EIA. Kazakhstan and Azerbaijan are two major oil producers while Turkmenistan produces natural gas on a large scale. Tengiz oil field in Kazakhstan is the most important oil reserve, along with the Azeri-Chirag Gunashli field of Azerbaijan. The development of the Shah Deniz gas field in Azerbaijan will increase its share of gas production as well. Turkmenistan's Galkynsh gas field is the fourth-largest gas reserve in the world (Pototskaya, 2004). With such a rich energy sector, the Caspian region presents a potential supply source for China's energy-hungry economy and economic and strategic strength to Russia.

China's transition from closed to open market economy has provided a boom to its economy. The industrialization of the Chinese economy has skyrocketed its energy consumption. It has restructured its coal, oil, and gas sector in 1998. China's domestically produced coal has been the major source of energy for its economy. However, due to the huge environmental impact of carbon emissions, coal's proportion in the Chinese energy sector has decreased from 94% in 1953 to 73% in the early 21st century. Meanwhile, the consumption of oil has increased from 4% to 23% in the same period (Sinton & Fridley, 2010). China has been dependent on imported

oil from the Middle East region. However, due to the volatile security situation in the Middle East and the vulnerability of the oil shipment from Malacca Strait, China has started looking at alternate sources of oil and gas supply. Thus, the Caspian region located in the immediate western neighborhood has attracted Chinese attention.

Caspian region's states are equally important for the Russian Federation. Once part of the USSR and still under considerable Russian influence, Moscow considers it as its traditional sphere of influence (Croissant & Bulent, 1999). It used to provide a great amount of oil and gas for export to Europe through the Soviet era's extensive pipeline system. The independence of these states has caused a big loss for the Russian energy sector (Rumer, 2006). Nonetheless, Russia applies several strategies to maintain control over the Caspian energy sector for its own energy security. The energy trade infrastructure of the Caspian region remained intertwined with Russia even after its independence (Hancock, 2008). Russia vehemently opposes any alternate proposal for the outflow of oil and gas from the region. While taking advantage of their infrastructural weakness, Russia has signed long-term oil and gas supply deals with all regional states on concessional prices (Blank, 2007). It serves two purposes for Russia; energy security and strategic supremacy. The cost of extraction of oil and gas from Caspian is much cheaper than the exploration and development of new reserves in Russia. These agreements help Russia in upholding domestic subsidies, which are unlikely otherwise. Secondly, it strengthens the Russian monopoly over the energy sector of the Caspian region and eventually Russian strategic position in the region.

Despite Russia's stronghold over the Caspian region's energy sector, all regional states are eager to diversify their oil and gas trade. However, Russia's growing assertiveness, wars in Georgia and Ukraine, and the Russia-Turkmenistan gas row of 2009 have made it critical for

the Caspian states to diversify their energy trade. This provides an ideal situation for China, who is already looking for new oil and gas sources to jump into the Caspian market and grab this opportunity. This situation binds Russia, Caspian states, and China into a regional energy security complex. A hub where converging and diverging interests meet and create an interdependence of energy security among them.

1.1.2 The Rationale of the Study

Energy Security is one of the most important aspects of contemporary world politics. Military security and territorial defense are not the only important dimensions of security today. Its significance for a rising China and increasingly assertive Russia cannot be denied. This study seeks to analyze the challenges created by the energy trade diversification policies of these states on their energy security and how this politics of energy security might affect China-Russia relations? Caspian Sea region is vital for both powers, but for different reasons. In this situation, it is important to know the competing interests of China and Russia and their impact on their relations in this region. This study will try to analyze the impact of diversification policies of China, Russia, and the Caspian states over their energy security and their relationship. It will also investigate the converging and diverging interests of China and Russia in the energy sector at bilateral and multilateral levels. Another important aspect of this study is that. It asserts that the energy sector, contrary to popular belief presents more prospects for cooperation than the conflict between China and Russia in the Caspian region and Caspian states must adopt a balanced and pragmatic energy relationship with two giant neighbors.

Another significant aspect of this study is the securitization of the energy sector. As there is still some disagreement that whether energy is an issue of security or not. And little work is available on the energy sector securitization. Moreover, This study is a humble effort as a reappraisal of

Regional security complex theory by applying a sectoral approach to present the Caspian Sea region as an energy-based security complex. It uses a theoretical model of two theories of Copenhagen school, the securitization theory, and the theory of regional security complex.

Moreover, this would be perhaps the first study that will present the Caspian Sea region as a sub-regional security complex. Regional Security Complex theory has been discussed in the context of Russia and adjacent states of Central Asia and the Caucasus and Russia with the EU. Not many studies are available which include Caspian regional states (Kazakhstan and Turkmenistan from Central Asia and Azerbaijan from the Caucasus) comprising unique geography and tying them into one security complex. The rationale behind the selection of these states is their commonality in hydrocarbon resources and its relevance to all levels of analysis in the Regional Security Complex theory. Besides, challenges, threats, and prospects of a regional security complex considering China would be an exclusive feature of this study.

1.1.3 Statement of the Problem

China-Russia relations have crossed a strategic threshold, thanks to unprecedented cooperation in the energy sector. Their bilateral ties, as well as an indirect interaction in the Caspian states, presents more prospects of cooperation than conflict. Put it differently, convergence seems to be dominant than divergence. It also represents a confluence of the eastward approach of Russia and the westward approach of China for the diversification of energy trade. The diversification of energy trade is creating some challenges for the energy security of the Caspian Sea region in the presence of multiple powerful actors in the region. Nonetheless, this complex scenario presents some shared interests and opportunities for both Russia and China to solidify their strategic partnership for shared views. Moreover, the energy politics of the Caspian region involving Russia

and China need to be looked at in an entirely different perspective away from conflict and more in the prism of cooperation.

1.1.4 Objective of the Study

This research project will pursue the following objectives:

- i- To examine the impacts of energy trade diversification on the energy security of China and Russia.
- ii- To analyze the impact of the energy sector on China-Russia relations bilaterally and at multilateral levels in the Caspian Sea region.
- iii- To assess the possible converging and diverging interests on their bilateral relations and overall regional security complex;
- iv- To examine the role of Caspian region states in this energy politics between two adjacent powers;
- v- To explore the impact of interdependence between China and resource-rich states, and Russia and Caspian region states;
- vi- To evaluate the strategic implications of this energy politics for Russia and China.

1.1.5 Research Questions

The following questions would guide this study. The main questions are:

- 1- How the energy sector has emerged as the biggest factor in determining contemporary China-Russia relations?
- 2- Why energy trade diversification is crucial for the energy security of China, Russia, and the Caspian states?
- 3- How does the convergence and divergence of interests between China and Russia emerge over energy issues in the Caspian region?

4- What are the implications of their competing and shared interests related to energy on the China-Russia bilateral relations?

1.1.6 Significance of the Study

There is a common perception that China and Russia relations are shallow and cannot form a solid base. Even the recent developments in their relations are seen with suspicions. Therefore, this study is significant in two ways. First, it will try to examine contemporary China-Russia relations with a specific focus on the energy sector, which is playing an incremental role in strengthening their relations. Secondly, most of the studies on China-Russia relations present a one-sided view of their relations in the energy sector, either focusing on the bilateral level or their involvement in the energy politics of Central Asia or the other post -Soviet states. This study is significant in the sense that it does not circumscribe itself to only one level of analysis. It encompasses every level of their interaction in the energy sector, direct at the bilateral level and indirect in another region. Thus, it is a humble effort to present a complete picture of China-Russia relations to explore whether the recent developments are meaningful or not.

It will be useful to see the impact of this energy politics of this region with special emphasis on the position of China that is a rising power, and Russia which is an emerging regional power. Their conflict or cooperation will define the future contours of regional stability.

Another significance of this study is that it will present a theoretical model of an energy security complex involving Russia and its energy-rich former Soviet republics of the Caspian Sea region along with China. The energy security of all states under discussion is interrelated. Existing literature on Regional Security Complex mostly deals with Russia and Central Asia, Russia and Caucasus, or Russia and EU in a regional security complex. Moreover, there are very few attempts made to securitize the energy sector of this region. Perhaps, this will be one of the very

few attempts of its kind to discuss a unique geographic entity as a regional security complex involving two major powers. The reason behind it the geographic adjacency of all state and shared interests of energy security. Diversification emerges out as the main theme behind this concert of these states in the energy sector.

This study would be significant for Russian and Chinese policymakers as well. It would point out the vulnerabilities of China-Russia energy relations and highlight more avenues for cooperation and for removing misunderstanding regarding their conflicts. Moreover, it would help them to find ways of avoiding conflict and adopt policies that ensure energy security for all.

1.1.7 Delimitation of the Study

This research project will focus on 21st-century energy politics and energy security issues of China, Russia, and the Caspian region. It will present them as a regional security complex, as all of them are adjacent to each other not only geographically but politically, socially, economically, and especially in the field of energy. Although, Caspian region comprises five littoral states of the Caspian Sea; Russia, Kazakhstan, Turkmenistan, Azerbaijan, and Iran. This research study will focus on post-Soviet states and Russia from the Caspian region states. In the presence of multiple security issues including military security, geostrategic, and economic security, this research will restrict itself to energy security issues. Multiple energy resources play their roles in economic development including oil, gas, coal, hydropower, and nuclear power. The focus of this study will be on oil and gas among other energy resources. China-Russia energy relations in the 21st century would be the highlight of this project.

1.1.8 Operational Definition of Major Terms

Energy Security: Energy Security is defined as an uninterrupted supply of energy resources for economic development (International Energy Agency, 2017). Some countries depend on imported oil and gas. Their main concern remains secure supply sources and routes (Tippee, 2012). Energy includes all modes of energy like oil, gas, hydropower, wind energy, and nuclear energy. However, this work will focus on oil and gas resources for energy security.

Caspian Sea Regional States: Geographically, Caspian Sea regional states are five littoral states of the Caspian region. They include Russia, Kazakhstan, Turkmenistan, Azerbaijan, and Iran. In this study, Russia and four former Soviet states will be discussed.

Sustainable Energy Supply: World Bank defines Sustainable Energy Supply as a universal availability of uninterrupted energy supply to all people (World Bank, 2013). This research study will focus primarily on sustainable energy supply in terms of oil and gas supply to states under discussion.

Eurasianism: Marlene Laruelle, from John Hopkins University, defines Eurasianism as an ideology that asserts Russia as part of Europe and Asia both (Klump, 2011). Here Russian Eurasianism would be regarded as a Russian approach to balancing its relations between Asia and Europe.

Atlanticist Approach: According to the Merriam Webster dictionary, the Atlanticist approach is defined as military cooperation among European Nations and the USA. However, if we look at the history of Russian foreign relations, it is evident that Russian politics have always been Euro-centric. This is called the Russian Atlanticist approach.

China's economic transition: China was a communist country with a closed economy. In 1978, Deng Xiaoping the leader of China's Communist party introduced economic reforms and adopted an open market economy. This process of Chinese economic transformation from a closed economy to an open market economy is called China's economic transition.

Rapprochement: According to the Cambridge dictionary rapprochement means "an agreement reached by opposing parties" (Oxford Dictionary, 2017). This term is frequently used for China-Russia relations in the 21st century. Both have a history of rivalry and antagonism. Recent development towards a good relationship is described as China-Russia rapprochement.

Energy trade diversification: Energy trade diversification is used to describe two aspects of energy trade. One is to find multiple options for obtaining energy supplies. Secondly, the construction of multiple pipeline routes to supply energy resources to different regions (Ross, 2014). China wants to diversify its energy import to reduce reliance on Middle-Eastern oil. While the Caspian region states want to build new pipelines to avail more options for energy export. They want to reduce their dependence on the Russian pipelines system, the only available option for them at the time of independence.

Regional Security Complex: A regional security complex is defined as a cluster of states where multiple adjacent states are tied in an interdependent security relationship (Buzan & Waeaver, 2003). In the same way, an energy security complex would be a cluster of states where an energy interdependence exists. Moreover, their energy security is strongly tied to the energy security of other states.

1.2 Literature Review

The complex nature of Sino-Russian relations and their energy security requires a multidimensional review of existing literature. It is pertinent to have an in-depth look at the writing of Chinese, Russian, and western energy experts on this issue. This literature review will categorize the topic into China-Russian bilateral energy security literature, their indirect relationship in the Caspian Sea region, and the impact of competition there. Besides, a theoretical explanation of this phenomenon in the existing literature would be incorporated. A lot of literature exists over China-Russia relations, their economic and energy relations in post-Soviet states. However, most of the writings are restricted to one aspect of their relationship in the energy sector. This study envisages that without analyzing the energy interaction at all levels it is unlikely to present a complete picture of China-Russia relations.

1.2.1 China, Russia, Caspian Region, and Energy Politics

China-Russia relations have become a major concern of the west in the 21st century. Apparently, this relationship looks like a “well-choreographed dance but the steps of this dance are not completely agreed on.” While providing a historical account of Sino-Russian relations, Bolt feels that there is a history of mistrust, rivalry, and suspicions between the two states, which still creates problems for a smooth relationship. He considers too many aspects at one time, including energy, economic, and defense relations. He also looks at their western links and their impact on the bilateral relationship (Bolt & Sharyl, 2010).

Similarly, Dmitri Trenin builds his argument about their relationship in the 21st century on an imbalanced strategic position they used to have in the 20th century; a relationship that has seen many ups and downs, a “partners turned enemy turned friend”. Despite this unbalanced nature, Trenin presents an optimistic view of their ties. He sees great potential for cooperation in the

fields of trade, economy, defense, and especially energy, but is also skeptical of their self-perceptions regarding their role in the region and world at large (Trenin, 2012). Still, pessimism is dominant in his views regarding China-Russia relations.

The strategic imbalance has mostly prevailed in their relationship in Russia's favor in the 20th century. However, the end of the cold war and the 21st century have turned this balance in China's favor. Russia's decline from the position of superpower to a second-tier or regional power has caused a strong feeling of insecurity from many international actors including China. However, some positive aspects are also visible in their relationship. They share common views regarding the international political system, opposition to uni-polarity and the US hegemony, support for multi-polar world order. Both are suspicious about the EU's eastern partnership program, and the US involvement in Asian affairs. This similarity of views is paradoxical. On the one hand, it provides an ideal condition for a strong partnership. However, it makes evident, that this relationship is political and strategic in nature. It does not represent any strong support for international norms, values, and vision for the international system (Ferguson, 2012). Many experts fail to grasp that this commonality of views led them to forget the mistrust of the past and build a strong strategic partnership through energy sector cooperation.

Jennifer Anderson put it differently. Although, they established a “strategic relationship” in 1996. They pledged to enhance this partnership, including demilitarization of borders, regular meetings at the highest levels, and an increase in trade up-to \$20 billion until the end of the 20th century. Contrary to their expectations, strategic imbalance continued to affect this “strategic relationship”. Moreover, the changing dynamics of post-cold war world politics created more security concerns (Anderson, 1997). His analysis of this spectrum establishes that differences have always existed. Their relationship is not as solid as it seems to be. The

divergence of interests is becoming more visible over time. However, this relationship can be analyzed by categorizing them into three levels. The first level is bilateralism, where some cooperation and friendship agreements have been signed, resolution of border disputes were used to enhance mutual understanding. The second level is a multilateral level, where participation in multilateral organizations have driven their cooperation forward in the fields of security, trade, and energy. The third level is where they develop the above-mentioned similarity of views about different issues of world politics. Peter Ferdinand shows some optimism and supports this idea (Ferdinand, 2007). Instead of building a strong relationship, they have been trying to get the advantage of their so-called strategic partnership in their dealings with the west. Bobo Lo calls it “axis of convenience” (Lo, 2009). Similar views are shared by many others (Deng, 2007). This skepticism about Sino Russian ties is usually found in western academia. On the other hand, most of the Chinese and Russian experts share more positivity regarding their relations. It is a fact that their strategic partnership could not achieve its pinnacle earlier. Also, many authors have tried to find out the specific reason behind this aspect. Nevertheless, their analysis is still lingering around this view.

As we know, many new dimensions have been added to the geostrategic competitions of the 21st century. Now, international politics does not revolve around military power only. Economic competition has gained equal importance (Dittmer, 2001). A weak economic base seems to be the real cause of security vulnerability in China-Russia relations. They have never been able to foster their bilateral trade. Russia has better trade relations with Europe historically. It has always considered itself as a European power. The Atlanticist school has been dominant in its foreign policy. Eurasianism is a relatively new approach for them. That is why Russia could not make strong roots in Asia (Marlene, 2008). Russia could not establish such a strong

political-economic and cultural link in Asia and especially with China as they have with Europe. Only recently, it has made some serious advances towards China but its efforts have not brought much change in the already prevailing perception regarding its new approach. Therefore, this makes some authors believe that China-Russia economic relations are not as strong as they should be. They realize the importance of energy resources for their economic development. However, in the views of most of the western authors of China-Russia relations, perhaps, the real divergence exists here in the field of energy. Most of the Chinese scholars do not augment this view (Bin, 2007). China's rise as an economic superpower and Russia's re-emergence as a noticeable power are attributes of energy resources. Conversely, this energy sector is considered as the biggest reason behind the recent consolidation of relations. However, mistrust and suspicions are not fully removed.

In Dittmer's views, this divergence can be tackled by the development of new avenues of cooperation, which can bear fruitful results through institutionalization. Some Russian authors share the same optimism. Russia and China must provide a firm economic base for their relationship. This would provide a substantive boost to the Russian economy and strengthen its strategic position to meet the challenges of rising China. Otherwise, it would become a major security concern for Russia and they would form a weaker strategic partnership.

Alexandros Petersen and Katinka have shared similar views regarding the importance of energy. However, they too share the pessimistic approach of many others. There is no doubt that some misunderstandings and differences of approach and opinion exists in every bilateral and multilateral relationship between states. But, their relations may take turns for worse or better. Any state relationship cannot be analyzed in the context of the past only. Current realities

matter a lot. And the analysis of China-Russia relations must be discussed in some new perspective to judge contemporary issues and development.

Reiterating the importance of the energy sector, there is no doubt that economic and energy security has gained equal importance as “nuclear weapons” (Peterson & Barysch, 2011). Energy is crucial for both. For China, it is the backbone of its thriving economy. It is equally significant for Russia’s re-emergence as a regional power. Thus, the energy sector has the potential to become a strength for their ties. Ironically, statistical data provides a gloomy picture of their energy links after the cold war. Whatever small-scale relation they could develop, hardly survived the test of 9/11, the Russia-Georgia war, and the Ukraine crisis, due to China’s neutral approach. It shows that China has strategic particularly energy interests in Russia, and does not want to disrupt them. Russia might become a potential source of oil and gas to China (Turner, 2011).

Now the main argument of this research study about Russia-China energy security that has led them to grasp the potential of the energy sector for their bilateral relations requires attention. Energy-security urge and diversification strategy lead this review to the next step of multilateral interaction in the energy sector. To put it in a straightforward way, China and Russia are also tied in an indirect energy relationship. The volume of their bilateral energy trade was remarkably low in the late 1990s and early new century. This low level became more explicit during the financial crisis of 2009 when Russia suffered a major setback due to low oil prices and predominantly west oriented energy trade. It was a financial blow to Russia and the whole of Europe and America. This financial crisis hit the petroleum sector severely. Sagging oil prices brought a substantial shift in Russian energy policy. Russia felt a severe need for diversification of energy trade (Mankoff, 2009). It readjusted its energy policy towards China

under the financial crisis. Eurasian approach finally emerged in Russian foreign policy and became evident in energy policy as well (Ballacque, 2010). China could provide a strategic advantage to Russia through this special relationship. Moreover, China has established its energy ties with the post-Soviet states already. Russia's opportunism, as well as optimism, was evident in its Asian pivot. However, in academic circles, it was seen with more suspicion as an anti-western act. Therefore, the strategic significance of this move could not be harnessed completely.

Erica Down describes the evolution of indirect relationships in the energy sector, the most critical point in the energy politics of the Post-Soviet states. At this juncture, both powers tie themselves in an indirect energy relation (Downs, 2010). She believes that Russia's short-term approach paved the way for the Caspian states to establish strong relations with China. In James Wilson's view, Russian President Putin pledges to build a huge oil and gas Pipelines with China, was a testing time for Russian foreign and energy policy. As soon as Russian economic conditions got better, it became reluctant to do so. This shows Russian priorities of short-term gains in oil trade rather than establishing a long-term energy trade partnership. The former-Soviet states of the Caspian region, especially Kazakhstan, Turkmenistan, and Azerbaijan took advantage of this scenario and established a long-term energy partnership with China. It presents another significant development in Andrei Kazantsev's opinion, an expert on Russia and post-Soviet states. In his views, the emergence of Putin on the Russian political scene is marked by great economic and political changes. Russia adopted the policy of the re-integration of the post-Soviet region. Control of energy resources was instrumental in this regard. Andrei views the Putin era as the turning point for the Russian Federation. It tried to improve bilateral trade and energy ties with the neighboring states. It also enhanced cooperation through

multilateral institutions, like SCO and CSTO to elevate its stature in the region. Putin set strategic priorities and energy security became a top priority. However, it failed to define priorities for regions. It failed to comprehend the potential of energy trade with China on the one hand and could not avoid the Caspian region's states slipping into Chinese sway on the other hand (Sakwa, 2009). Very few experts have stressed the energy links between Russia and China and the potential of energy trade between China and Caspian states and their possible benefits for the region. However, lots of attention has been paid to the potential conflicts that could be triggered due to competing interests and their possible damage to the whole region.

To determine the geographical definition of Caspian Sea regional states and their importance, Moshe Gammer has given an extensive detail on the geography, political, geostrategic, and economic importance of the region. He tries to magnify this region among the states called as post-Soviet states, like Central Asia and the Caucasus. In between these two regions, five littoral states of the Caspian Sea are located. It includes Russia, Kazakhstan, Turkmenistan, Azerbaijan, and Iran. This study will focus on the former Soviet states. Moshe looks at its importance for China and Russia in detail. To diversify its energy trade and get rid of the Russian monopoly over infrastructure, China has become the most important country for Caspian states. Russia looks at this new energy policy and re-orientation of its foreign policy as a great threat to its historical influence in the region (Gammer, 2004).

R Hrair, Dekmejian, and Hovann H, Simonian in their book provide another aspect of the Caspian region's energy politics. They discuss the US and the EU as competitors and external actors in the region. To understand the multiple interests in the region, they too consider the energy resources of a relatively poor region as the main factor. They further highlight the

reasons that make Caspian states dependent on external factors in the region, making the whole scenario vulnerable to energy security (Dekmejian & Simonian, 2003).

China's energy security is equally important as of Russia. The fastest-growing economy in the world is increasingly dependent on imported energy resources. Huanying Cui has tried to look at China's booming economy and its energy vulnerabilities in detail. According to Cui, the use of oil and gas is increasing in China's industrial sector. Due to environmental damage, China is decreasing the use of coal. In the absence of enough oil and gas resources of its own and vulnerability of oil import through Malacca Strait, it has started focusing on alternate regions. Caspian region's states provide the best option for securing energy supply (Cui, 2016). All these studies represent one aspect of China Russia relations in multilateral settings, again missing a comprehensive analysis at all levels. They are more focused on empirical observations and miss the theoretical aspect of interdependence in the energy sector and joints interests and opportunities,

Energy securities of different states collide in the Caspian region and threaten regional energy security as well. This interesting aspect has been termed as the "Great Game" of the 21st century. Despite conceding the fact that their energy security is tied with each other, hardly any attempt is made to theorize this specific region as an energy security complex.

Alec Rasizade provides a contradictory account. He believes that Caspian energy resources are not in abundance as they are portrayed. An in-depth analysis of his work raises many questions about the Caspian energy sector. One possible explanation for his reservations might be that very few resources have been fully developed. Most of the resources are offshore resources lying beneath the Caspian basin and yet to be developed. Controversy over the legal status and

territorial claims are major factors behind it. Alec Rasizade does not agree with the estimates of western sources regarding the energy reserves (Rasizade, 2005).

Mehdi Parvizi Aminah and Henk Houweling develop an interesting framework to analyze the energy security, which can be further applied to the Caspian region case study and energy security of states in this security complex. In the author's opinion, Energy security can be studied at two levels: demand and securing supplies. Demand in the author's view develops either due to;

- (i) Scarce domestic resources or (ii) Increase in demand

Similarly, supply can be secured through different strategies, through conquest or power, or through domination and legally changing the property ownership laws. This is perhaps the best suitable explanation for China and Russia's demand and supply strategies (Aminah & Houweling, 2003). The demand and supply structure has a lot of importance for energy security.

Another article written by Jan H Kalichi links the demand and supply strategies to the political and economic gains of the big powers. It discusses how the economic crisis of 1998 and fall in oil prices and then a sudden rise in prices in early 2000 changed the energy security strategy of Russia for economic gains and political advantage. He also focuses on the western projects for the construction of new transit pipelines under the Caspian and the Black Sea to provide a western perspective contrary to Russian policy. However, he stresses the need for a regional or international energy security strategy instead of only national (Kalichi, 2001).

Hooshang Amirahmadi has done a remarkable job in the field of Caspian energy politics. He comes up with some solution and emphasizes cooperation in the greater interest of the region. In his view, settlement of the legal status of the Caspian Sea would help greatly in ushering a new era of cooperation and development in the region (Amirahmadi, 2000). Energy security in

Paul Kubicek's view has provided the major powers a new arena of maneuvering especially in the post 9/11 era. In his opinion, "geopolitical pluralism has greatly altered the strategic balance." He believes that among the three major powers China perhaps is in the best position to fully exploit the energy resources of the Caspian region and become the dominant actor in Eurasia (Kubicek, 2013)

China has restructured its energy policy in the 21st century. The transition from coal to oil and gas signifies the changing priorities of the Chinese economy. Pun-Lee Lam has analyzed Chinese economic history since 1978. In his view, structural changes in energy strategy have a great impact on economic relations in near abroad as well as energy and environmental security (Lam, 2005). Yanlin, Yang, Yin E Chen, and Zhi Zhong Liu look at energy security from a different perspective. In their view, changes in energy policy especially the transition from coal to oil and gas has put some constraints on the Chinese economy and energy security. They believe that it would have a great impact on Chinese economic growth in the longer run (Yang et al., 2007).

After reviewing the literature on different aspects of Russian and Chinese energy sectors, it is evident that most of the writings present a conflict-ridden account of their relations. They interact in the post-Soviet region and have almost similar ambitions but different strategies. Younkyoo Kim and Stephen Blank call the Caspian region as a "same bed for Russia and China but with different dreams." Both are following a different agenda for the control of Caspian energy resources. Both are apprehensive about each other's strategies (Kim & Blank, 2013). Stockholm International Peace Research Institute's policy paper written by Linda Jackson, Paul Holtom, Dean Knox, and Jingchao Peng deals with this matter differently. To determine their

energy priorities, they try to find out their converging and diverging interests in the region (Jackson et al., 2011).

1.2.2 Caspian Region, Energy, and Regional Security Complex

In this phase of the literature review, the focus will be on Caspian states as a regional group, theoretical aspects of security, regional security Complex, and its implications for the region.

Most of the writings do not comprehend the theoretical aspect

To analyze China-Russia relations and Energy Security from a theoretical perspective, it is important to understand the concept of security first. Barry Buzan has written extensively on security. In his book “People State and Fear”, he provides an in-depth analysis of the concept of security. He divides the term theoretically and structurally. In his view, neoliberalism and globalism provide contrary accounts of security. Structurally, it can be divided into national, international, and regional security levels (Buzan & Spiers, 1983). In another book, Barry Buzan and Ole Weaver expand the horizon of security studies. They include the new dynamics of the post-cold war era in their writing and give a sectoral account of security. According to Buzan and Weaver, the structure of international politics has considerably changed in the post-cold war era. Economy, environment, and social issues have gained much importance in security studies. Similarly, in an article, Barry Buzan discusses the changing dynamics of security after the cold war. In his opinion, security should be taken in a broader perspective. The traditional notion of military security has lost its importance due to the emergence of new areas of security. He contends that military security provides a very narrow concept of security (Buzan, 1997). They believe that the end of the bipolar world order has reduced the maneuvering space for great powers. A view shared by many authors. They are no more interested in indulging in the politics of every area around the globe. That is why their interests

have increased in regional security affairs. In their view, threats from adjacent states are more important to address. This regional aspect of security binds the states in a security complex at the regional level. They have defined many regional security complexes from every continent. According to Buzan, Russia and post-Soviet states form a Regional Security Complex (Buzan & Waever, 2003). However, this does not pertain to the energy security complex. Moreover, there is still disagreement over the securitization of the energy sector among the experts of securitization theory. That is why very little data is available which securitize the energy sector, that is why no known attempt is made to form an energy security complex by combining the two theories of the Copenhagen school. Despite this, Buzan's theory of regional security complex provides a good theoretical framework to study the post-Soviet states, especially the Caspian region.

Jan Nathan Eyvazov analyzed some other aspects of a regional security complex. He applies it to study the political system of the post-Soviet Space Central Asia and the Caucasus. He examines the validity of this theory for the said region and finally proves that mutual interdependence and conflicting interests bind them together in a security complex (Eyvazov, 2011). Evgeny F Troitskiy in his article assesses the post-Soviet region from the theoretical lens of the security complex and the impact of Russian and US policies over the region. A very interesting aspect of this article is that it includes regional and extra-regional states to discuss a security complex. This model provides a good example to examine the role of two adjacent regional powers China and Russia over the Caspian region states (Troitskiy, 2015). Whatever data is available on post-Soviet states from the Regional Security Complex theory perspective, either test Central Asia or the Caucasus region in relations with Russia. Hardly any writing deals with the Caspian region. Several articles have appeared since the beginning of the 21st

century, which are more concerned with the economic, and energy relations among states. However, very little literature is available which could explain energy relations in the context of a security complex.

1.3 Methodology

1.3.1 Qualitative Research

This research study will rely primarily on qualitative data. It will provide an in-depth analysis of available primary and secondary data related to the energy policies of Russia, China, and the Caspian region's states. It will be exploratory in nature. This kind of research is conducted for an understudied phenomenon. The security vulnerability of the energy sector in a regional security complex is an unexplored area. It will explore how the energy sector might raise security issues for the states under discussion. This research would try to figure out the implications of the energy policies of the above-mentioned states over the regional geostrategic situation.

1.3.2 Data Collection

Primary sources: The importance of primary data is indispensable in academic research. Three types of primary data will be used in the study. As the research focuses on energy relations and regional security complex. To comprehend energy security, nationwide energy trade statistics available on official websites will be used. Moreover, regional energy trade data available on the World Bank and IMF websites will be analyzed to explore the growth trends in energy trade. The rise or decline in energy trade and level of cooperation in the energy sector will help to determine whether the energy sector causes a security threat or not. (It is important to remember that the energy sector is the backbone of Caspian region states and Russian economies. And anything essential for the survival of states poses a security threat in a regional security

complex). This will also help in understanding the level of energy interdependence between these states. Which will, in turn, determine whether this specific cluster of states becomes an energy security complex or not? Several research institutes and think tanks are working on the energy politics of these states. (detail of these institutes is given in secondary sources) The following sources (Energy-related research institutes) would be helpful in primary data collection through the interviews of energy experts working there.

Interviews are defined as a mode of conversation that is initiated by the interviewer for some specific objective of collecting research-relevant information and focused on content specified research objectives (Cohen & Manion, 1989). Interviews might be of multiple formats including structured, unstructured, or semi-structured, however, semi-structured interviews are more flexible in generating enlightening ideas, which are particularly suitable while investigating new ideas.

The interviews will be conducted from academics (whose research focuses on Energy politics and security issues) and energy trade policymakers. For this purpose experts from China, Russia, and former Soviet states of the Caspian Sea region, as well as some westerns experts, will be interviewed. The Convenience based sampling method will be applied is the selection of interviewees. This type of sampling is best suitable for data collection from conveniently available members of a population. A tentative list of interviewees has been prepared. The selection of these experts is based on their background in research and accessibility. All of them will be contacted through email and interviews will be conducted through internet sources. Interviews will be semi-structured and based on open-ended questions.

Another important source of primary data will be official documents related to energy policies and trade. This type of data is available on the official websites of states. Official policy

documents like CEER, (China's Energy Efficiency Report), Energy Security of Russia 2030 published in 2010 and other official documents are available on the official website. They provide an insight into their energy policies towards neighboring countries.

Secondary Sources: Many secondary sources will be used in this study. The writings of Chinese, Russian, as well as western authors, will be consulted as secondary sources. Many Chinese language studies, whose English translations are available and English language articles and books written by Chinese, Russian, or western authors will be included to have an in-depth understanding of Chinese policy regarding energy trade with the states under consideration. Such secondary sources are available online in Chinese and Russian research institutions and think tanks whose work solely focus on energy issues, like Oxford Institute for Energy Studies, New Huadu Business School, Fudan University, Center for Energy Economics, and Strategy Studies; Chinese Academy of Sciences (CAS) Institute of Policy and Management (IPM) China. These sources are very useful in providing relevant empirical data for this research. In the same way, some other institutions from Russian and post-Soviet states provide some useful data for the energy policies of their respective governments. Among them, the Energy Research Institute of Russian Academy of Sciences, Centre for Energy and Security Studies Russia, Institute of Strategic Studies Kazakhstan are some other important sources are of utmost importance. To have a clear vision, scholarly articles in journals and books dealing with Chinese and Russian politics and specialized journals in the field of energy will help in exploring the dynamics of energy trade and other issues related to the energy security of concerned states.

1.3.3 Data Analysis

This study would use the thematic analytical method for data analysis. Thematic analysis is one form of qualitative analysis that is applied to analyze, classify, and present some themes related

to the data. This study being qualitative in nature requires understanding and collecting diverse aspects and data. The thematic analysis provides an opportunity for identifying, analyzing, and reporting maximum available patterns or themes within data. Moreover, this analytical method allows flexibility in the selection of a theoretical framework (Virginia, 2006). It minimally organizes and describes the data set in (rich) detail. The thematic analysis provides an opportunity to understand the potential of energy policy and related threats in detail. By using, thematic analysis, a researcher can compare his concepts with the already collected data and the data that will be gathered in a different situation at different times during the project.

To identify themes and patterns in the data corpus, a Deductive or top-down approach will be used. Because this approach works well with the researcher's theoretical and analytical interests in the topic. In addition, the deductive technique would help to explore the theory of Regional Security complex and related phenomena of energy security and test the validity of the theory in given circumstances. Another important step of the thematic analysis is the level of theme identification at the Semantic or Latent level. This research study would use the latent level of themes identification, it would try to identify underlying ideas, meaning, and concepts of different data sets (interviews, above mentioned Official documents of energy policies, and other primary and secondary data).

1.3.4 Plan of Study

The first chapter of this research work is based on the proposal for the work. It entails the major details of the plan of research activity.

The second chapter will provide a theoretical understanding of the topic. It will discuss the topic in the context of Securitization theory to securitize the energy sector of China, Russia, and the

Caspian states. It will also present a new model “regional energy security complex’ to understand the multilateral dimension of China-Russia energy relations in the Caspian region.

The third chapter will be based on understanding the history of China-Russia relations. I will examine the different trends that shaped their relationship in the past. Like many economic, security, and ideological factors have played their role in the last three centuries. Similarly, it is the energy security interest that is determining the nature of their relationship in the twenty-first century highlighting both direct and indirect relationships in the energy sector.

The next three chapters will provide analytical tools for understanding the importance of the energy sector on China-Russia bilateral and multilateral level interaction in the energy sector.

For understanding the importance of energy resources for China, the fourth chapter will look at the dynamics of China’s energy security in detail. It will provide a detailed view of its domestic resources, consumption and production pattern, import dependency, and related challenges. It proves that energy is a matter of security for China that leads it to look for diversified sources. Hence, it is developing a strong energy relationship with Russia and the Caspian region states.

The fifth chapter will discuss the energy security of Russia in the same way as done in the previous chapter. It discusses Russia’s energy profile, detailed account of its energy resources, the export dependency of Russia on the oil and gas sector to highlight the energy as the security issue for Russia too. It will also look at the major issues faced by the Russian Federation in the energy trade with Europe that consequently brought a policy shift in its energy strategy and initiation of the Asian Pivot. It will also describe how diversification becomes a major necessity of Russia too. Hence, this fact creates a complementarity between the energy sectors of both states.

The sixth chapter will focus on the energy sector of the Caspian states. First, it will provide an energy profile of the energy sector of the region. Then it will thoroughly discuss the importance of the Caspian energy resources for the external powers. It will emphasize the role of both adjacent powers China and Russia. The main theme of diversification will be a part of this chapter too. How former Soviet Republics are seeking energy trade diversification to reduce their dependence on the oil and gas export infrastructure of Russia and the emergence of China as the best possible solution to diversification. Furthermore, it will also highlight the energy interests of other forces like the US and the EU. Thus, securitizing the energy sector of the Caspian states on two grounds. First, their resource-based economies are a matter of their survival. Secondly, the interests of strong external actors make it more a security concern

The seventh chapter will be based on the analysis of the above-mentioned chapters. After securitizing the energy sector of all states under discussion, this chapter will analyze the role of the energy sector in this regional energy security complex. The major focus of the chapter will be on the role of the energy sector on China-Russia relations at two levels. It includes the converging and diverging interest of China and Russia in the energy sector at the bilateral level and then at the multilateral level. The multilateral level deals with their indirect interaction in the energy sector in the former Soviet republics of the Caspian Sea region. The objective of this specific chapter is to understand the impact of the energy sector on their relationship from both structural aspects. Moreover, it will determine whether convergence is dominant or divergence is the most important role-playing factor. This will determine the future development of their relations.

The Final chapter will eventually conclude the discussion. It will be based on the major findings and recommendations.

Chapter 2

Theoretical Framework

The analysis of China-Russia's energy interests in the Caspian Sea region and its impact on their bilateral relations, energy security of both powers and regional states requires an all-encompassing theoretical understanding of energy as a security issue for them individually, and at a collective level in the Caspian Sea region.

2.1 The Concept of Security

This study is based on a theoretical model, Regional Energy Security Complex, combining the two theories of the Copenhagen School of Security studies. The theory of Securitization and the theory of the Regional Security Complex. This chapter is divided into two parts.

- i- Whether energy can be securitized? (The analysis of Securitization Theory)
- ii- Whether the Caspian region qualifies as a sub-regional security complex? (The application of Regional Security Complex Theory).

This will help finally to develop a theoretical model of an Energy-based Regional Security Complex.

The first part will analyze the Securitization theory and examine whether the energy issue is a security issue or not. For the theoretical contextualization of the Regional Energy Security Complex, an important task is to securitize the energy sector. In the first part, the whole process of securitization will be analyzed in the context of energy specifically the oil and gas sector. In

the second part of the chapter, the theory of the Regional Security Complex will be applied to the Caspian region at the micro-level in the context of energy security. Thus, this chapter will endeavor to build a regional energy security Complex. Barry Buzan, and Ole Weaver (2003) in their book, “Regions and Powers: The Structure for International Security” have drawn a map of regional security complexes globally. In their work, Russia and its post-Soviet states are described as a super complex consisting of multiple sub-complexes including Balkan, the Baltics, Caucasus, and Central Asia, with their own peculiarities as sub-regional security complex. Although, no consensus has developed yet whether a broader Central Asia region is a security complex or not. Buzan has even tried to discuss South Caucasus and Central Asia combined as a sub-regional security complex. This study will try to analyze it at a more micro level. By carving out the post-Soviet oil and gas-rich states around the Caspian Sea, it will try to explore two important questions.

Security is a multidimensional concept existing since the inception of human civilization and inarguably the most important necessity of every human civilization both at the individual and collective levels. It blankets a range of issues, and themes including military security, (the dominant paradigm among security-related studies), economic security, environmental security, food security, and cybersecurity. It is a causal phenomenon; a direct consequence of a particular behavior of states has become very important for policymakers for multiple reasons. However, there is a fundamental difference between the use of this term in the different schools of thought in international relations (Baldwin, 1997).

2.1.1 Polarization in Security Studies

Security debates have been highly polarized between realist and idealist schools of thought. From national security to human security, many common areas exist in different concepts of

security. Many developments took place in security studies during the cold war and in the post-cold war era. The traditional notions of security revamped and new paradigms emanated from globalization. However, the realism stands on its foundation and believes that states for their self-interests strive for more and more power. Thus, rendering the security of each other (Walt, 2002). With the structural reconfiguration of the world, threat perception underwent a great change and theoretical debate about security entered a new phase. Hence, security is not only a national or global debate, but its regional dimension has also emerged as an important phenomenon of international relations. To understand, its dynamics, it is important to look at security from a wider theoretical perspective.

2.1.2 Realism vs Liberalism

No theory debates security more than realism. Central to the debate of the realist school of thought is the concept of security. Realists consider it a major cause of anarchy in the international system. For them, “self-help” is the only solution. There are two types of realist explanations of, “why security is scant?” are available. For Machiavelli to Morgenthau, it is limited to the concept of “Power” as the intrinsic desire of man arising out of insecurity. EH Carr believes that realism is more concerned with the conflict of interests between the states, the main cause of anarchy. Every state is different from each other in size, wealth, resources, system, and power. Therefore, conflicts seem to be unavoidable (Carr, 1946). In an anarchic situation where security is a core interest of any nation and no nation is ready to sacrifice it, anything that is essential for state survival becomes a security issue. The anarchic situation of the world along with self-interested actors has a direct bearing on security (Baldwin, 1993).

Security relates to the strategy of reducing the threat. Whatever has been written on the topic so far makes it clear that the notion of security is not limited to the use of military force to evade

threats, as it is believed in the security studies. Though, the realism dominates the concept of security but believing in a realist conception of security greatly alter the broad spectrum in which security can be studied. A realist like Henry Kissinger believes security as a core national interest pursued by the state. In his words “how realistically we perceive our national interests’ is a core security concern” (Kissinger, 1976). Nevertheless, his views are seen in the context of the cold war rivalry where the military competition was a dominant issue of security in the polarized global political structure. As far as energy security is, concerned realism might not be able to present a clear insight as it has always been obsessed with military security. Resources, technology, and economic aspects of the international system do not get much attention from realism (Buzan, 1983).

While looking at the above opinion from a broader perspective, this might be applied in both theoretical paradigms. Realism where military threats and power are major security concerns. And liberalism, where individuals and institutions are more important security concerns. This paradigm brings other nontraditional issues into the security orbit. As far as the liberal approach towards security is concerned, it does not negate the idea of the anarchic world system. However, they attribute security as the absence of a central authority in the world system. Moreover, it also differs in its approach to achieving security. Such an approach widens the gap between the two theoretical paradigms about the concept of security. Thus, the political aspects of energy relations are ignored.

There has been a significant emphasis on broadening the concept of security since the 1980s. Further, with the fall of Communism and the establishment of Capitalism, new ideas of security have been added. New dimensions have been added beyond the territorial conflict between nations and the power struggle between polarized power groups of the cold war era (Williams,

1997). The post-1991 development brought a new realization in the world that the security realm should not be limited to the national territorial security of states. The NATO summit of 1991 held in Rome emphasized this while realizing that with the radical changes in the security situation, the opportunities for achieving alliance objectives through political means are greater than ever before. It is now possible to draw all the consequences from the fact that security and stability have political, economic, social, and environmental elements as well as the indispensable defense dimension. Managing the diversity of challenges facing the Alliance requires a broad approach to security (NATO, 1991).

Since the beginning of the twenty-first century, the concept has expanded and become more complex. Increased economic interdependence between states has caused new kinds of security threats for the states. With the emergence of new dilemmas of security, states are more perilous for conflicts over economic resources. Although security is no more limited to military threats and it has incorporated new dimensions, even then it can burst out in a clash between states and convert to a threat to territory or sovereignty of the state. Nonetheless, the shadow of realism cannot be removed altogether from security studies. The non-traditional approach became dominant during the 1990s and it was revived in the wake of the 9/11 terrorist attack.

It is evident that security is a fundamental concern of the world at every level. Human beings, societies and states, and power blocks have always felt threatened by the actions and policies of their rivals. The emergence of an open market economy has altered the concept of security to a great deal. The importance of military security cannot be denied even today, but more avenues have been opened in the sphere of security (Buzan & Weaver, 2003). Economic, social, and environmental security and later, energy security has gained considerable importance in the international system. All these paradigms of security are not isolated but

complement each other. Amongst them, energy security is a relatively new phenomenon, which came to the limelight after the oil crisis of 1970 (Ikenberry, 2009). The traditional concept of security helps us understand how to conceptualize the notion of energy security.

Barry Buzan in his book “People State and Fear” tried to broaden the concept of security from its narrow and polarized base. He tried to incorporate in the security studies new avenues of sectoral and structural analysis. The first time, regional security and issues like environment were brought into the security studies (Buzan, 2008). His approach to security is different and interesting in many respects. The most important aspect of security studies is to securitize a phenomenon as a security issue. Like, the realist has always manifested the military as the most important security issue. The analysis of Buzan’s approach in detail, reveals that securitizing any issue is a construct. Although originally belonging to the English school of thought, when he broadens the horizon of security, he more reflects himself as a pluralist (Stone, 2009).

2.2 Securitizing the Geopolitics of Energy

Security is a complex phenomenon. It can hardly be understood without expanding its boundaries. Unfortunately, there is very little data available and not many attempts have been made to securitize the energy. Whatever discussion available, does not relate the energy to the security issue due to the inclusion of the multifaceted nature of energy resources. For example, electricity is usually considered a domain of a state’s authority and does not necessarily relate outside its sphere. While oil and gas are considered as a strategic resource essential for running the basic state’s infrastructure. However, self-sufficiency is limited in oil and gas due to the uneven geographical distribution of these resources. Therefore, non-renewable energy resources, especially oil and gas, have the potential to enter into the domain of security studies.

During the post-cold war era, security does not remain a mere military issue like cold war times. Moreover, many issues have emerged, threatening the security of not only states but of individuals, institutions, and societies. It seems more probable to securitize the other factors or those issues, which are causing insecurity in the world. To further elaborate, when an existing referent object becomes an issue of survival, it becomes securitized. Securitization is a process that transforms an existing issue, which has become politicized already into a security issue. As far as the issue of energy is concerned. It has all attributes essential for the securitization process.

In this framework, it is useful to look at energy as the issue of national security. Many states around the world are dependent on the revenues generated by the energy sector for their survival. Their national interests are integrated with the energy trade, fluctuating prices of oil gas, and other resources in the international market. The theory of securitization though has expanded a lot in recent times, but still, it is not devoid of the state-centric approach. Whichever issue might be securitized, the ultimate threat facing entity is the state. It is ultimately a state, which strives for the survival, stability, and strength. In the increasingly energy-dependent world, the interaction of states for the energy resources is undeniable. For this purpose, it interacts with other states. Consequently, the conflict of interests arising out of this interaction cannot be overlooked. The example of Russia's energy conflicts with the EU and within its own post-Soviet states are very important. China's huge reliance on imported energy resources is another example. China's recent development and growth cannot be sustained without these resources. This resource dependence and interaction between resource-rich and resource-dependent nations bring with it other important issues of trade and transit, price mechanism so on and so forth.

In Buzan's view, the whole system of international relations revolves around the interaction of states to ensure their security. Therefore, security is defined as the pursuit of freedom from threat and the ability of states and societies to maintain their independent identity and their functional integrity against forces of change which they see as hostile (Buzan, 2008). Moreover, it is equally applicable to all security issues ranging from military security to economic or environmental security or energy security.

Since the oil crisis of the 1970's energy security has become an important phenomenon. Earlier, energy security was equivalent to a safe supply of oil only. However, the military dimension of security remained dominant until the end of the cold war. The events of 9/11 have added a new dimension in energy issues that nonstate actors might be a significant threat to energy security. Secondly, climatic changes and conflicts in the oil-producing regions, and their growing intensity are adding threats to a secure supply of oil. There is another phenomenon that is observed regularly is oil and gas price fluctuation, policies of OPEC states, new agendas, and threats from the major oil and gas suppliers in daily newspapers.

Energy issues have emerged as the forefront of major political and geostrategic debates all around the world, threatening the survival of many states. In the words of Condoleezza Rice, the former US secretary of state "I can tell you that nothing has really taken me aback more as secretary of state than the way that the politics of energy is—I will use the word 'warping'—diplomacy around the world" (Senate, 2006). The frequent fluctuation in oil and gas price globally, disputes over means of transportation and routes, along with the above-mentioned geopolitical and climatic factors, indicate how much nations are dependent on energy. It is evident that energy resources are crucial for the survival of individuals, and states altogether.

2.2.1 The Process of Securitization

As this study is taking the securitization theory and Regional Security Complex theory of the Copenhagen School of thought as preliminary concepts to formulate the energy security complex. We must ensure that the energy sector represents all components of the securitizable issue. The Copenhagen School has presented a complete process of securitization. When an issue is politicized and then accepted by the related audience for taking emergency measures to combat that threat becomes necessary for the concerned authority, it becomes a security concern and securitized. Therefore, to successfully securitize an issue three elements are essential “existential threats, the requirement of emergency action, and its impacts on interrelated states” (Özcan, 2013). Many experts believe that an issue becomes securitized when the political means are not workable. They assume securitization as above politics. However, many believe that we must keep politicization and securitization under the same orbit and consider securitization as a higher level of politicization.



Figure 1: The Securitization Process According to the Copenhagen School (Özcan, 2013).

The above-given figure of the process of securitization is a good attempt from the Copenhagen School to present a graphic image of the process. There are three levels of non-politicized to politicized and then securitized complete the process of securitization.

This model is quite compatible with the energy sector of post-Soviet states of the Caspian region, their energy sector has passed through the whole process. Under Soviet rule, their energy resources were part of a broader national energy sector. During the first decade of independence, their energy sector crossed some major milestones in this securitization process. Earlier their energy sector was well integrated into the Soviet system technologically and for transit. Two major factors brought it one-step forward and were politicized. The realization of the following factors has contributed to the securitization process. They include the realization that they are solely dependent on energy for their survival, an emerging dispute with the Russians over transit and oil and gas price, the involvement of multiple actors in this energy game, and the realization of diversification as a necessity for them. The integrated nature of their energy sector problems and emerging threats from Russia might be considered as one-step further in securitizing the issue. This has led them from the level of politicization to the final level of securitization.

2.2.2 Levels of Analysis

Barry Buzan and Ole Weaver slice the concept of security and present it as a complex idea. Copenhagen School of security studies has done extensive work on security issues. Although, the Copenhagen school does not apply their securitization to the energy sector. Still, there is a lot of debate going on in academia about its application to the energy sector. This study is an attempt to apply the process of securitization in the energy sector. Copenhagen school has done the securitization analysis at two levels.

2.2.3 Structural and Sectoral Levels of Security

Firstly, the sectoral level, which analyzes the security at political, economic, societal, and environmental levels. Secondly, the structural level discusses security at regional and global level securitization under regional security complex. Both levels are helpful to understand the phenomena of energy security in a regional security complex. Together, they define security as “when an issue is presented as posing an existential threat to a designated referent object (Traditionally, but not necessarily the state), incorporating government, territory, and security.” when an issue escalates concerns and becomes a threat it becomes a security issue (Buzan et al., 1998).

At the sectoral level, the security debate originates due to the multifaceted nature of states' relationship with one another. The most compatible sectors for energy are economy and environment (Buzan, 2009). The referent objects in it are not only states but also involved institutions and human security. Moreover, all these are directly related to the energy sector.

As far as the structural approach is concerned, if a state is taken as a referent object, a political, ideological, economic, or environmental threat might become a security issue not only for a state but also for a region or globally. In the same way, energy issues have become a security threat at domestic national, regional, and global levels. When a state perceives an issue as a threat and argues its relative importance among other issues and makes it a priority, then it becomes a politicized issue and eventually regarded as a threat. The energy sector is perceived as a threatening sector in the Caspian Sea region not only as a threat to the national interests of states. Also due to the integrated nature of energy infrastructure and trade, it is a regional security threat too. In this situation, states might claim to reserve the right to deal with that threat in an extraordinary way (Buzan et al., 1998). This applies to the Caspian states and all

actors whose interests are at stake in the region's energy sector. Be it Russia or China or the EU. Keeping in view the above-mentioned discussion, one might conclude that energy security is one such sector, which is related to the interests and capabilities of states and needs to be securitized. This is the sectoral approach to security. After having a comprehensive discussion of what is security? The securitization process and the securitization of the energy sector as a security issue this study moves forward to the next level of its theoretical framework. That is the application of security in a Regional Security Complex.

Before starting a discussion of Regional Security Complex, let the other aspect of "regions" made clear. In a unipolar world system, superpowers find it less attractive to intervene in every world affair, especially outside their own region. Even the remaining major powers do not do so without any incentive. This has constituted a new dimension in security at the regional level. It is strikingly different from that of the cold war (Buzan, 1998). Barry Buzan divides security into two levels: system level and subsystem level. System-level security comprehends the global powers at the global level, while the subsystem level considers lesser powers who are more concerned with security matters within their region (Buzan & Waever, 2003). And it is the capability, which defines a state as a global power or lesser power.

2.3 Regional Security Complex

The second part of this chapter will try to apply the regional Security complex theory on the Caspian Sea region. Barry Buzan in his book "People, state and fear, presents a comprehensive analysis of the theory of "regional security complex". This theory claims that a security complex is formed when the security interests of a group of states are tied and integrated. There is an intense synergy found among the regional states. They frequently interact on regional security matters. Barry Buzan points out an interaction based on "amity and enmity" among the

regional states (Buzan, 2009). By amity, Buzan means a relationship based on friendship and support, and by enmity, a relationship between states based on mutual distrust, and differences. This relationship of amity and enmity stems from historic roots of ethnic, ideological, and political tendencies, border disputes, or diverging interests. The Caspian Sea region has a shared history of Soviet rule (except Iran) and cultural, ethnic, and ideological affiliations. In the post-independence period, their bilateral and multilateral relations were transformed based on their exclusive and shared interests. They also share the impacts of the obsolete political system of the Soviet Union. The authoritative and centralized political systems and resource-based economies are a few of the common features found in the post -Soviet states of the region.

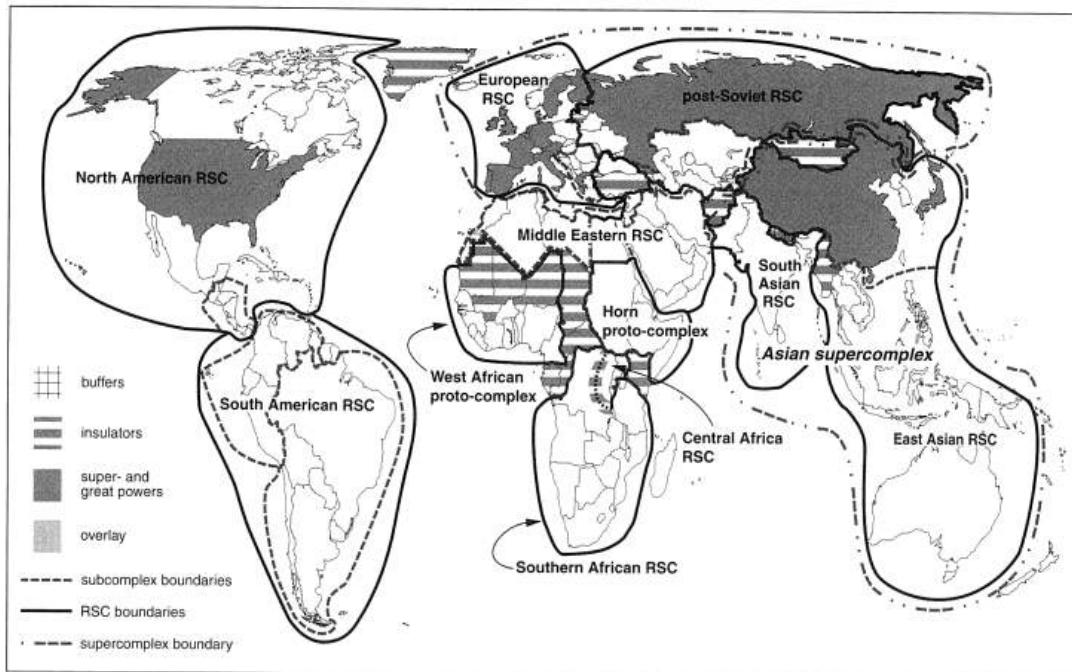


Figure 2: The map of regional security complexes According to the Copenhagen School (Policy Tensor, 2011).

The Soviet-style political system and its impact caused security issues internally, while rich resource endowment attracted the attention of foreign powers caused external security problems. Their dependence on Soviet economic and energy trade infrastructure added to the insecurity.

Before Barry Buzan, the idea of regional security was presented in the theory of “security Community” by famous political scientist Karl Deutsch during the 1950s. His views are similar to Barry Buzan’s regional security in many respects. He deduced that when a group of people or states harmoniously consolidates their relations and resolve their difference without adopting any violent means they become a security community (Vesa, 1999). His theory provides a good basis for extending Barry Buzan’s work on the Regional Security Complex especially in the context of the post-cold war era.

Buzan points out “most of the threats occur from geographically adjacent states. That is why states are required to remain connected with each in security matters. Adjacency is potent for security because many threats travel more easily over a short distance than over a longer one” (Buzan & Wilde, 1998). Thus, adjacent states in a region, which are dependent on each other for their “security” form a regional complex. The regional states around the Caspian Sea are geographically adjacent and share common interests in the integrated energy sector. They also share the same threat perceptions as their immediate neighborhood. Especially, Russia who has been the regional hegemon in the past and currently holds the major energy transportation network as well as the transit routes. Therefore, the first immediate threat to the regional states does not come from far away. It exists there. Their energy sector is collectively vulnerable to interference from Russia. As far as China is concerned, too much dependence over one export destination also causes insecurity. The case of Turkmenistan is very important, whose energy

sector given the extreme dependence on exports to China is getting vulnerable. The involvement of the EU in the region, though beneficial for the states, jeopardizes the Russian and causes additional threats. Moreover, the integrated energy trade system makes them dependent on each other. Therefore, when states are adjacent, share threat perception, which is proportional to their survival, and are interdependent for their energy security form an energy security complex.

Friedberg has supported this view of regional security. He says, historically, states have been more perturbed with their neighbors, suspicious of their policies and dubious of their intentions. In this way, security becomes an issue of interdependence within a region (Friedberg, 1993). Buzan says, “Security is a relational phenomenon.” A state’s security does not exist in a vacuum. It is closely knitted in a system of security interdependence. States are tied together in either friendship or alliance due to fear. He specifies it as a “bond of amity or enmity” (Buzan, 1983). This precedes the concept of “Security Complex.” According to Buzan, relations of states with one another are determined due to security issues. National security cannot be understood without linking it to other states. In this manner, regional security collectively considers the security of every state in a regional setting. It is the case with energy security. We might take this definition and apply it to Russia and post-Soviet states of the Caspian region and China. Caspian region’s proximity to both Russia and China make it a complex case to study the regional security complex. The pattern of amity is found in their external relations more profoundly then inside the region. Similarly, the enmity is also originated from the involvement of external forces in the region. Mainly China, the US, and the EU are the external forces in the region. Russia is not an external force but part of the bigger power struggle in the region. Russia's efforts to maintain its influence with the regional states at bilateral and multilateral levels create both amity and enmity in the regional security complex. Despite their

own uniqueness, and inter-states rivalries all states of the Caspian region face common security threats. As mentioned above, they range from the fragility of their internal political systems, non-state actor's threat to economic energy, and environmental issues. A close examination of their common threat perception makes one thing evident and that threat emanating from the energy sector encompasses all other threats to their internal or external security. Which makes the case of energy very strong to qualify not only for securitization but also for developing a regional energy security Complex.

i- Fragile Political system: a shared internal security threat

The oil and gas-based economies are considered as one of the biggest reason for an inefficient and undemocratic political system the resource curse theory appropriately describes this phenomenon.

ii- Inter-state conflicts & energy

Another very important aspect of the Caspian region's security is that the regional states not only have mutual border disputes but their territorial differences are also related to energy resources. When it comes to the offshore resources of the Sea. The legal dispute on the Caspian Sea legal status is a big obstacle in the exploration of these resources. The energy sector is not a cause of interstate rivalry but also a common threat to their energy security.

iii- The threat from non-state actors

Nonstate actors or terrorists have occurred as a strong security threat for all the states of the Central Asia and Caspian Sea region. Their geographic proximity to Afghanistan, South Asia, and the Middle East region has exacerbated this threat especially after 9/11. They not only pose a threat for internal peace but also for the oil and gas infrastructure, pipelines and oil and gas

reserves, and other related to exploration and transit facilities. The long pipelines stretching across thousands of miles are more susceptible to terrorist attacks. Their security requires huge sums of money and other resources. Any unfortunate event might result in severe financial damage to already struggling economies. Additionally, they might disrupt the oil and gas supply to the consumers.

iv- Threats from External powers

The biggest common threat faced by the Caspian region is again related to the energy sector. The involvement of external powers in the energy sector is the biggest cause of concern. These threats penetrate the region at both regional and global levels.

2.3.1 Levels of Analysis

Now after a lucid analysis of energy sectors relation with every security threat it is almost evident that this region presents a good example of a regional energy security complex. To further elaborate the idea in the light of Barry Buzan's theory, it is important to analyze these threats at three levels of analysis given by Buzan in the Regional Security Complex Theory (Buzan, 2009). He discusses the regional security complex theory by dividing them at structural levels.

2.3.2 The International level of Analysis

The end of the Cold war and the disintegration of Communism did not end the security dilemma for the region. Perhaps, it eventuated a new kind of rivalry in the region called the “second Great Game”. The former-Soviet states attracted a lot of international attention in the post-cold war era due to their geostrategic location at the crossroads of Asia and Europe. Secondly and more importantly, their vast energy resources enticed the attention of external powers. Initially,

during the first decade of independence, this international involvement specifically of the U.S and EU was more focused on the security issues and problems of transition. The problems related to political and economic transitions from a Soviet-style political system to democracy and a centralized economy to an open market economy. Furthermore, the amalgamation of new states within the international community after a long period of isolation was a challenging task for the U.S (Giragosian, 2006).

As far as Russian involvement in the region is concerned. It was very limited initially given the internal political chaos and problems of disintegration. Russia's exigencies to maintain some influence in the region resulted in the establishment of the Commonwealth of Independent States. It assisted considerably in mitigating the civil war in some of its former republics. China's involvement was more focused on the border security issues and eruption of any ethnic conflict in its Uighur autonomous region, which has close ethnic ties with Central Asians. For this purpose, it emphasized the demarcation of borders with the newly established states. Later, China's policy of border settlements and cooperation with the newly independent states resulted in the formation of the Shanghai Five and afterward SCO.

The region's strategic significance amplified after the calamitous events of 9/11 and the initiation of war against terror. The regional juxtaposition to Afghanistan steered the U.S and NATO's arrival in the region and establishment of military bases. Despite extending cooperation to fight terrorism and extremism by China and Russia, both powers did not endorse the US presence in the region. One of the major impacts of international involvement in Afghanistan was the delay of one major gas pipeline scheme. Turkmenistan, Afghanistan, Pakistan India pipeline whose negotiations initiated in the late 1990', has constantly been delayed due to the fragile security situation in Afghanistan. TAPI project was the first major

gas export route aimed at diversification of Turkmen energy trade. The said project also developed severe differences between the US and Russia over the pipeline routes. Similar differences were developed on the proposal of the Trans Caspian pipeline project. Though Russia supported the transit route via Iran, the U.S sanctions against Iran and opposition to the Iranian transit route remained an unresolved issue. The Caspian Pipeline Consortium, Central Asia Center pipeline system, and Atyrau Samara pipeline connect the Central Asian and Caspian oil and gas reserves to the Russian pipeline network for export to Europe. In return, Russia not only collects huge revenues as a transit fee but also maintain gas and oil supply to Europe. As a matter of fact, the US does not require Caspian oil and gas for its energy demand. Its involvement in the region serves a strategic purpose of weakening Russia's control of the region. The energy sector is instrumental in this regard. Thence, the US has always supported the involvement of US companies Chevron and Exxon Mobil in the Kazakhstan energy sector. China's gradual rise in the regions' energy sector added a new dimension to the energy security of the region. Now it controls 24% of Kazakhstan's total oil reserves and more than 80% of Turkmenistan's gas.

The international level of analysis of the Caspian regional energy security complex reveals some important aspects. First, the energy sector is a mutual security concern for all regional states. Which brings it closer to the Regional Security Complex. On the other hand, international involvement has divided the region and most of the agreements in the region's energy sector are controversial as well as making the international involvement more complex.

2.3.3 Domestic Level of Analysis

The Caspian region is prone to the domestic level of insecurities too. The weak political institutions, rampant corruption, and extremism pose a considerable security threat. Similarly,

drug and human trafficking, low levels of economic developments, and unemployment are common security concerns for the states of the region. It is important to link the energy sector as a security threat at the domestic level of analysis too. Given their extreme dependence on oil and gas, export revenues for the economic survival of these states have created stakes in the energy sector. They have a great impact on regime stability in the region. This generates a strong relationship between oil and gas oligarchs of the region and the political elite. Thus, autocratic regimes in the states successfully retain their political role in the states. Secondly, such a relationship prevents them from imposing taxes on the masses; consequently, no strong demand for democracy emerges from the public. Therefore, a dysfunctional government, creeping corruption, and low demand for accountability have become serious domestic security threats to the development of democratic and efficient government structures in oil and gas-rich states (Pomfert, 2011). It is evident that the energy sector despite its glaring importance for the Caspian states presents a shared security dilemma too. This scenario builds a strong case for the establishment of a regional energy security complex,

2.3.4 Regional Level of Analysis

The regional level of analysis is perhaps the most important level to highlight the regional threats to the states of the region. The states of the Caspian Sea region share a considerable number of security threats at the regional level. The most important one again relates to resources. Oil and gas reserves, extraction, transit, and distribution of water resources. Other issues include border conflicts, regional ethnicity inter-regional smuggling, and extremism.

The water distribution in the whole region is so uneven that most of the irrigation resources are located in two upstream states of Tajikistan and Kyrgyzstan. The downstream countries of Turkmenistan, Kazakhstan, and Uzbekistan need water resources in the summer for irrigation

purpose. The water reservoir becomes so important for upstream states in winter for electricity production. They also need hydrocarbon resources from the downstream states to run the electricity-producing plants. This has resulted in a resource conflict between the states of the region. Kazakhstan and Turkmenistan oppose any attempts from downstream states for building water reservoirs. This conflict has exacerbated in the wake of the Rogan dam and Kambar-ata dam construction projects.

The Aral Sea conflict is another such example. Located in the heart of Central Asia, the Aral Sea is considered as the fourth largest inland water body or lake in the world. Two major rivers of the region the Amu Darya and Sayre Darya contribute their water in it. It has been a great source for water and irrigation for the adjoining states since the Soviet era. The Soviet Union initiated the program of water diversion from the Aral Sea in the 1960s greatly disturbing the ecological balance of the Aral. Consequently, the agricultural production is falling and states are rushing towards the drilling of more oil reserves. This, in turn, igniting a resource conflict between the states after independence. Border disputes between the regional states and their proximity to Afghanistan make it more vulnerable to two kinds of threats. One extremism and second drug trafficking. The inability of the regional states to protect their borders have caused serious security concerns for the region.

The Caspian Sea region has emerged as an important source of hydrocarbon resources in the world during the last two decades. More importantly after the shifting of the economic hub of the world to Asia from Europe. The emergence of China as the biggest customer of their oil and gas, new fault lines have emerged on the regional scene due to transit issues. Among the regional states, Kazakhstan shares borders with China, which is emerging as one of the biggest suppliers of oil. China has become the largest export destination for Turkmen gas. But it does

not share a direct border. It requires transit from the regional states. Ironically, transit states are also contenders for their share in exports. Besides, there is always disagreement on the transit fees. The second important regional security threats posed by the energy sector is the legal status of the Caspian Sea.

The rich unexplored offshore oil and gas resources possess tremendous importance for the energy security of the regional states. However, in the absence of a legal regime and undemarcated territorial boundaries and seabed, conflicts have developed between all regional states. Turkmenistan and Azerbaijan have developed a heated conflict in 1997 and again in 2012. All these security threats at the regional level make this region an important case for the study of an energy-based regional security complex.

2.4 Conclusion: The Caspian Region: A Regional Energy Security Complex

The theory of Securitization and Regional Security Complex combines perhaps provides the most appropriate explanation of energy security of the Caspian Sea region. The securitization theory in international relations deals with the procedure of converting an issue into a security concern. While RSC is defined as a “group of states whose major security concerns are tied so closely that their national securities cannot be realistically considered apart from each other” (Buzan & Waever, 2003). The main argument of the securitization theory is “the pursuit of freedom from threat and the ability of states to maintain their independence (Buzan, 1983). While regional Security Complex discusses the threats of geographic proximity that makes security an issue of interdependence. In fact, this interdependence increases mutual insecurity in regional clusters (Buzan & Waever, 2003). This explanation is appropriate to understand the energy security of adjacent states. Buzan believes that convergence and divergence of interests play an important role in the formation of such regional clusters. Caspian Sea regional states present a clear picture

of such a cluster where common and rival interests are present and lay the foundation of energy politics between more than two states and forms an energy security complex.

The opposite of security is insecurity or vulnerability. Security strategies are needed to elude insecurity and vulnerability. Security strategy addresses national security internally and international security externally (Buzan, 1983). Moreover, it produces noticeable outcomes when both are combined. This perspective ideally describes Russian and Chinese energy security. Their energy policies are formulated to address internal requirements and their positions at the regional and global levels. Hence, together with internal and external aspects develop a framework that describes why states are required to have uninterrupted energy supply and diversification of supply routes? In this way, it becomes possible to understand their energy policies, their outcomes, and future implications for states.

The theory of the Regional Security Complex combines two approaches; neorealism, and constructivism in its discussion. When it talks about power distribution at the territorial level, it complements neorealism. However, there is a divergence from neorealism as well. The neorealist examines security at the global level. This is called a material aspect of a regional security complex, as it talks about material capabilities attached to security. From the constructivist point of view, regional security corresponds to the political process undertaken by actors or the political behavior of states. This does not associate security with material capabilities. Energy security is directly related to economic security and political survival in the case of the Caspian region. Access to natural resources eventually converts into a necessity to sustain the power of the state both in political and economic terms. Although the Copenhagen school does not relate their security discussion to energy security, it has become an important issue, which can be discussed under the broader theoretical paradigm of security.

Energy security might be described as a state's ability to ensure an uninterrupted supply of resources to its economy either through self-sufficiency or domestic sources or from another state through energy trade. This point can further be broken into categories: Self-sufficiency and interdependence. Self-sufficiency at the national level leads to greater energy security more often. On the other hand, interdependence causes more possibility of an external threat to financial stability. These two perspectives of energy security are suitable to discuss the case of Russia who is self-sufficient in its domestic energy requirements (but vulnerable to some other factors related to energy trade), and China who is dependent on imported oil and gas to support its growing economy. Both are tied in an energy trade relationship with each other and with other states of the region and outside. Thus, they present a regional structure of an energy relation. Such a regional setting can assimilate the basic concept of Regional Security complex theory of Barry Buzan.

Chapter 3

Historical Background and Contextualization of China-Russian Relations

3.1 Introduction

The emergence of China as a global economic power in the 21st century is instrumental in redefining the contours of its relationships with the neighboring as well as regional states. Multiple factors such as history, geopolitical and geo-economics interests play a decisive role. It is a fact that a country's most important relations are always with its neighbors, and with whom it has the closest economic, political, and strategic partnerships (Eugen et al., 2007). China is no exception. Looking at the Chinese border regions, Russia and post-Soviet states perhaps fulfill all these conditions. They are not only geographically adjacent to China but have a history of bilateral ties, strong economic relations, and political and geostrategic interests. Their rich energy resources are of fundamental importance for a growing economy like China. Russian Federation, being the largest neighboring state occupies the most important position in this nexus (Ballacqua, 2007).

China-Russia relations are constantly evolving and growing. Hardly any other topic has generated such abscond views as China's relations with Russia. Even though, they entered the 21st century with a shallow economic base. Yet they have already declared it as a strategic

relationship in 1996 (Wilson, 2004). The energy resources of former Soviet states are a common issue of interest for them. These resources are of fundamental importance for both, China, and Russia for their strategic strength. The phenomenal economic growth that China has achieved in recent decades has not been possible without secure energy resources. It is equally important for it to ensure its uninterrupted supply in the future. Being the second-largest exporter of oil and gas (EIA, 2018), the Russian economy heavily depends upon the export of oil and gas and the transit system it developed during the Soviet period. It still provides the largest infrastructure to its former republics for the trade of its energy resources. On the other hand, China has emerged as the largest importer of oil and gas in the world. The vulnerability of oil import through the Malacca strait has compelled China to find new and comparatively secure sources of supply (Zhang, 2011). Post-Soviet states of Kazakhstan, Turkmenistan, and Azerbaijan have emerged as a very significant option in this regard as they are located westward to China. Moreover, their location in the Russian proximity and as a traditional sphere of Russian influence make the situation more complex. Thus, it makes a special zone of energy politics in the region. This scenario binds them all in an energy relationship, where interests, threats, and opportunities create parallelism (Eder, 2014).

To understand the dynamics of this relationship, it is important to understand the mutual perceptions of both big powers towards each other. Moreover, the reevaluation of their relative position in the world system is very important. This position has been constantly changing since the last three centuries (Lo, 2005). A comprehensive historical background of their relationship would set the stage to analyze their relations especially their energy relations in the 21st century.

3.1.1 Historical Background and Contextualization of China-Russian Relations

There is a famous saying that God, Gold, and Glory were the biggest motivations behind European navigation and colonization (Spielvogel, 2008). A state might have multiple motivations behind its expansion into a certain area. European motivations demonstrate the economic and political factors behind their exploration of the world. The rich agricultural lands, forests, and other trade and commerce opportunities motivated the US westward expansion during the early nineteenth century. It was the resource thirst usually remembered as the “Doctrine of Manifest Destiny” that made them believe that the United States must control all of North America. (Mountjoy, 2009). The great Ming dynasty at the zenith of their power destroyed their ships and stopped all maritime activities because they did not have any motivation in it. This is important to understand the motives of Russia and China behind their historical expansion in a region lay between them. A region geographically located between China and Russia and termed as Eurasia includes Central Asia and the Caspian region.

This chapter of history explores a great amount of time and space. To understand the Russian and Chinese motivation in the Caspian Sea region, it is important to delve into the historical background of their relationship. These motivating factors might be divided into three broad categories;

- i- Economic, including trade, commerce, and natural resources
- ii- Political, including security issues and ethnic conflicts
- iii- Non-material, including religious and ideological factor

Under economic motives resources, trade and commerce become important, and security might be considered as a political motive. Ideological factors are another important dimension of these motives. It is a non-material factor, not material motives like economic and political.

While exploring the Russian-Chinese historical relationship, two very interesting patterns of relations emerge expanding almost four hundred years. First, external regions have played a more important role in the emergence of their ties. This relationship emerged in two extreme ends of Eurasia (Christian, 2018). It started with the interaction in the far-east with Russian advancement towards eastern Siberia. Since the mid-eighteenth century, both clashed in Central Asia because of China's westward march and Russian southward approach (Perdue, 2010). Second, multiple factors have played a role in their relationship at different times of history. Their relationship might be discussed into four broad categories to find the motivation behind their interaction in every phase of history.

- (a) The Period of Alignment (Seventeenth century to the first quarter of the nineteenth century)
- (b) The period of rivalry (Late nineteenth century)
- (c) The period of Alliance (Early twentieth century to 1960s)
- (d) The Period of Confrontation (1960 to the end of Cold War)
- (e) China Russia relations in the 21st century

The events of these phases and their analysis will determine the factors behind their relations at every stage of history.

3.2 The Period of Alignment (Seventeenth century to the first quarter of the nineteenth century)

China and Russia share an unstable history of bilateral relations. The contemporary history of their relationship elucidates the painful memory of the past with traditional resentment, a permanent feeling of strategic vulnerability from each other, and a feeling of national humiliation. All these elements set the stage for the formation of 21st century Chinese-Russian relations and their relative perceptions from the times of Mongol invasion to the end of the USSR.

3.2.1 Mongol Factor in China-Russia Relations: An Historical Anecdote

Although relations between inhabitants of these states dates back to 200 BC, the modern history of their relations starts with the Mongol invasion of Russia's then capital Kyiv back in the 13th century (Borrero, 2004). After Kyiv's destruction at the hands of Mongols in the 13th century, Russia shifted its capital to Moscow. Russia's importance in European politics grew tremendously during this time and it gradually became a balancing force between Europe and Asia (Crummey, 2013). Russia enjoyed a strategic edge in its matters with Asiatic tribes of that time including Mongols. It defeated the first Mongol tribe in 1480 and tried to eliminate the remaining three Mongol tribes along with its territory in the Khanates of Crimea, Kazan, and Astrakhan (Ostrowski, 1998). The Turks were successful in getting control of the Crimean Khanate in 1475. However, the other two fell to Ivan the Terrible in 1552 and 1556 respectively (Smith, 2013). With these victories, the Russian expedition towards the east took a decisive turn and it crossed the Caspian Sea and the Ural Mountains, approaching Siberia. Many factors played their role in the Russian drive towards Asia. One of the most important factors was the commercial quest of merchant families following great Novgorodian traditions of exploring

new commercial centers. Their desire to import Chinese Silk and Indian goods and export Russian goods to Asian markets presented a commercial attraction for Russia (Cheng, 1966).

Mongols remained a problematic factor for China too since the start of the second millennium (Voskressenski, 2003). Song Dynasty from 10th to 13th century AD faced Mongol wrath, which culminated with its conquest at the hands of Mongols in the late 13th Century under Kublai Khan. Mongols continued their rule in the successive Yuan dynasty and ruled the whole of China. (Atwood, 2004). At the end of the 14th century AD, after widespread bloodshed and warfare, finally, China achieved freedom from Mongol rule with the establishment of the Ming dynasty (Twitchett & Fairbank, 1988). However, the Ming dynasty during the first century of its rule over China had to face the Mongol menace again. Mongol devastation of China forced the Ming rule to reconquer Mongols. During the course of events, the Ming dynasty lost 500,000 of its soldiers, a great human loss inflicted due to the Mongols (Elman, 2015).

The Mongol atrocities did not stop here. It continued more ferociously during the Qing rule, the longest-ruling dynasty in China. During the Mongol conflict, Russians first came to know about the riches of China. The Mongols, the most formidable foe of Manchus or Qing organized their presence in Central Eurasia, including, Xinjiang region, Tibet, and western Mongolia, an area located between the two great empires of Russia and China (Perude, 2005). In this way, Mongols formed a common threat for both states historically and helped the Russian movement eastward and Chinese movement westwards. Mongols did less bloodshed in Russia but their savageness cultivated a barbaric image of Asia in Russia, yet, China had been a greater victim of Mongol barbarianism (Lo, 2008).

This was the time when the west was struggling to find a way towards China. Many expeditions were sent by European countries. According to some sources, Ivan the Terrible sent a mission

to acquire information about China in the late sixteenth century. The accounts of authentic information about China reached Moscow when Russian Cossacks reached Siberia. Two factors increased their interests in this region, one was the resources of the region. They were impressed with the superb furs of animals found in Siberian forests. They were also curious about exploring the salt, silver ore, and iron ore mines. Second, the threat of Mongols whose eastern tribes encountered them in Siberia (Witzenrath, 2007). Russians remained fearful of an attack from uncivilized and culturally inferior Mongols of the east from the 13th century to the 16th century.

As mentioned earlier, Russia's commercial and security interests initiated its eastward advancement towards Siberia during the 16th and 17th centuries. Russians remained overly cautious about their eastern approaches. They felt it imperative to collect all basic information about their cultures, religions, and economic conditions before starting a military expedition, diplomacy, or starting an economic activity in these far-off lands (Monahan, 2016). For this purpose, it continued sending diplomatic missions to the Mongol rulers of the outer Mongolia regions situated on the outskirts of northern China. Russians made many attempts to reach Peking. Several missions were dispatched to collect firsthand information about surrounding terrain, accessible routes, rivers, and many other things. The most important mission among them was Ivan Petlin a Russian Cossack in 1618. He is believed to be the first Russian and second European to reach China from the western route. Despite successfully reaching China, Petlin failed to establish a comprehensive link between the two states (Kotilaine, 2005).

Russians continued their march towards China. They did not meet much resistance until crossing the Amur River and reaching the Chinese northern borders. Russia took advantage of the weakened Siberian Khanate and conquered the area as far as the northeast Pacific Ocean

(Lincoln, 2007). The conquests of Upper Yenisei River and Lake Baikal opened the area for the movement of hunters, traders, peasants, and ultimately Russian officials to manage their newly conquered region. However, their southwards advancement met with resistance by the local Mongols, Tartars, and Chinese, who had greater influence in the Manchu region (Bonhomme, 2012).

3.2.2 Early Border Clashes Along the Amur River

Another significant factor behind the Russian's movement south of Siberia was food for its eastern conquests. Eastern Siberia with its severe cold was not arable land. Russian sent two expeditions between 1640 to 1650 from Yakutsk to southwards in search of food. These missions reported of grains reserves south of the Amur river a strategic point where Russia had to face much resistance (March, 1996). While Russians were inflicting atrocities on the people living on the bank of Amur River. Manchus were busy strengthening their political power in China proper (Lim, 2013).

Since the mid-seventeenth century, China-Russia border clashes spread in a crooked way. Russia remained in a state of conflict with the local Mongol tribes especially with western Khalkha's the biggest subgroup of Mongols. This had a great impact on the newly established Qing (Manchu) dynasty. On the other hand, during the Russian conflict in the east, Chinese expansion westwards into Turkestan continued unabated. With these border clashes, both states came in direct contact with each other (Cheng, 1966). Russian were aware that the consolidation of the Qing dynasty would result in Chinese expansion in the north and west. Qing finally consolidated their rule in mainland China and paid attention to the Manchuria region where Russian were in a state of conflict with Mongol tribes to find a way into China across the Amur

river. Chinese advanced towards the outer Mongolia region in 1655 materialized the Russian fears (Cosmo et al., 2009).

The clashes of Russian Cossacks with local Manchu people expedited the Russian's sending of the first embassy to Peking under Isakovich Baikov. This first formal effort helped the Russian collect all necessary details of routes towards China, trading goods, and the local population. This was the time when Russian and Chinese developed active contacts in the northeast or the eastern end of Eurasia.

While conflict between Chinese and Russian forces was continuously creating problems in frontier regions, both states maintained economic and trade relations on a permanent basis since the mid-seventeenth century. It represents a clear indication of the economic motivation behind their relations. It also helped to facilitate the movement of traders and commerce activities. Trade, commerce, and resources have been a predominant factor in the initiation of Chinese Russian contacts. The frontier region of the Amur river remained a cause of disagreement for both states for many years to come. Eventually, the Chinese were able to drive them out of the region (Ziegler, 2015).

3.2.3 Treaty of Nerchinsk and Kayakhta

The economic and commercial motivation brought the Russians to explore this difficult terrain. Russian eastern settlements in Siberia and Cossack tribes were desperately in need of food grains, which were available south of Amur River. However, they had difficult times with the local Mongol tribes living there. In these circumstances, it was difficult for Russian traders and their native Cossacks to carry out trade and commerce with Peking. As far as China is concerned, the peace and security of frontier regions were the primary objectives behind this initiative (Gvosdev

& Maesh, 2014). They did not need much trade activity with Russians. Due to resource abundance, including fertile land, water, and others, the Chinese were comparatively in better economic conditions. However, trade could provide a strong base for friendship and strategic cooperation between two great nations. This resource abundance provided China a strategic advantage over Russians.

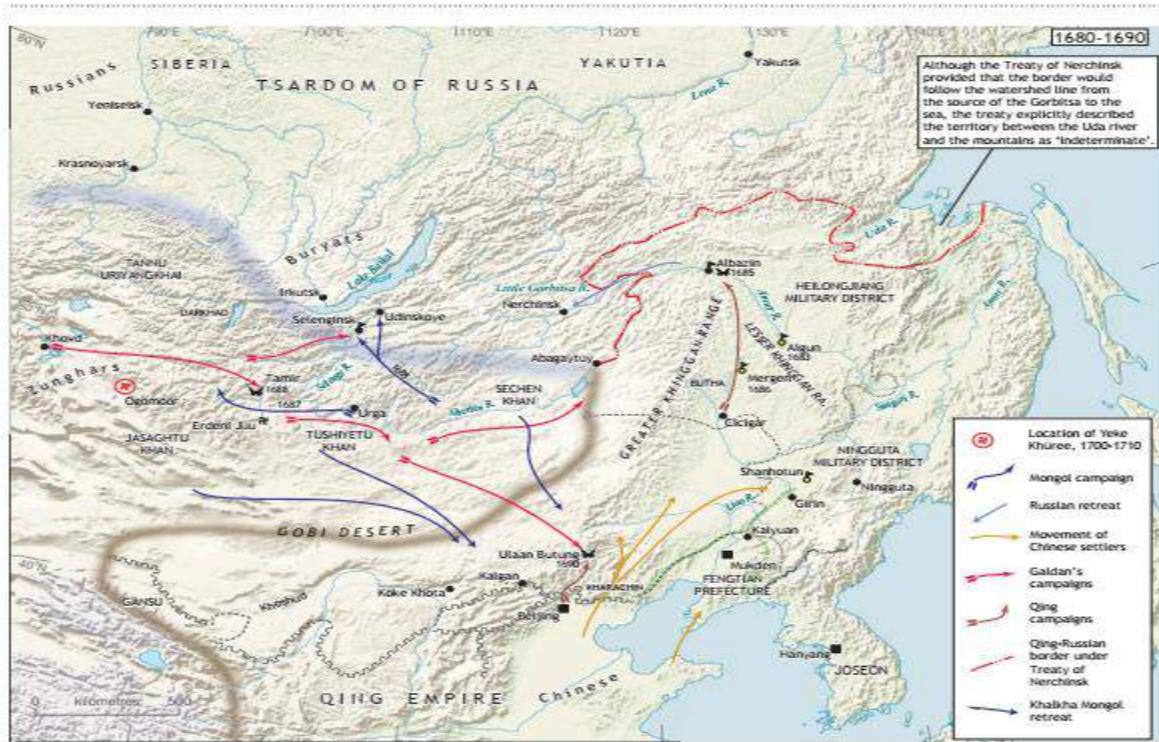


Figure 3: China-Russia interaction in Manchuria in the late 17th Century (Li & Cribb, 2014)

The Mongol atrocities against the trade caravans remained a threat to flourishing trade relations between the neighboring empires. Without the settlement of the border between the two states, the Mongol issue could hardly be resolved. The commercial motives compelled the Tsar to initiate the negotiations in 1675 with the Chinese emperor (Paine, 1996). Chinese hard stance during negotiations manifests their consciousness of the fact that Moscow was too far away to send a huge army to fight China. Moreover, Local Manchu's and Mongol support for Chinese

and a relatively small number of Russian security personnel had given a clear edge to Chinese (Zhao, 2016).

Such an unbalanced strategic position would continue to appear in the bilateral relations of the two states, establishing a fact that both states never enjoyed a balanced and equal strategic position in their relationship. Hence, Chinese due to their strategic edge in the seventeenth-century did not deal with Russians as an equal (Mao, 2005). However, they were willing to engage in diplomacy. There are two accounts of trade obstacles, found in the existing literature. Some authors like Vincent Chen maintains that it was Russian Cossacks whose looting and plundering were the real obstacle in the establishment of smooth relations. While Russian author Mikhail Losifovich Sladkovskia views Mongols as the problem.

Another noticeable pattern that emerged during their initial conflict and continued making an impact on China-Russia relations has been the use of resources as a tool for strategic superiority. During their conflict with Russians in the late seventeenth century, they paid special attention to the prohibition of rice and other grains export to the other side of Amur, this could be the greatest setback for Cossacks and Russians (Cheng, 1966). The establishment of communication and transportation remained an issue since the seventeenth century. It is still playing a significant role in the development of China-Russia bilateral relations today. Lack of contact and diplomatic engagement remained an obstacle in maintaining peace in the eastern Siberia region (Elman, 2005). This was evident during their negotiation to reach their first bilateral treaty. China's strong relative position against Russia created a strategic imbalance (Matsuzato, 2017).

By the end of 1683, China had established its control in the frontier regions. Consequently, a formal demarcation line between the Russian territory and China was established in Yakutsk (Barisitz, 2017). And it was tried to avoid bloodshed in bilateral interaction (Lim, 2013).

The northeastern region continued to create problems in the establishment of peaceful relations between the two states. Nonetheless, their constant diplomatic efforts brought both states to peacefully settle down their differences and reached a frontier settlement agreement “The treaty of Nerchinsk” in 1689 in Nerchinsk near present-day Mongolia (Lim, 2013).

The treaty was a milestone in many aspects for both states. First, it helped in preventing a total military defeat for Russians. Secondly, it was the first step towards border delimitation. Third, China for the first time got ready to treat Russians as equal sovereigns. An achievement, no European country had been able to gain (Elman, 2005). The Treaty of Nerchinsk holds strategic importance too. It not only calmed down the tension in the frontier region but also brought economic and commercial benefits. Economic interests were indeed the greatest motive behind this treaty, especially for Russians whose eastward expansion was led by the objective of maximization of commercial gains. This treaty was the result of century-long Russian efforts to initiate strong economic relations with China and reap the fruits of eastern riches (Schorkowitz & Chia, 2017). A phenomenon being revived in 21st century Russian eastward approaches. Therefore, a systemic method of control was set up for traders and trading items in trade matters with China.

China’s increased interference with Russian trade caravans brought the two governments back on the negotiating table after 1710. Once more, commercial interests made political settlements inevitable. Both states agreed to sign another treaty called the treaty of Kyakhta in 1727 (Noda, 2016). The new treaty further consolidated the Nerchinsk treaty as well as the Chinese claim

over the Amur region. Additionally, it delineated the joint border and helped in flourishing trade activities. Most notably, it made the presence of a permanent Russian diplomatic and orthodox ecclesiastical mission in Beijing possible. Before Russia, only the Vatican had its presence in the Chinese capital (Uhalley & Wu, 2001). Therefore, Russia became the second European country to achieve this milestone. Russia had the geographic advantage of adjoining borders with China, which no other European country had. It took more than a century or more for other European states to step in this great eastern empire. This is considered as a great achievement of most westernized Russian Czar Peter the Great, who despite his European overture, did not fail to realize the Russian position as a Eurasian state (Rieber, 2014).

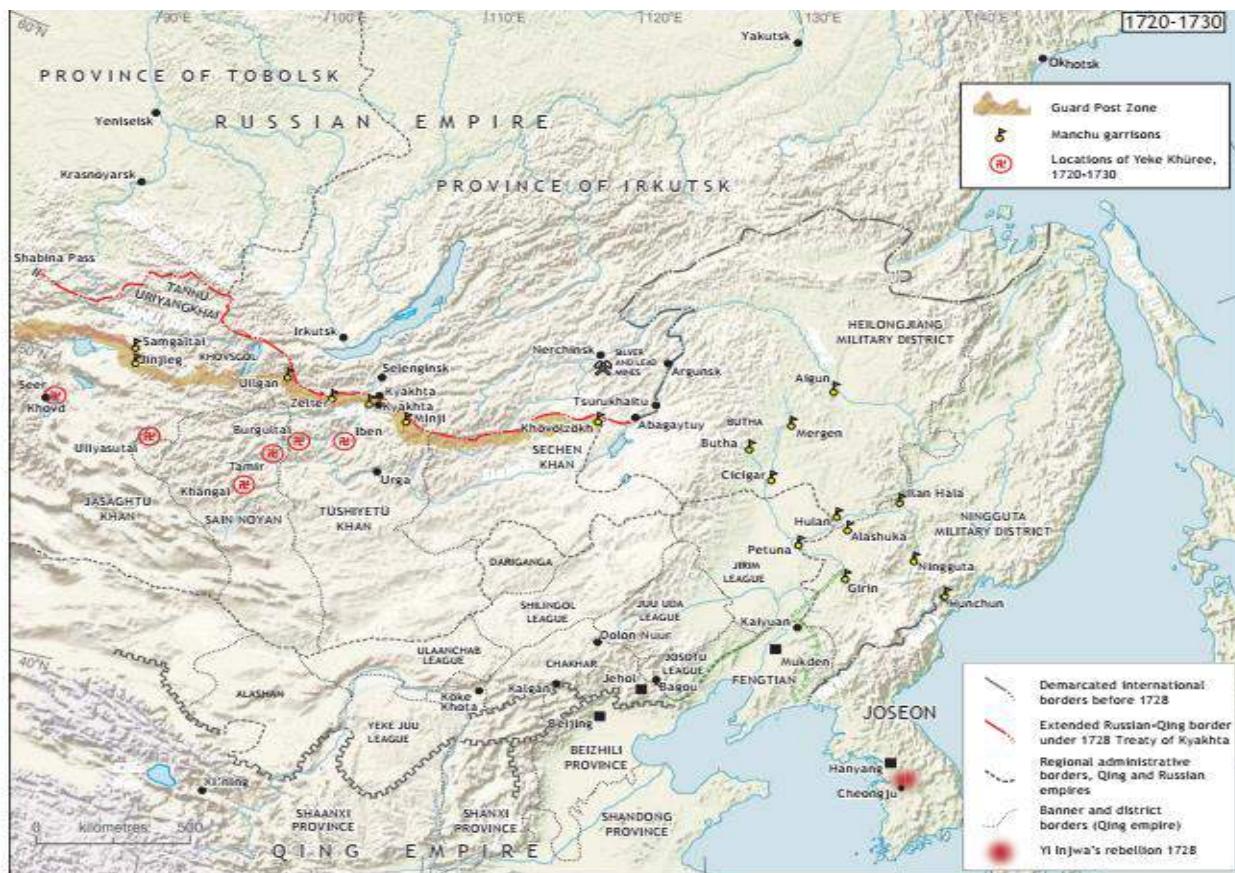


Figure 4: Russian outposts in North East during the 18th century (Li & Cribb, 2014).

Treaty of Kyakhta occurred at a time when anti-British tantrum was on the rise against the opium trade. Chinese experience with European and especially British helped in easing tension in trade relations between the two neighbors and China showed some restraint and leniency in its dealing with Russian traders. Thus, China and Russia enjoyed a peaceful, friendly though not very close relationship for the next one and a half-century. However, during this time, they had more interaction in the western rim of Eurasia.

3.2.4 Meeting in Central Asia

Although, this treaty enhances the commercial activities, and the number of trade caravans increased considerably. Still, several security threats remained. The western region of China along with Xinjiang and Central Asian Khanates was the home of barbaric Mongols. As a transit route, it was a constant threat to the trade caravans of both states. Therefore, a comprehensive military action was inevitable to solve this issue. Moreover, the annexation of Tibet had become a great challenge for the Manchu Qing dynasty. The situation required peaceful relations with the neighboring state of Russia. A policy of alignment ensued (Powers, 2004).

As mentioned earlier, Mongols played a very important role in establishing contacts between Russia and China. Their first interaction occurred in eastern Siberia and after the signing of two treaties, Nerchinsk and Kyakhta the center of gravity shifted westwards to Eurasian steppes, the Central Asia region, where Dzungar Khanate was located composed of Oirat Mongols (a westernmost Mongol tribe) in Turkestan area. It was established in the previous century, quickly consolidated, and expanded in all directions becoming a great threat to western occupations of China and especially for Tibet. It covers almost the whole area of today's Xinjiang province of China, where the Chinese and Central Asian border meets (Ming, 2017). It stretched from west of the Chinese Great wall to modern Kazakhstan and from Kyrgyzstan

to southern Siberia. Dzungar established good trade relations with the Russians to overcome their domestic economic issues.

By 1680, Dzungar Khanate has spread in entire eastern Turkestan. Peace prevailed between Dzungars and Qing until 1715 when a new crisis shook its head. Dzungar king started a march towards Tibet. Though Tibet was not under Qing's rule, its ruler had the support of Qing. This invasion met a strong reaction from the Qing emperor Kangxi and he invaded the capital of Tibet. The conquest of the Tibetan capital Lhasa opened the door of further conquests into the west and northwest.

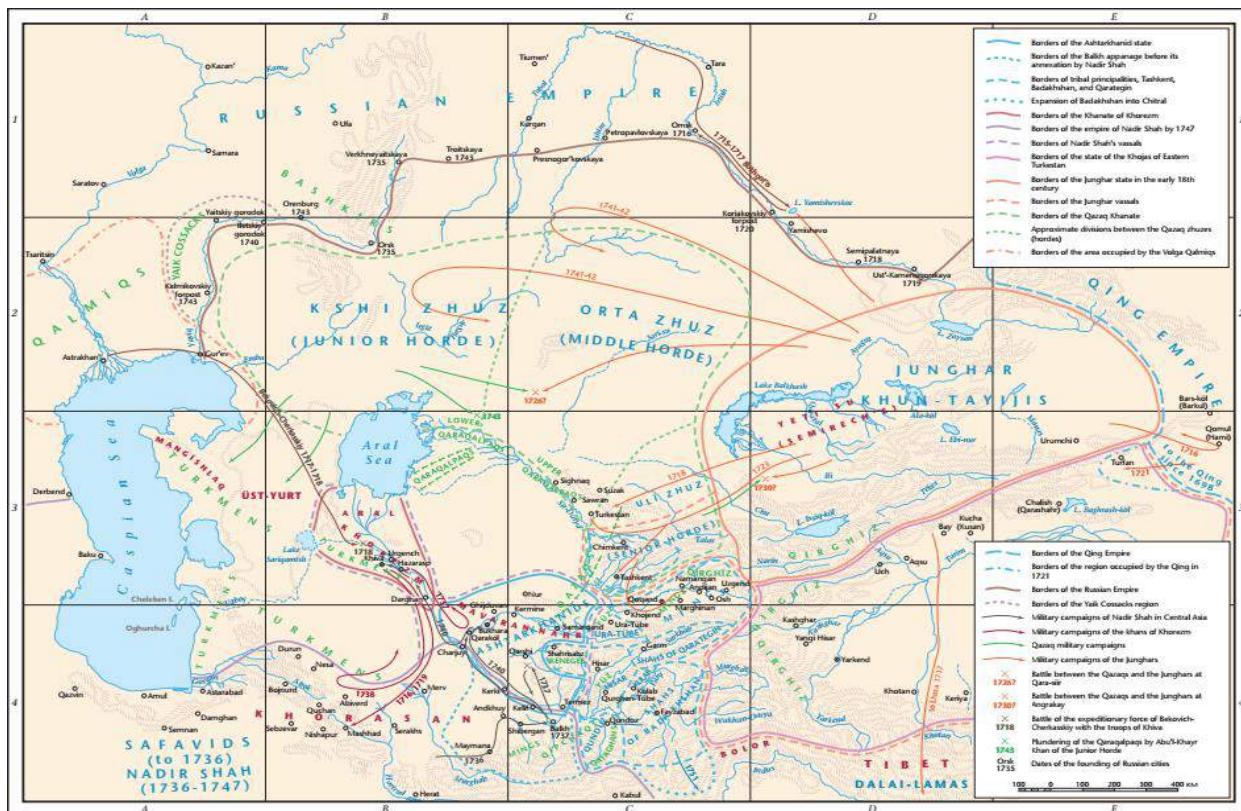


Figure 5: Dzungar Khanate and China-Russian interaction in Central Eurasia
Historical map of Dzungar. (Also pronounced in Junghar) (Bregal, 2003).

As Qing emperor was aware that a strong Dzungar Khanate could pose a serious threat to the eastern Mongol tribe Kalkha's allegiance to the Qing. Moreover, the Dalai Lama's religious influence along with their military strength might undermine the whole Mongolia region (Mote, 2003). At one point, the Kangxi emperor successfully occupied important cities of Dzungar like Turfan, Kokonor, and Hami. However, eastern Turkestan was still under the strong control of Dzungars posing a threat to China's western frontiers. Qing ruler repeatedly raided the above-mentioned city of Turfan. After a great expenditure of military resources, finally, the Qing's and Dzungars announced a truce in 1732. Meanwhile, trade and other economic activities commenced and started flourishing. For almost the next two decades, peace prevailed between the two kingdoms; When Qing attacked the khanate after an internal fight for reign and a revolt against Qing. This revolt instigated an attack and genocide was ordered against the Dzungars and the whole area of eastern Turkestan became a permanent part of China (Dani & Mikhailovich, 2003). It was renamed Xinjiang after 9 years in 1768.

The Chinese conquest of eastern Turkestan was not without some implicit or explicit causes. Nomads of western Mongolia and East Turkestan (Central Asia) regions had been very problematic for China for centuries. The Chinese rulers had been involved in violent encounters with them since the Han dynasty in 200 BC. Later, Tang and Ming's dynasties had faced these nomads. The establishment and consolidation of Dzungar Khanate at their growing political and military power could pose a serious threat to Qing. Therefore, the Qing ruler did not waste the opportunity to remove the threat and expand its empire into Central Asia bringing Chinese borders very close to Russia in western Eurasia (Dillon, 2012). This was the second instance when Mongol somehow brought Chinese and Russians close to each other. The Dzungar Khanate not only posed threats for China in the east, but they also remained a great military and

economic threat for Kazakh Khanate in the west. Their repeated onslaught pushed the Kazakhs further west geographically and politically. Thus, intimidating Russians of the Dzungars. Their activities were also perilous for Russian economic relations with eastern parts of their empire in Siberia and with China. Dzungar were involved in attacking and looting the trade caravans. Consequently, Russia realized that Dzungar could threaten their eastern empire and economic interests eventually. This was the ultimate factor, why Russians provide military assistance to Kazakh Khanate against Dzungar. After their alliance against Dzungar, Russian gained increasing influence in Kazakh Khanate in the early nineteenth century (Ubiria, 2016). This also evoked their interests in Central Asia's riches as of Qing. However, both empires remained peaceful though not very friendly for the next hundred years.

3.3 The Century of Humiliation, Growing Instability in China, and Decline of Qing Power

As mentioned earlier, after the Dzungar elimination, peace prevailed for almost the next hundred years. Even though China and Russia could not maintain a very cordial relationship, but they maintained their diplomatic and economic interaction somehow. It was a Russian privilege that it was the only European country, which occasionally hosted the representative of the Chinese emperor. The movement of other European nations towards China began during this era. It started with the visit of British McCartney, the first British diplomatic mission to Peking at the end of the eighteenth century. The senior Qing officials were tasked to get insight from McCartney's diplomatic experience in St Petersburg. This helped Chinese court officials greatly during their negotiation with the Anglo-French expedition (Nightale & Skrine, 2005).

This era of peaceful China-Russian relations ended after the mid-nineteenth century with the Russian interference in the Taiping rebellion. During this era, China was plagued with

instability and rebellion at the domestic level. Which led to the weakening of Qing's power and increased foreign interference in the internal affairs of the state (Reilly, 2004). It started with the first opium war. With the initiation of maritime trade between China and the west, many European nations leased outposts in the eastern and southern China Sea. The Spanish invasion of the Philippine brought a dramatic increase in Asia-European trade. The silver bullion from South American mines started pouring into the Asian market and China became the target destination for the precious metal (Hamashita, 2008). The imperial Qing ruler mandated the exchange of Chinese exports with these silver bullions. The British maritime traders appeared on the scene in the seventeenth century.

3.3.1 Opium Wars and Unequal Treaties in the Century of Humiliation

It is interesting to note that unless Russia was the only European power having diplomatic as well as economic relations with China, both states experience relative stability in their status for each other. With the arrival of multiple European powers on the scene, especially the British who had colonized the Chinese southern neighbor India and began sporadic movement along the Chinese coastal belt, a drastic change occurred. This made it difficult for the Qing dynasty to control the state of affairs. It started with the first opium war and gradually added to the weakening of Chinese power relative to the west (Chen, 2017).

At the start of the nineteenth century, China was the largest economy in the world. It had the largest share of world GDP in 1820 (Maddison, 2003). The strength of China had been a major cause of its peaceful relations with the largest neighbor Russia. From the epic position, its downfall started and at the end of the century, it had become the sick man of Asia. China remained isolated from the outside world especially with Europe until the dawn of the nineteenth century. Europe has grasped the idea of free trade, and their ships had started floating

in all seas. While China was still a conservative land-based state with no maritime connections with the world (Kong, 2017). Moreover, two thousand years old bureaucratic and administrative ideas had made it difficult to cease the impacts of growing western power spreading through the sea and affecting the political, economic, and religious ideas on land.

China had successfully prevented foreign influence through the Canton system based on Guangzhou coasts until the mid-nineteenth century. This control was weakened as their opium trade with the British East India company grew proportionately. This situation had a huge impact on China's position in the region, especially in its relative position against Russia. The British East India Company had created a monopoly over the opium trade with China. The use of opium increased dramatically around the mid-nineteenth century. The Chinese government banned opium after recognizing the serious impacts on society further aggravated the situation and illegal means were utilized to acquire opium (Melancon, 2003). Smuggling of opium was rampant during the first three decades of the nineteenth century. The sharp rise in opium use contributed to the more and more outflow of silver causing a severe financial crisis. The Chinese bureaucracy could not adopt a pragmatic approach and opted for curbing the opium producer and sellers in 1839. The inability of the Chinese government to curb this menace and failure to curtail the opium trade and use indicate the growing inability of court officials to reach consensus due to inherent corruption in the system. The Chinese decision to confiscate the opium ships on Canton was taken at a time when British ships were ruling the seas. The situation had its repercussions for China's internal and external affairs (Bickers, 2011).

- i- The fragility of the Chinese political and security system became evident to the world with the advent of the first opium war.

ii- China had to come out of its isolationism. (Chinese remained in isolationism until the early nineteenth century. Even, its commercial ties were limited to Canton (Guangzhou). They had already destroyed their maritime force, without considering the growing maritime threats to its territory.

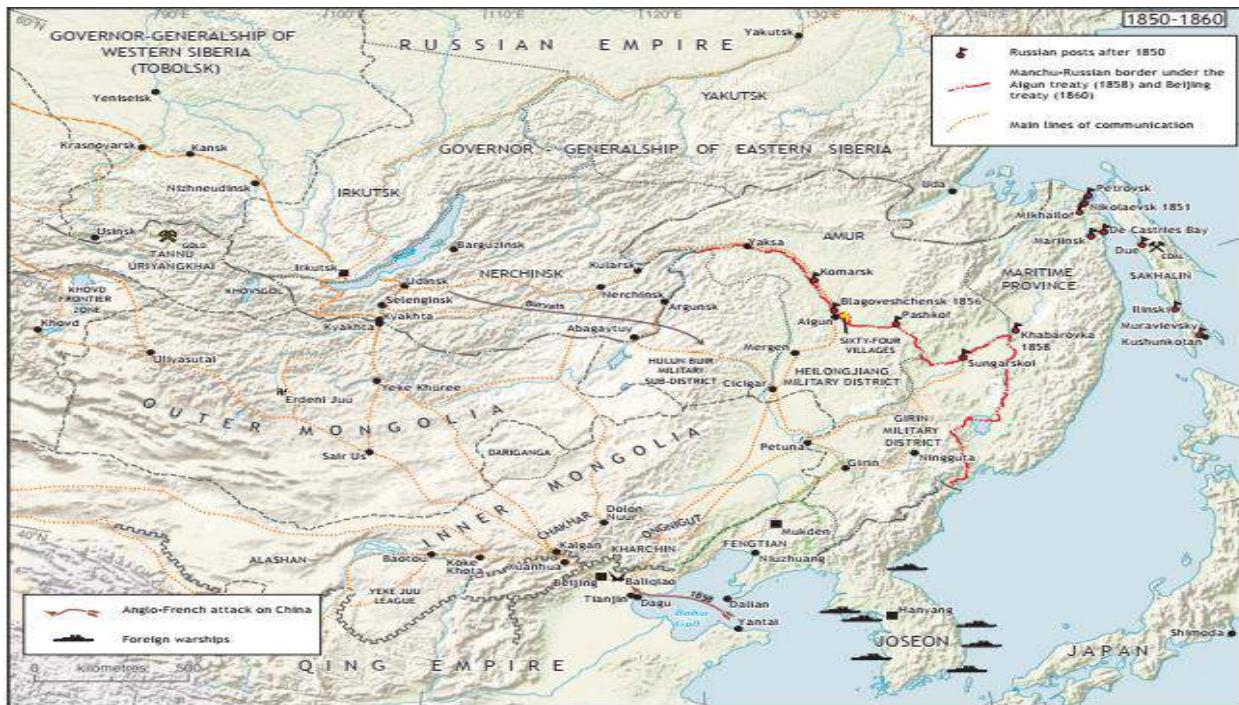


Figure 6: Russian and European Encroachments in China (Li & Cribb, 2014).

The Chinese had to pay a price for their internal instability, isolation from the world, and its emerging norms, the vulnerability of its primitive system, and above all aloofness from technology and warfare techniques. They lost Hong Kong to the British, had to pay an indemnity, and signed the first unequal treaty of Nanjing in 1842.

This treaty was followed by the second opium war between China, France, and Britain from 1856-1860. It resulted in the more humiliating treaty of Tianjin in 1858. Humiliation is a self-perception and a political construct (Wang, 2012). Someone does not impose it. It might be a narrative evolved by the declining imperial power later. The analysis of humiliation, with a

specific Chinese policy perspective, makes it evident that no one was more responsible for this humiliation than China itself.

At a crucial juncture of history, the opium war played an important role in shaping the western image in the eyes of China. It also brought near the end of a thousand years of Chinese imperialism. The second half of the nineteenth century saw expanding western imperialism. Thus, it paved the way for further unequal treaties between China and other European powers (Martinez, 2016). Among them a treaty of Bogue with Britain in 1843, the Treaty of Wanghia with the USA in 1844, the treaty of Whampoa with France in 1844, Treaty of Canton with Britain, Sweden, and Norway in 1847 and the treaty of Khuldja 1851, Aigun 1858 and, Treaty of St Petersburg 1881 with Russia. These unequal treaties made the nineteenth century a century of humiliation for China (Cassel, 2012). The growing weakness of China invoked an internal crisis as well. The Taiping war was one such event, which jolted the foundations of the Qing dynasty. This civil war from 1850 to 1864 resulted in 20 to 30 million casualties.

3.3.2 Russian Encroachments: Imbalance in Relative Power of the Two States

An important aspect of these unequal treaties was the changing Russian approach towards China. Growing western naval strength fomented Russian desire to establish its naval superiority in the Pacific Ocean. This desire revoked the Russian-Chinese conflict on the Amur River and its surroundings, an area never perfectly administered by the Chinese (Lukin, 2015). Russia established its outposts near Amur River when China was preoccupied with the Taiping rebellion internally and the second opium war with the French and British. Russians seized this opportunity and threatened China for another war on Amur. Consequently, China agreed for negotiations and signed the treaty of Aigun on Russian Terms and conditions (Paine, 1996).

The growing debilitation made the Chinese dynasty the sick man of Asia. While potent Russian empire incurred hostilities over both eastern and western edges of Eurasia. Russian expansion in Central Asia had become a matter of great concern for the British Indian Empire in the south and China in the east. Russia took advantage of internal conflicts, and instability in China and invaded the Xinjiang city of Khuldja during the Dungan revolt in China (Ho-dong, 2004). The occupation of Xinjiang could augment Russia's expansionist designs for Central Asia during the great game. At one point, the British even offered a coalition with the Chinese against the Russian hegemonic designs for the region (Fairbank & Liu, 2008). This was undoubtedly the peak time in the Anglo Russian great game, and China could become part of the politics. This time the Xinjiang region became the battleground (Share, 2015). Although the Chinese have successfully invaded the Xinjiang region in the late eighteenth century, it could never be incorporated in the Qing dynasty as a proper part of the empire.

Secondly, the border between Russia and China in this region was not delineated so far. The Russian invasion of Khuldja brought the two empires into an armed conflict in Xinjiang. (Elleman, 2001). However, Chinese forces successfully expelled the Russians from the area. The events of the last forty years made the Chinese realized that strengthening of the military on modern lines had become inevitable to protect its borders. Consequently, China's military buildup compelled the Russians to relinquish their control of the Ili areas of Xinjiang, in St Petersburg treaty in 1881, captured during the Dungan revolt. This treaty enhanced the Chinese stature in the west temporarily and considered it as a great diplomatic victory of Qing against Russia (Anderson, 2013). On the other hand, it stoked up the fears of growing Chinese military strength as a threat to European occupations in East Asia. Contrary to this fear, European had witnessed and knew very well the Chinese aversion of maritime security. Whatever military

they built up was limited to land forces. The Qing dynasty had already paid a heavy price for their forbearance towards naval forces during the century of humiliation. Still, Qing had no way to avert a maritime incursion from the European powers in its seas. China successfully recovered its area from Russian occupations and defeated French armies in the Sino-French War of 1885 on land, but it had no ways and means to respond to an attack from steamships resulting in the signing of a peace agreement on unfavorable terms and conditions (Encyclopaedia Britannica, 2018). Similar vulnerabilities led the Qing dynasty into the new century. China not only faced the disastrous outcomes against western imperialist powers but also against the emerging regional rival Japan in the first China Japanese war in 1895 primarily to get control of the Korean peninsula. The disastrous defeat of China against Japan paved the way for Russian incursions in Manchuria in the coming years. Commercial and resource motives of the west and Russia made the nineteenth century, a century of humiliation for the demotivated Chinese empire.

3.4 China-Russian Relations in the Twentieth Century, Turning Rivalry into Alliance

Two great neighboring empires did not cordially greet the new century. The end of the nineteenth century and the dawn of the twentieth century were full of rivalries and armed conflicts. On the one hand, the Russian empire was in full strength (Gerwarth & Manela, 2014), while China's Qing dynasty was breathing its last. The Chinese had faced multiple colonizing attempts during the last sixty years. Albeit, China could not be colonized in its entirety, its military deficiencies to protect its coasts did assist European colonial powers to occupy its coastal cities. Shanghai, Guangzhou, Tianjin, Dalian, and many other important port cities experienced severe foreign interference fueled unrest, and extreme resentment among the local

population against imperialist powers. The economic, religious, and political factors provoked the grievances against the foreign population residing in these areas (McMahon, 2015). The Boxer's rebellion in northern China was the outcome, which once again demonstrated the internal frailty upon the rival forces. Qing dynasty had been struggling for its firm control over the northern region where they had already dealt with Russians in the seventeenth and eighteenth centuries. The emergence of Japan as a regional power after the Meiji revolution at the end of the nineteenth century proved a catalyst for further internal unrest and an unparalleled public outcry right at the start of the new century (Christie, 1998). It culminated in the Boxers rebellion targeted against the foreigners of which Russians became the victim of this outrage too. On the pretext of crushing Boxers, Russians entered an army of 200,000 into the area. And within a few weeks, Russia was able to occupy the northern province of Jilin and Liaodong and ultimately the whole of Manchuria (Gerwarth & Manela, 2014). Two factors motivated the Russian intrusion of Manchuria and the outbreak of new hostilities between the two states. First, Russia had a long history of interest in the Amur region (the same northern region called Manchuria) for navigational purposes. Ports Arthur and Dairen of Liaodong could serve the purpose for the whole year, as compared to Russian ports in the north. Secondly, the growing military and economic strength of Japan had provoked fear in Russia against possible Japanese control over the area, especially, in the aftermath of their occupation of the Korean peninsula in the first Sino Japanese war (Williams & Koch, 2013).

Even though, Boxers rebellion emerged as a multilateral conflict involving eight nations. The invasion of Manchuria remained a bilateral affair between China and Russia. The Boxer's rebellion had a great imprint on China's imperial history and the downfall of the Qing dynasty. In such a hazardous situation, several revolts emerged signaling dissatisfaction with the Qing's

political system, economic policies, military defeats, social and cultural problems (Mackerras, 2013). The declining Qing dynasty failed to respond to these challenges and a civil war ensued, bringing almost three centuries old Qing rule to an end.

Ironically, both the neighboring states met with a somewhat similar fate in the second decade of the twentieth century. As far as Russia is concerned, despite, ruling Russia remarkably, the ruling Romanov could not forestall their downfall just like Qing in China. During their rule, Russia became more westernized (Mironov, 2014). They worked hard to improve infrastructure, education system, economy, and military. However, many factors, such as famine, lack of fuel, and other resources, military conflicts, and defeats provoked unrest in the population and they became desperate especially for food and other basic resources. Russian involvement in multiple military conflicts causes so much loss of resources, which were already scarce, social inequalities fueled the unrest. Besides, the First World War was crucial in this regard (Basin, et al., 2017).

Several similarities emerge between the two states. Both states experienced a revolution in the second decade of the 20th century. The outgoing dynasties in both states ruled for almost three centuries. Multiple internal and external issues contributed to the end of regimes in both states. China and Russia stepped into a new phase of their history with multiple challenges for their relations (Dillon, 2010). A hierarchical pattern in their relationship that emerged in the mid-nineteenth century after a relative decline of Qing's power would continue to overshadow their bilateral relationship for the next eighty years or so until the dismemberment of the Soviet Union.

3.5 Post-Imperial China-Russia Relations

The Republic of China faced with huge challenges at internal as well as external fronts. Internally, in the aftermath of the Xinhai revolution, China emerged as a Republic ending the three-century long Qing dynasty with Yuan Shikai as its first president. Unfortunately, he could not survive for long and his death in 1916 plunged Chinese society into a constant power struggle between KMT the Chinese Nationalist Party, (established in 1912), and CCP Communist Party of China in 1921 (Dillon, 2010). Yuan had already developed differences with KMT during his life, raising anti-republican sentiments in KMT. With the arrival of the biggest proponents of anti-imperialism in China, Sun Yat-Sen from exile in 1917, another group of anti-Beiyang forces (Government in Beijing was called the Beiyang government) gathered and formed, Kuomintang of China. Based in Canton, Kuomintang launched its struggle against the Beiyang Government (Fang, 2015).

Decaying economy, several uprisings, constitutional crises on the one hand, and failure in achieving international recognition of COR until 1928 aggrandized the challenges of the new regime. The immaturity of the new political system along with instability and civil war created severe doubts among Chinese intellectuals about the future of Republicanism in China (Yuzhen, 2013). Paradoxically, revolution infused a new sense of excitement in China as a chance to re-emerge on the global political scene and gain a status of equality with the western nations after the century of humiliation at their hands (Guoqi, 2011). For this purpose, China offered a huge number of troops to Britain for ousting Germans from Qingdao. After an initial refusal, the British agreed, but the Japanese averted this Chinese strategy to maintain their supremacy in East Asian affairs. However, China sent non-combatant and volunteers to ally the countries, apparently maintaining their neutrality in war and hoping for a justifiable place in the global

balance of power (Xu, 2005). China never achieved what it was hoping for. Instead, failures at domestic and international levels produced harsh criticism against Republicans and some prominent leaders like Sun Yat-Sen, Chiang Kai Shek, from KMT and CCP raised a strong voice against the system and made every effort to get rid of it. Here, the difference between the government approach towards the west and an emerging revolutionary party of KMT became very clear. Both were perusing diagonal objectives (Hutchings, 2001).

Russia was also on the verge of revolution at that time. The beginning of the First World War and its inclusion in it multiplied the already mounting problems for the Russian government. Enormous social unrest made the war very unpopular among the Russian populace, giving considerable support to Vladimir Lenin. The Bolshevik Revolution disappointed the western alliance and increased German attacks against the Russian position was responded by the British and French-led Allied military intervention in Russia (Naarden, 2002).

3.5.1 Soviet Recognition of Kuomintang and Re-Establishment of Sino Soviet Diplomatic Ties

The ideological affinity between the Soviet Union and China played an important role in their relations in the post First World war era. It started with Soviet recognition of Chinese Kuomintang in 1923 and produced its re-organization following the footsteps of the Soviet communist party. The Chinese Kuomintang was badly in need of some sort of external support to achieve its political objectives at the time of internal suppression and externally international isolation (Pantsov, 2013). Even though, Sun Yat-Sen had made it explicitly clear to the Comintern in the early 1920s that there was a difference between allying with the Soviet Union, and cooperation with Comintern and supporting Communist ideology. Even some moderate voices in China were supportive of Sun's view. However, after he died in 1925, radical

developments took place and the Soviet Union took concrete measures to integrate Communism within China.

The Soviet Union was in search of some foreign bulwark for supporting its ideology. The Chinese Communist Party was established upon the guidelines of Soviet Comintern leaders to work in collaboration with Kuomintang (Gvosdev & Maesh, 2014). Chinese KMT were expecting political support for toppling down the republican government in Beijing. The KMT's expectations met a severe blow when Sun's "Northwestern" plan did not receive any response from the Soviet Union. In fact, the Chinese KMT was perusing more domestic plans, and the objectives of the Soviets were more international. The Soviet ambitions for the occupation of the Outer Mongolia region of China created more apprehensions in KMT leadership. Sun Yat-Sen and Chiang Kai Shek were disappointed with USSR but there were some supportive voices within the party for Soviet policy. Which led to a great divide between anti-republican forces (Elleman, 2015).

The Policy of the Soviet Union was to consolidate Communist ideology at home and its expansion abroad. The left-wing elements of Kuomintang were especially impressed with Soviet-style communism as the only hope for proletariats with an anti-imperialist approach (Grasso et al, 2009). After the death of Sun, Chiang Kai Sheik a rightist, assumed the leadership of KMT. During his three months stay in the Soviet Union, Sheik had a chance to understand the Soviet Communist ideology. His study of the Soviet military and meetings with top leadership made him revisit his earlier view and he concluded that Soviet-style socialism was unsuitable for China. Later, their divergent objective produced a split. After the consolidation of his power in northern China and the northern expedition with the help of the Soviet Union, he emerged as the dictator of China. Meanwhile, Kuomintang had developed severe differences

between its right and left wings (Dillon, 2010). The communists were overwhelmingly dominating the left-wing. When Sheik started expelling communists from KMT, it developed severe differences with CCP. It led to the formation of the Red Army composed of peasants and workers bringing Mao Zedong into the limelight. Mao became the commander in chief of the red army. With the growing cleavage between KMT and CCP, civil war broke out in China (Elleman, 2009). Chiang made deliberate efforts to purge KMT of Soviet elements, which led to the deterioration of relations between KMT and the Soviet Union. Thus, creating an internal split between KMT and CCP, with throwing CCP away in the Soviet sphere of influence. It might be considered as a challenge for the Soviet Union's Comintern party for the consolidation of their base in China.

The Soviet Union had to do two balancing act this time. First, it had to balance itself between Kuomintang who was officially ruling then, and CCP whose ideas were much compatible with Comintern. It was a compelling requirement for the Soviet Union in the face of the Japanese threat. Secondly, without achieving the first balance, USSR could not achieve a balance between the eastern front against Japan and the western front against Nazi Germany (Legvold, 2007). Therefore, USSR had to become the strongest supporter of China in the world. Perhaps, Mao too could not afford to lose Comintern's support at this time. Such a situation again disturbed the relative positions of China and Russia, placing China under the visible influence of the USSR. Although both parties set their differences aside during the Sino Japanese war, they never developed consensus. In fact, both prepared for the more astringent circumstances ahead. The cleavage between CCP and KMT left deeper imprints of Soviet communism on CCP (Elleman, 2009).

3.5.2 Political and Ideological Manifestations of Mao

Mao's ascendency to power in CCP, declaration of the establishment of the Chinese-Soviet Republic (1931-1937), and Mao's long march made CCP a mere branch of Comintern international, developing severe differences with the ruling KMT. The Soviets continued to exert influence at CCP sometimes aggravating the CCP leadership. The Yalta Conference at the end of the Second World War presents a gloomy picture of this troubled relationship (Lüthi, 2008). As mentioned earlier, the Soviet Union was more concerned with its strategic objectives than China's internal split between communist and nationalist forces. Without any prior consultation with CCP, it pledged in the Yalta conference to declare war against Japan over some arbitrary terms and conditions. It included the independence of the Mongolia region, and control of all major transportation infrastructure in the Manchuria region (Goncharoov & Wilso, 1993). It also revealed its willingness to sign a mutual friendship and alliance treaty with the Nationalist government, which was the Kuomintang government an adversary of the CCP. With this confusing approach, one could hardly expect a smooth relationship between the Soviet Union and the future CCP government in China after the Chinese communist revolution of 1949 (Gvosdev & Marsh, 2014). Along with this political mismatch, Mao could not develop ideological and policy unanimity with Stalin. His land reforms and peasant support policy were in severe repudiation of the New Economic Policy of Stalin. He was able to grasp the idea of the Soviet version of Marxism and felt the need to present a "Sinified" version (Lüthi, 2008). Despite this, CCP and the Soviet Union remained in contact over international issues like war with Japan.

The experience of the Second World War left a lasting impression over Mao and he realized that the US could be the greatest threat to his anti-imperialist ideals. Such belief strengthen

his faith over the Soviet Union. It further necessitated China's economic and military reliance over USSR in the post-revolution era. Albeit, their relationship remained floating between ideological and economic domains.

3.6 Cold War in the Communist World 1949-1990

The support of the Soviet Union was crucial in the CCP's victory in the Chinese civil war. With the elimination of Kuomintang, CCP was in full charge of affairs to deal with the world. However, imprints of Soviet supports remained there and translated apparently into a decade of ideological affinity in the post-revolution era. The national interests were disguised as ideological. They remained tied with each other ideologically with an incremental improvement in ties (Li, 2012). Although, right from the inception of Communist China, Mao had realized the asymmetric relationship of China with the USSR.

An important factor in their post-revolution partnership was the US inclination towards the ousted Nationalist party government. USSR despite its efforts to conclude some settlement with Chiang Kai Sheik failed and had to improve relations with Mao. The US support for Sheik in Formosa contributed towards the conclusion of the Treaty of Friendship between the two communist states in 1950. Although, this treaty of Friendship and alliance was considered as a diplomatic success of the communist world, sustaining this alliance was a great challenge (Wilson, 2015). The terms of the treaty signify a hierarchical pattern consolidating their relationship, reenacting the historical precedence. Such as Soviet privileges for using strategically important Dalian port in Manchuria along with the eastern railway network and much needed financial aid from the USSR (Lo, 2008). These privileges were of utmost importance during the Korean War. Russian military and economic support to China during the Korean War temporarily consolidated the alliance. The Soviet support was momentarily

significant in two ways. First, it raised the level of mutual trust and confidence politically. Secondly, it proved Soviet commitment with the communist bloc.

The decade of 1950 completely transformed the Sino Soviet relationship. However, an ambivalence was visible and turned the best friends gradually into foes in the late 1950s. Two broad factors facilitated the Sino-Soviet split. The idiosyncrasies of Mao regarding Communism and Khrushchev's anti-Stalinism corroded the ideological bedrock of communist states. This was evident after the death of Stalin in 1953. His death provoked a sense of seniority in Mao and he was expecting to be recognized as the leader of the communist world. Khrushchev's destalinization policy further unveiled the inherent weakness of ideological bonds (Sui, 2011). Secondly, Soviet denial to assist China in the nuclear domain, and support for its rival India offended the Chinese. China's increased dependence over USSR did not bear good results. The policy of Khrushchev backfired with the Chinese opposition to the USSR position during the Cuban missile crisis in 1962. Besides, ideological split, the US was one of the major causes of the breach between China and the Soviet Union. China assumed the USSR's policy of détente as its retreat from the communist ideology, parting the ways of two states.

The basis of Chinese and Russian communism has never been exquisitely similar. Their relations revolved around partly ideological, military assistance, and economic relationships. None of the above factors could strengthen their mutual bond. Therefore, China developed its own model of economic development in the form of the Great Leap Forward. This might be taken as an attempt to escape Soviet dominance over China and find a place as a leader of the third world. While Mao had never been in favor of the subordination to the USSR. The Chinese attempt to gain more independence in their decisions widened the cleavage (Changbin, 2001).

The next 35 years would not see close ties again between the two communist powers. Both states did not make any perceptible move forward to solve territorial issues or improve bleak economic ties. During the 1960's China's struggle for the leadership of the third world and at the end of 60's a policy of reconciliation towards the US parted their ways (Jun, 2006). After a complete halt in their relationship, Beijing reversed its foreign policy realizing that the Soviet threat might be tackled in this way. It emerged in a triangular relationship between three states. Ideology seemed to be working nowhere.

The death of Mao and Deng Xiaoping's economic reforms induced more confidence in Chinese foreign policy-makers. They adopted a more independent foreign policy during the Afghan war. The deteriorating position of the Soviet Union during the Afghan war made it realize the importance of good neighborly relations with China (Zubok, 2017). In his speech in Vladivostok in 1986, Gorbachev reiterated the significance he attached with good relations between two communist states. This might have become the start of a new era in Soviet relations with China. Gorbachev's policy revealed a new Soviet approach towards international issues, in the same manner as Deng Xiaoping has initiated the reforms and modernization process in China during the late 1970s. They left behind the policy of containment and adopted a pragmatic approach. After more than a century, a policy of containment and assertiveness, finally a new approach came in hindsight. Whatever efforts made for reconciliation by allowing Gorbachev to visit Beijing in 1988 were overshadowed by the climaxing Afghan War and Tiananmen Square issue (Lo, 2008). The decade of the 1980s ended with the collapse of the Soviet model of communism. A decade of growing fragility at internal and external domains of the USSR and finally its downfall from the status of a superpower re-established and redefined the contours of the China-Russia relationship.

3.7 Post-Cold War Scenario

The disintegration of the Soviet Union redefined the China-Russia relations. The unsuccessful coup attempt in Russia and the ascendance of Boris Yeltsin to power was a disappointing moment for China due to western support for his regime. The post-cold war developments ended the ideological affinity while added many new dimensions to their bilateral relations. Russia with the adoption of democracy politically and China's adherence to the market economy changed the orientation of their ties during the early 1990s. For the first time in the twentieth century, both countries regarded each other as equal partners after the territorial agreement of 1991 (Wilson, 2004).

Notwithstanding the Russian obsession with Europe, its disappointment from the west necessitated its eastward quest for new partners. Despite finding some common political grounds like opposition to US hegemony, and support for the multi-polar world order, both countries failed to establish a strong economic base in their relationship during the first decade of the post-cold war era. However, the beginning of the twenty-first century and China's rise as a global economic power would add a new dimension "energy resources" to their relationship. New areas of cooperation and conflict would appear. China's rising stature in the global economy and Russia's rich energy resources made their interaction in the energy sector inevitable. Perhaps, energy resources especially oil and gas have become the most important factors in their relationship.

3.8 Conclusion

The dynamics of China-Russia relations have been different at every stage of history. Three aspects have been very important. One, security, in the seventeenth century, trade and

commerce in the late eighteenth and nineteenth century, and ideology emerged as the dominating factors since the start of the twentieth century. Secondly, the eastern and western edges of Eurasia have predominantly been the theater of their interaction again. Likewise, in the post-Soviet era, Geostrategic compulsions would bring them close to each other. However, the twenty-first-century relationship would be marked by all three historical factors. Ideology being the weakest common factor, security, geopolitical considerations, and most importantly, economic and resource consideration would determine the future of their relationship.

The Far East and central Eurasia consisting of modern Central Asia and Caspian regions remained very significant for both states throughout the second millennium. Russia's expansionist designs in the east and China's fear of invasions kept them busy in constant interaction. At the time of first Russian diplomatic contact with China, it was way behind China in demographic terms and economic development. They did not enjoy equal status at that time even. Later, Russia embarked on its ambitious program of consolidating its far east for geostrategic strength and economic development and industrialization. The weakening of the Qing dynasty accompanied by several indigenous rebellions and foreign interventions provided Russia great opportunities for its quest for raw material in the east. The eastern end of Eurasia the far-east region was easily occupied by Russia at a time when China was already occupied by foreign infringement in the south and southeast.

The twentieth-century interaction is marked by more ideological affinity than any other factor. After some early years of closeness, both states developed some differences and their relations went through many ups and downs. A relationship, which can be described as masters turned friends, turned foe. The post-cold war China-Russia relations present a completely different scenario, In the early years of the post-cold war era, Russia has lost its economic strength and

China was still struggling with economic takeoff. However, both states did not realize the potential of cooperation with each other. Despite their historical mistrust, geopolitical challenges set the stage for their convergence of interest. The early twentieth century is marked by China's economic rise and Russia's reemergence as an economic power. And this could not be possible without the use of energy resources like coal oil and gas. China's resource hunger and Russia's resource abundance set a complementary relationship. Thanks to energy resources, which paved the ground for the establishment of strong relations between the two states. Hence, energy security provided the biggest ever convergence. In short, it is the energy sector, which defines the contours of China-Russia relations in the twentieth century. The following chapters will look at the energy sector in detail to find out the real motives and interests behind the recent developments in their bilateral relations with a specific focus on the energy sector's role in it.

Chapter 4

Dynamics of China's Energy Security: From Self Sufficiency to Import Dependency

4.1 Introduction

This chapter will look at the dynamics of China's energy security in detail specifically, its oil and gas sector, which are crucial for its energy security. It provides analytical tools to understand China's search for oil and gas markets in its immediate neighborhood. Moreover, the development of its energy relations with Russia and their energy politics in the Caspian region will be understood. The dynamics of energy security in these states must be appraised before this. Breaking it down into three parts is a better way to delineate these dynamics. Part one will focus on the details of China's energy resources with special emphasis on coal, oil, and gas. However, the detail of other energy resources like hydropower, the nuclear, wind, and other renewables will also be accompanied by total reserves, production, and consumption patterns in recent years. Part two will investigate the brief history of China's energy policy since 1949 to understand the changing patterns of energy usage and the governmental approach. Part 3 will focus on the internal and external dynamics of Chinese energy security in the 21st century. Moreover, it will also look into the geostrategic challenges to energy security and alternate solutions

The global oil crisis of the 1970s was the baffling event that drew the attention of states towards energy security issues, causing huge shocks and instability economically and politically. The formation of the International Energy Agency (IEA) and subsequent conceptualization of energy security were its immediate outcomes. Since then, the concept of energy security has gained so much diversity. Multiple geographic, political, and economic connotations of energy security have emerged. The current asymmetries between natural resource distribution and consumers of energy resources make it a critical issue. The changing political landscape at regional and global levels, multiple financial crises, and the emergence of new regional economic powers have accelerated the competition for securing energy resources, making it an important foreign policy issue. China is among one of these emerging economies, whose unprecedented growth and oil and gas demand have transformed energy into a real security issue.

Energy remained a matter of domestic concern for China for several decades. The post-cold war developments, rapid industrialization, and change in China's status as an emerging economic power have brought a considerable change in China's perception and policy towards energy resources. Before indulging into the evolution and development of the current scenario of energy security policy of China, it is imperative to solve the puzzle, what is energy security?

4.1.1 Energy Security in International Relations

There is no doubt that energy resources shaped international relations in the twentieth century. Energy resources revolutionized the whole industrial development, transportation sector, and households. The scientific and technological development along with economic, political, and geostrategic developments of the twentieth century have created an unprecedented dependence on energy resources. Over the last fifty years, the term energy security has gained considerable

importance at the international level. The oil crisis of the 1970s greatly influenced the debate considering it as a security issue.

There is a famous saying of Aristotle “he who controls the definition, controls the debate (Sovacool, 2011)” provides a very interesting perspective for understanding the importance of energy resources in this globalized world. Those who control the energy resources in the contemporary world, control the power and influence.

Energy security is a broad phenomenon, having spatial and temporal variations. With a wide scope, it covers issues ranging from politics, economy, to poverty and the environment (Chester, 2010). The ability of a state to fulfill the requirement of energy resources for economic, trade, domestic, and defense purposes is the pre-requisite of energy security, with the high probability of meeting future requirements. The rising demand for resources demonstrates this important aspect of energy security. Natural resource distribution is uneven in the world. Not every state can fulfill all of its energy demand due to natural geological constraints, which make them import-dependent states. Provided that, energy dependency becomes a very important aspect of energy security. Therefore, securing supplies is the fundamental objective of energy security.

Despite the tremendous importance attached to energy security, most of the scholars believe that the definition of energy security is still blurred due to its multi-dimensional nature (Chester, 2010). Initially, its definition was limited to securing oil resources after the 1970’s oil crisis (Yergin, 1991). Later, stability in the price of petroleum goods in the 1980s reduced the interest in energy security. However, at the turn of the century, rising oil demand and the emergence of new regional economic power centers especially in Asia renewed interest in energy security (Hancock & Vivoda, 2014). This renewed current emerged while adding more dimensions to

the discipline. Asia Pacific Energy Research Centre came up with the idea of using a 4A framework for defining energy security in its Asian energy reports in 2007. (APERC, 2007). Their conceptualization of 4A's Affordability, Availability, Acceptability, and Accessibility was perhaps the first major touchstone in creating a comprehensive understanding of the term. Most of the debates on energy security usually begin with this 4A approach. They reflect different aspects of energy security studies. Availability might be taken as a geological and geographical phenomenon. As all non-renewable energy resources are naturally but unequally distributed in a different geographical region. While affordability would be a purely economic condition, accessibility would be concerned with the economic and political facet. As far as acceptability is concerned, it is more underpinned with social and environmental features (Kruyt et al., 2009).

For a conceptual clarity of 4A's, it is imperative to start with the concept of security first and dig into the question; security for whom and for what kind of interests and values? Baldwin and Buzan who have done some remarkable work on "securitization" are of the view that without determining these basic questions energy security debates are meaningless. The answer to these fundamental questions would determine the answer to the subsequent question of how energy becomes a security issue for a state? Baldwin presents one of the most comprehensive annotations of security. He made sectoral categorization of security. According to him, security is not a narrow and bounded concept (Baldwin, 1997). Although, it started with military security. However, the developments of the last 40 years have broadened its horizon and now it encompasses economic, social, environmental, health, and food security too (Baldwin, 1997). And these categories might be regarded as an answer to security for whom and what interests.

Exploring the inherent link between energy resources and the fundamental interests of those seeking it is the core value of energy security studies.

Another important objective of energy security studies is to identify the threats. No phenomena could seek security without securitization. Having said that, the energy security might be regarded as securing the political, economic, security, and social interests of a state, threatened by limited or insufficient, natural resource endowment, conflicts in case of import dependency, the price hike in the international market, and economic stability tied to the provision of energy resource. It may also include social security, related to health, food, and the environment. For all the above-mentioned factors, energy sources are of undeniable significance. With this broad conceptualization of energy security, this study would pursue the energy security discussion of China. Emanating as a scholarly debate in the early twenty-first century, the topic of energy security constantly widening in scope. Energy Security is a broad concept with different definitions in different situations. Every country varies in its approach towards energy resources and its energy security policies.

4.2 Energy Resources and China's Economic Development

Energy resources are as important for China's economic growth as its weapons for territorial security. It is an undeniable fact that China's phenomenal economic growth is attributed to the unprecedented consumption of energy resources during the last three decades (Li et al., 2014). China is a dynamic country in every sense. The initiation of reforms and its opening to the world has truly transformed its economic social and political outlook. Its entry in the twenty-first century is marked by the extraordinary growth rate and its success in pulling millions of its people from below poverty. With the highest population and fastest-growing economy in the early 21st century, China became the highest energy-consuming nation in the world in 2011

(EIA, 2015). Such a thriving economy requires a constantly high-energy resource demand to maintain a reasonable growth rate as well as a balance between energy demand and supply. Unlike other big powers, be it Russia or the USA, China has a relatively poor resource endowment relative to its requirements. Its invariably rising energy demand made it an import-dependent country. Thus, by securitizing the energy sector, energy security has become one of the top priority issues in foreign policy.

4.2.1 China's Energy Mix

China's emergence as the world's biggest economy has also made it the biggest user of resources. The following graph of relative energy consumption in China and the world indicates this phenomenon.

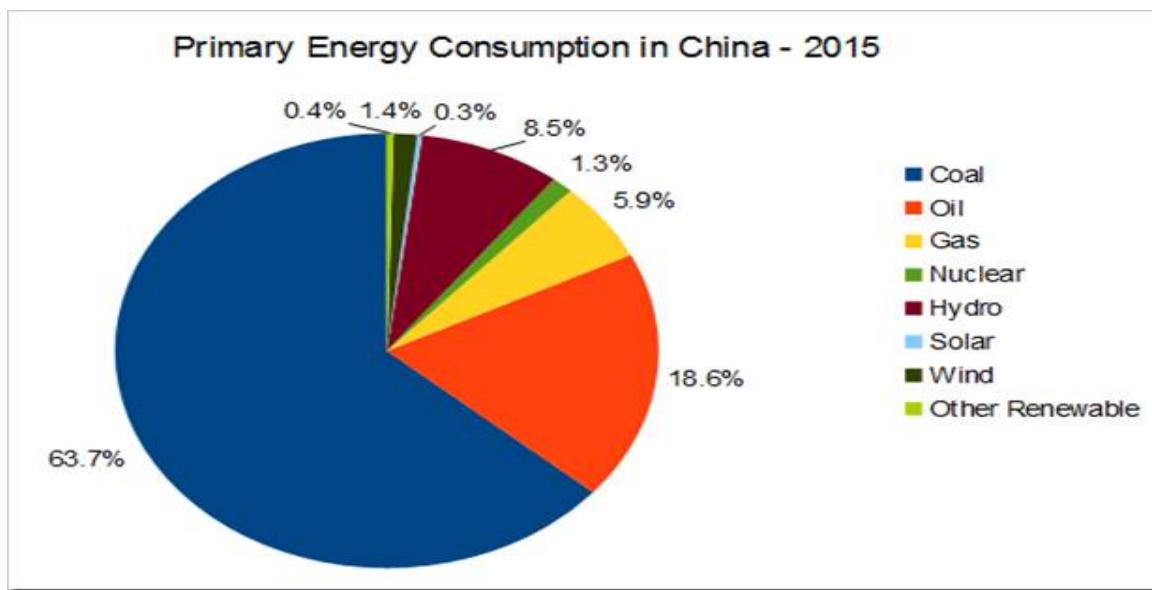


Figure 7: China's Energy mix showing the consumption of every energy resource (National Bureau of Statistics China, 2015).

China's energy mix comprises five major energy resources including, three nonrenewable resources with coal, oil, natural gas, and two renewables like nuclear and other small

renewables. Another significant development in China's energy sector is an improved energy mix. The share of other non-renewable energy resources like gas and renewable resources is increasing at a good pace. This is driven by the objective of reducing coal consumption. The rising demand in the electricity sector is attributed to two major factors. One is the fast-growing household demand and rapidly growing industry and secondly to improve the air quality badly affected by higher coal consumption in the past.

With the decrease in coal usage, China's dependency on the oil and gas sector is increasing rapidly. Moreover, it is actively working to improve the energy mix by increasing the share of wind, hydro, and nuclear energy (IEA, 2017).

4.2.2 Coal as the Foundation of China's Industrial Development

The post-1949 era brought many challenges to the Chinese economy. It emerged from the debris of long civil war and foreign interference. The task of establishing a strong economy based on the modern industry was a huge task that could not materialize with very low domestic oil production. However, 1959, proved to be a landmark year when China's biggest oil field in Daqing was discovered. The oil production from Daqing greatly enhanced the reliance on domestic sources bringing domestic production to 4.3 million tons more than double of pre-Daqing domestic production. This was the first time in a hundred years that China could fulfill its oil demand without any reliance on imports (Dajiong, 2006). The negative impact of this self-sufficiency was that China did not devise any substantive strategy and the whole energy sector worked under one ministry. Energy remained a domestic issue for China, in part because of the abundance of coal and agrarian-based economy. With the rapid industrialization after the opening-up of China, the demand for energy resources has risen gradually.

The share of coal in the Chinese economy has fallen from 94% in 1953 to 74% in the early twenty-first century (Jiang, 2003). Paradoxically, its consumption has been rapidly increasing during this time due to the colossal economic development. The Chinese economy has come a long way ahead of what it used to be before opening-up. Its transformation from a poor agrarian economy to a thriving global economic superpower is mainly attributed to the availability and consumption of mammoth energy resources. The contribution of coal as a domestically available source is undeniable even for many decades to come (Cohen, 2014). However, its hazardous environmental impacts due to huge carbon emission realized the Chinese, the importance of other energy resources.

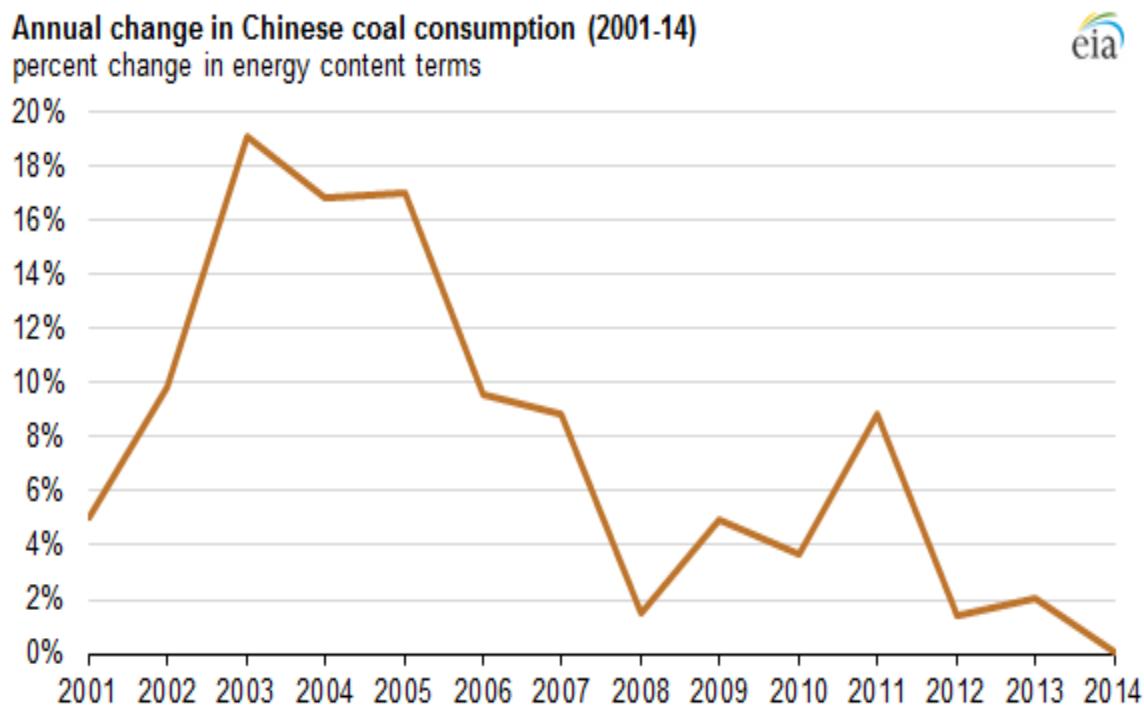


Figure 8: Reduction in Coal Consumption in China (Energy Information Administration, 2015). After restructuring, the energy sector in the late 1990's China set ambitious goals to reduce its coal consumption. Coal's proportion in the Chinese economy used to be more than 90% before the reforms period. China successfully reduced it by bringing it between 65 to 70% until 2013.

However, it was just coal's share in China's economy, not the actual amount of coal consumed. China's Co₂ emission in 2012 was recorded at 8,106 million metric tons (EIA, 2015). According to the Wall Street Journal, coal consumption dropped by 2.5% in 2014 only, while oil and gas usage increased 5.9 and 8.6% respectively (Puko & Weiyap, 2015). Its coal reserves from 2011 to 2017 amounted to almost 131 billion metric tons (The Statistics Portal, 2018). Being the third-largest coal producer, China's economy has been primarily dependent on coal. For a clear understanding of China's energy security issue, it is indeed crucial to look at China's energy resources data, its energy mix (energy production and consumption pattern before the reforms period, in the post-reforms period, present situation, and future indicators.

4.2.3 Oil and Gas as Crucial Resource in China's Energy Security

China became an oil import-dependent country in 1993. Since then, securing enough oil resources has become a top priority of China's energy security policy. Import dependency brings strategic threats with it. Chinese petroleum companies like Sinopec and CNOOC (China National Offshore Oil Corporation) began foreign operations by obtaining exploration and development projects and concession rights. Their entry into the international market although met with tough competition by the western oil companies like British Petroleum, Exxon, Chevron, Lukoil, Shell, and many others.

The coal consumption has already started taking its toll. China left with no choice other than reducing its coal consumption. Ever since the Chinese economy has taken off, its dependency on imported oil and gas has increased. Oil has become the ultimate factor in Chinese energy security policy. China has become the second-largest oil consumer and the largest importer of oil leaving behind the USA in 2014 (EIA, 2015).

The following figure shows a comparative picture of petroleum consumption in China and the US.

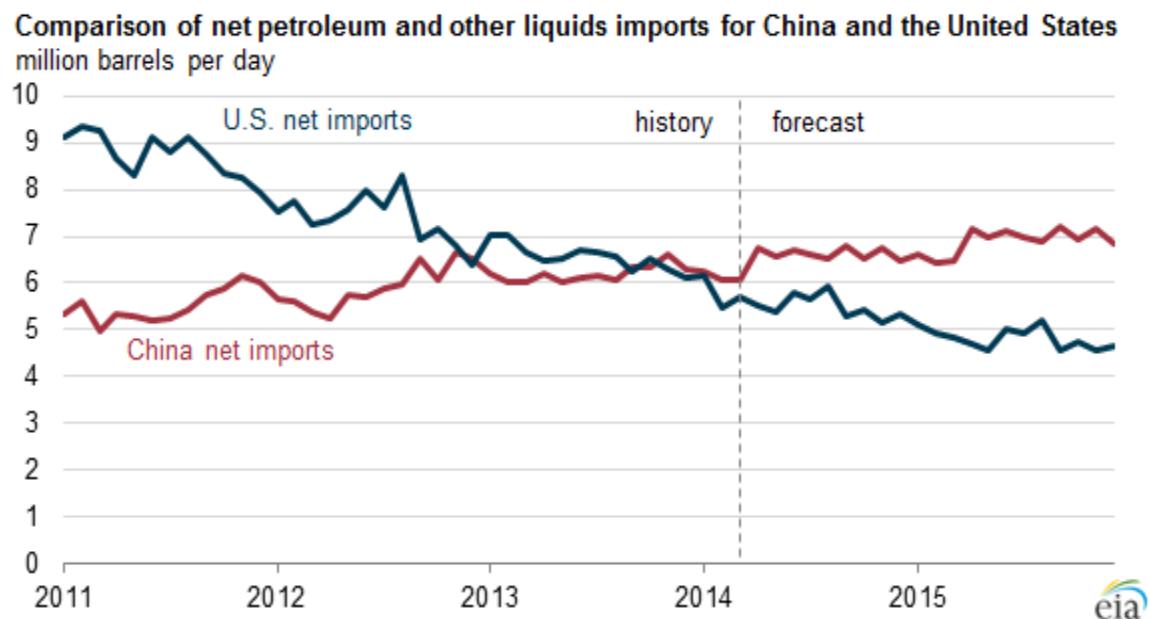


Figure 9: Comparison of China and US in petroleum consumption over the years (Energy Information Administration, 2017).

It intricately shows how China's petroleum production has rapidly grown over the years and how it has taken over the world's largest petroleum-consuming nation the US in the first decade of the twenty-first century. The increase in consumption also indicates China's growing import dependency, which is causing alarms for the world's biggest economy and its huge industrial setup that cannot survive in the absence of secure and uninterrupted oil and gas supply.

The energy statistics of the Energy Information Administration clearly indicates that China's net energy consumption has exceeded its energy production. Hence, making it an import-dependent country and increasing the security vulnerability of the energy sector, especially the oil and gas sector, whose share in the Chinese economy is growing rapidly. As far as China's

domestic oil resources are concerned. The following graph clearly shows the level of production of petroleum goods in China and soaring consumption levels.

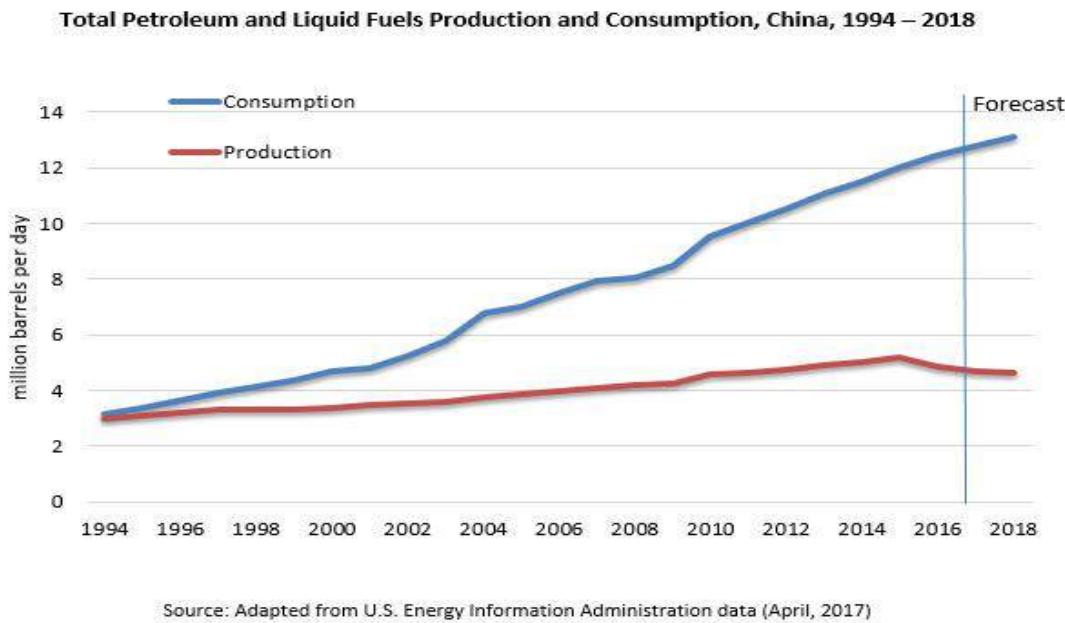


Figure 10: Growth in Petroleum consumption in China (US Energy Information Administration, 2017).

The gap between production and consumption indicates the level of import dependency. This gap is constantly increasing with every passing year. It indicates that the gap between production and consumption has immensely broadened since the 1990s. However, the difference that occurred in the first and second decades of the new century is phenomenal.

According to the Energy Information Administration, China's proven oil reserves are less than 2.5% of the total world. However, oil consumption has been increasing by more than 5% annually. Its oil consumption was 91 million tons in 1978 at the time of opening-up. This figure rose to 560 million tons in 2015 and from self-reliant to high import dependence (National Bureau of Statistics China, 2015). However, the official statistics of China's oil consumption

shows that it has been consuming over 12million-barrel oil per day in 2016. It also indicates China's annual import of oil is increasing at 13% annually. More than 65% of consumed oil is imported. China's reliance on imported oil is growing expeditiously and is expected to reach more than 80% by the end of the next decade (China - Oil and Gas, 2017).

The case of its gas reserves is not much different. China owns less than 3% of the total world gas reserves (EIA, 2013). The share of natural gas in China's energy mix is on the rise. It has 90 trillion cubic meters of gas reserves, with the possibility of handsome shale gas reserves (China Daily, 2016). Although, China has invested heavily in domestic exploration and production and achieved remarkable results. Even then consumption has outpaced the increase in production. It is expected that gas demand would rise by 10% by 2020. Its consumption has risen by about 17% per annum since 2003 (EIA, 2014).

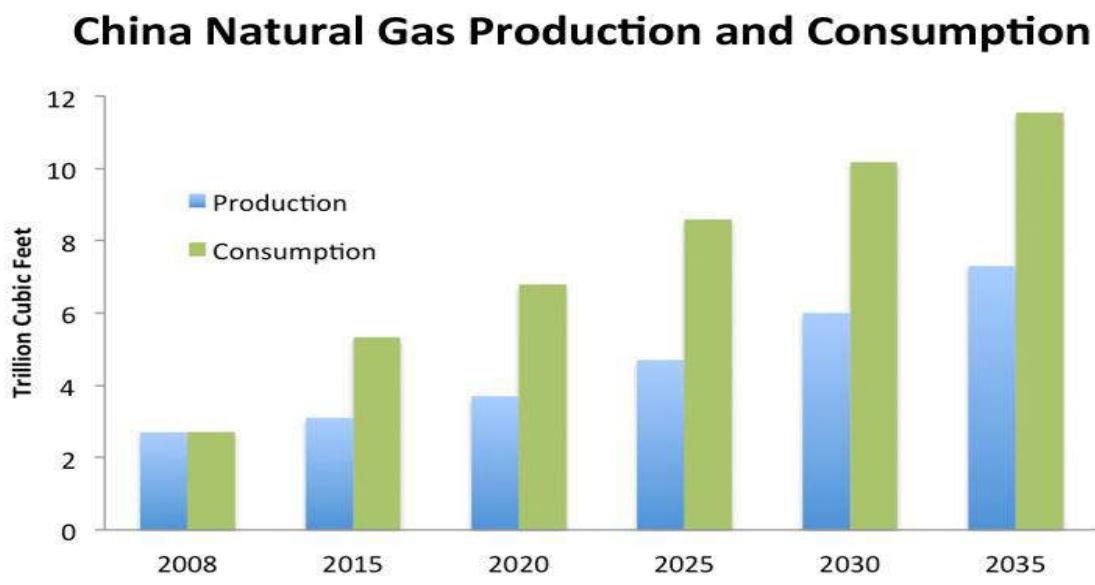


Figure 11: Natural Gas Production & Consumption Forecast (The US Energy Information Administration, 2018).

4.2.4 A Brief Account of Renewable Sources of Energy in China

China is also focusing on increasing the share of renewable sources of energy in its energy mix. Until 2017, their share in China's total energy mix has grown to 2.1% from 0.8%. It has 45 nuclear power plants and the share of nuclear energy in the total energy mix is only 2 % in 2017 (Neol, 2018). Interestingly, China has the biggest hydropower production base in the world. It is constructing three of the world's largest dams. Even then, its share in China's total energy mix is not more than 18.6%. The following graph further, elaborate on the role of the renewable sector in China's energy sector. The solar energy contributes 1.8 %. Similarly, China has invested extensively in wind energy production in recent years and its share has reached 4.8% of the total energy used for electricity production.

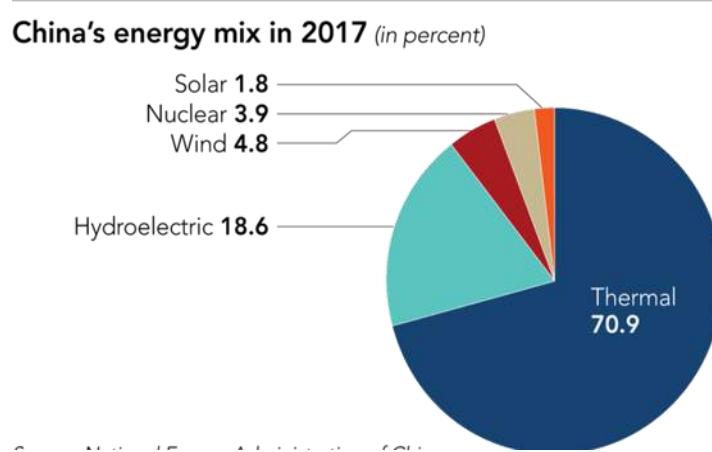


Figure 12: The share of renewable sources in comparison to nonrenewable.

(National Energy Administration of China, 2018).

4.3 Brief History of Energy Production, Consumption, and Evolution of Energy Policy

China's energy policies have undergone a significant change over six decades. The institutional base of energy policy experienced a remarkable shift before and after the reforms period. To

discern the current energy strategies, it is imperative to grasp the evolution process of China's energy security policies. The evolution process of China's energy security might easily be divided into three broad periods.

- (a) The first period of strictly centralized control from 1949 to 1978,
- (b) The second phase from 1979 to 1999 transition period towards the open market economy and
- (c) The third phase from 2000 to the present.

4.3.1 First Phase 1949 to 1978: Era of Self Sufficiency

During the first phase from 1949 to 1978, China clearly lacked a comprehensive energy security policy. It used to follow a strict centralized decision-making system encompassing all sectors of the economy including the energy sector. Only one ministry "ministry of fuel and power" was developed during the early 1950s to regulate the energy sector. Later, it was split into several ministries separating the coal, petroleum, and electricity sectors. The ministry under the supervision of the State Planning Commission sufficiently met the limited demand for energy resources within the country. A strategy of short-term planning was adopted with incremental changes in the coming years. The policy of self-reliance was prevalent in China's energy sector during this time. Coal was the dominant resource of energy with 96% of total energy consumption. The coal production in China crossed the record 330 million metric tons during the 1960s (Reuters, 2011). However, the coal sector faced some drawbacks due to Mao's Cultural Revolution.

China implied the policy of energy self-reliance in the oil sector too. The Chinese had already realized the strategic importance of its oil reserves since Japan got control of its major oil reserves in Manchuria (in Fushun in Liaoning province) during the second world war and

developed it with the emphasis on resource nationalism. China's top oil fields of Fushun, Yuman, and Daqing laid the development of China's oil sector. With the assistance of the Soviet Union, China was able to increase the production of the Yumen oil field to 1.7 million tons of oil until the 1960s (Lim, 2008). The exploration of the Daqing oil field proved to be a landmark in China's oil industry. It further enhanced the self-reliance policy in the oil industry. Daqing was discovered in 1959 and within the next four years, it was producing almost half of China's domestic requirement of crude oil at that time. Discovery of six major oil fields from 1959-1975 including, Changqing, Huabei, and Shengli strengthen the oil industry and China became an oil exporter (Hook et al., 2010). By the end of 1978, China's oil production growth rate was recorded at 18.6% annually. China's gas exploration also showed decent results and reached 13.73 billion cubic meters (Feng et al., 2013). Nevertheless, coal remained the largest consumed energy resource due to the self-sufficiency in coal production at the domestic level. That is why, energy security remained a matter of domestic concern and it is never taken as a foreign policy issue unless China became a resource-dependent country (Jian, 2011).

4.3.2 Second Phase 1978-1999 China's Economic Takeoff

The opening-up of the Chinese economy laid the foundation of China's future energy discourse. Multiple factors like enormous population, growing industrial base, increasing urbanization, all contributed to the unprecedented demand for energy resources. Though China had become an oil-exporting country before the reforms period, its exports were limited. To fulfill the growing export of oil, the exploration of new reserves was essential. The Chinese government had to deal with the fund's insufficiency issue to maintain a balance between its oil production, consumption, and reserves for domestic use and export. With the arrival of foreign petroleum exploration firms from the United States and France and after signing contracts with the Chinese

government, China's oil industry finally took off and emerged very strong and promising. With the opening of the Chinese economy, transportation, and industrialization, the demand for oil resources also increased. Therefore, the government introduced reforms in the energy sector. The transport sector, industrial sector, and construction sector are the three most energy-consuming sectors. Hence, the oil sector needed urgent overhauling. The energy scenario changed for China further in the 1990s. It became an oil exporter in 1993 (Troush, 1999). The restructuring of the petroleum industry in 1998 followed by the adoption of an intense exploration program proved quite fruitful.

4.3.3 Third Phase: The Twenty-First Century Energy Scenario

During the first decade of the twenty-first century, a parallel increase in production and consumption were observed. As soon as the growth rate of the Chinese economy rose high, domestic production despite its increase proved insufficient for the transportation, industrial, and electricity sectors (Andrew et al., 2002).

Rapid economic growth made oil a strategic resource for China. Correspondingly, securing oil would become a high priority foreign policy issue. Many security vulnerabilities were involved in the import of oil, which will be discussed later.

China's oil consumption remained very high in the second decade of the new century despite the slowdown in growth rate. In 2010, its consumption of oil has surpassed that of the United States with a per-day consumption of 52.9 million barrels of oil compared to 47.5 million barrels of the U.S. According to the International Energy Agency, China would remain the top consumer and importer of oil by 2030 (EIA, 2017). It is only oil and gas, which will sustain China's economic growth with less environmental impact. Though clean energy has become an important objective around the world and China is no exception. It will take time to shift

reliance from nonrenewable to renewable resources and increase their share in China's energy mix. Currently, China's oil requirement is growing rapidly.

In such a dire need for oil, where maintaining economic growth require huge energy resources, China is left with no choice other than importing oil and gas from resource-rich regions. In the next section of this chapter, an account of China's oil and gas trade will be discussed. Which countries are its major import destinations? How much oil and gas China is importing, what kind of security vulnerabilities and geopolitical susceptibilities are involved, and how they make energy a sheer security concern for China?

China has reached an advanced stage of industrialization where energy security has become a prime objective for economic, social, and even military security. The establishment of the National Energy Commission in 2010 by then-Premier Wen Jia Bao is a clear reflection of Chinese overwhelming concerns for improving its energy security scenario.

4.4 China's Oil and Gas Imports

China is the leading oil consumer of the world. It consumed almost 11 million barrels of oil per day in 2015. Out of which more than 7 million barrels of oil were imported. According to the Energy Information Administration, China's top oil import destination remained OPEC countries, Saudi Arabia, Angola, Iran, Iraq, Venezuela, etc. The import from OPEC countries reached its peak in 2012 when China imported 67% oil from these countries, however, its import from non-OPEC countries like Russia and Brazil grew considerably after 2012. The share of OPEC countries dropped to 56 % recently in 2017. Saudi Arabia who remained the top importer of oil to China until 2015 has been replaced by Russia in the last two years (EIA, 2018).

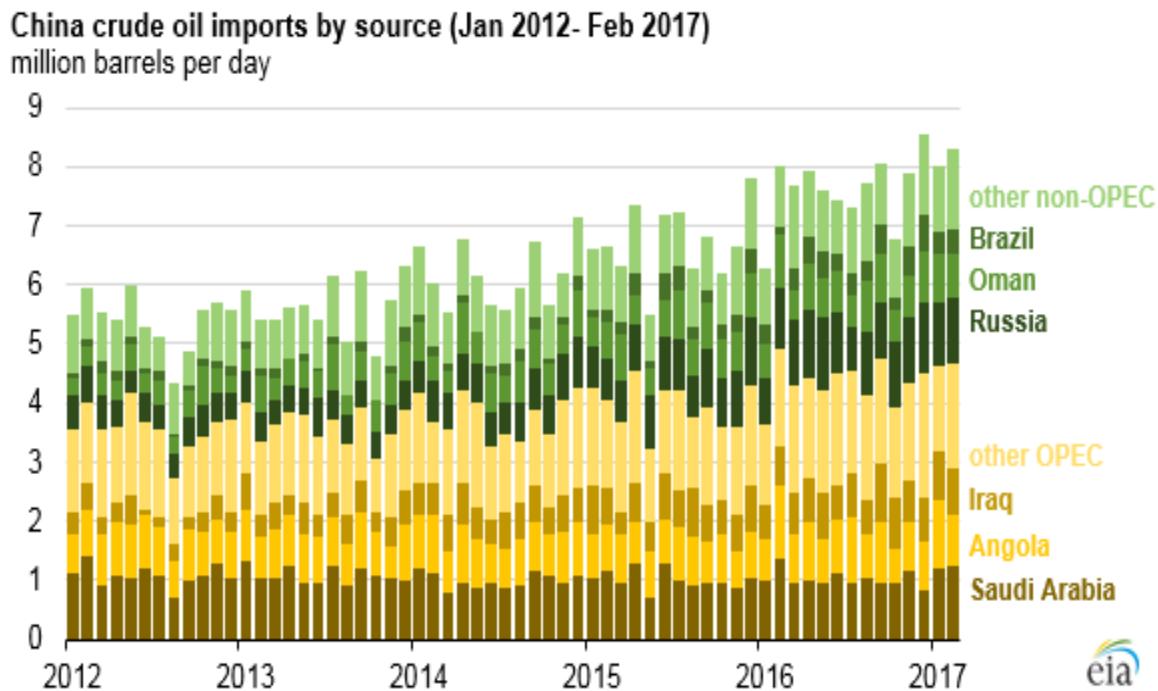


Figure 13: China's oil imports by source (US Energy Information Administration, 2017).

China buys crude oil from 45 countries around the world. Among them, 45% of its imports come from Middle Eastern countries, indicates the recent statistics. According to the latest data by World Top Exports, Saudi Arabia is at top of the list of crude oil-suppliers from the Middle Eastern region. In 2014, Saudi Arabia was exporting 16% of China's imported crude oil. While Oman was in the second position with 10% and Iran and Iraq providing 9% of oil each (Statista, 2015). The share of the United Arab Emirates was 4 % and Kuwait's share was 3%. The share of Saudi Arabia remained at the top of the Middle Eastern region in 2017. It accounts for 20.5 billion barrels of oil.

Africa is another important supplier of oil for China with Angola emerging as the second-largest source of these imports. China's oil import from Angola comprises 13% of its total oil imports in 2014. Congo, Nigeria, and Sudan are other important oil trader importers to China (Statista,

2015). Their share grew recently, and Angola has become the third-largest oil importer to China from Africa.

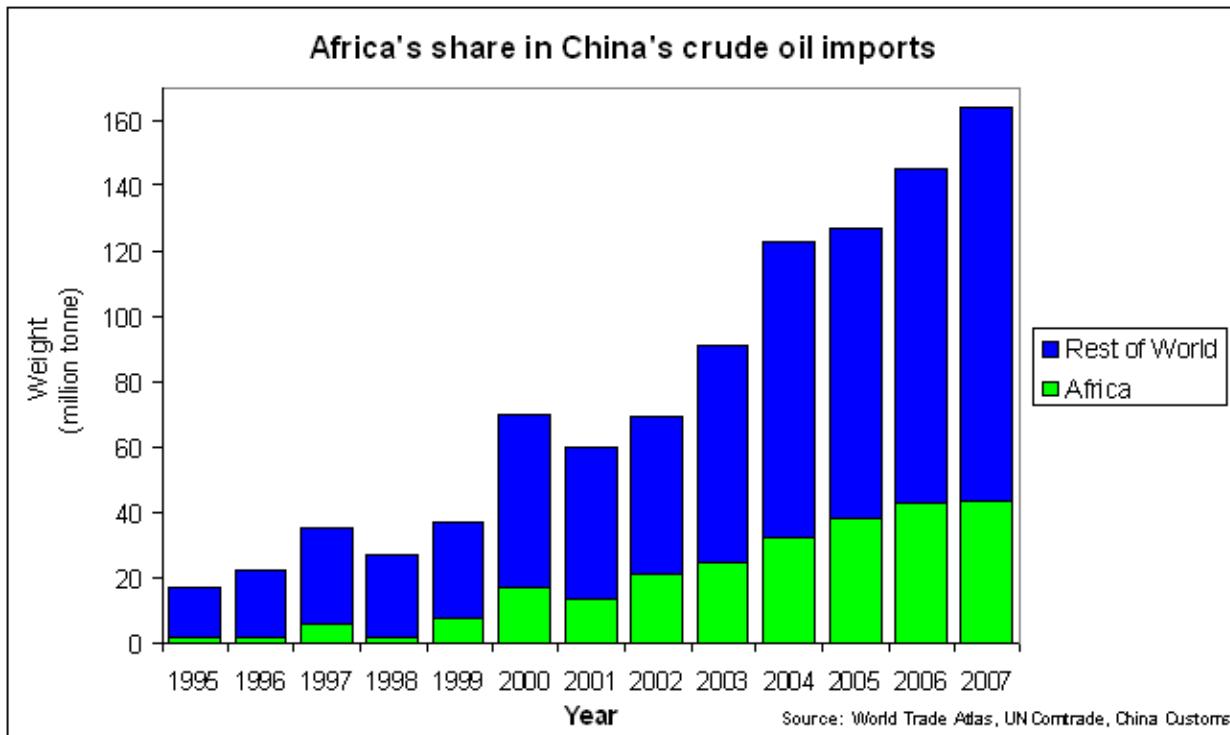


Figure 14: Share of Africa in China's Oil Imports (World Trade Atlas, 2010).

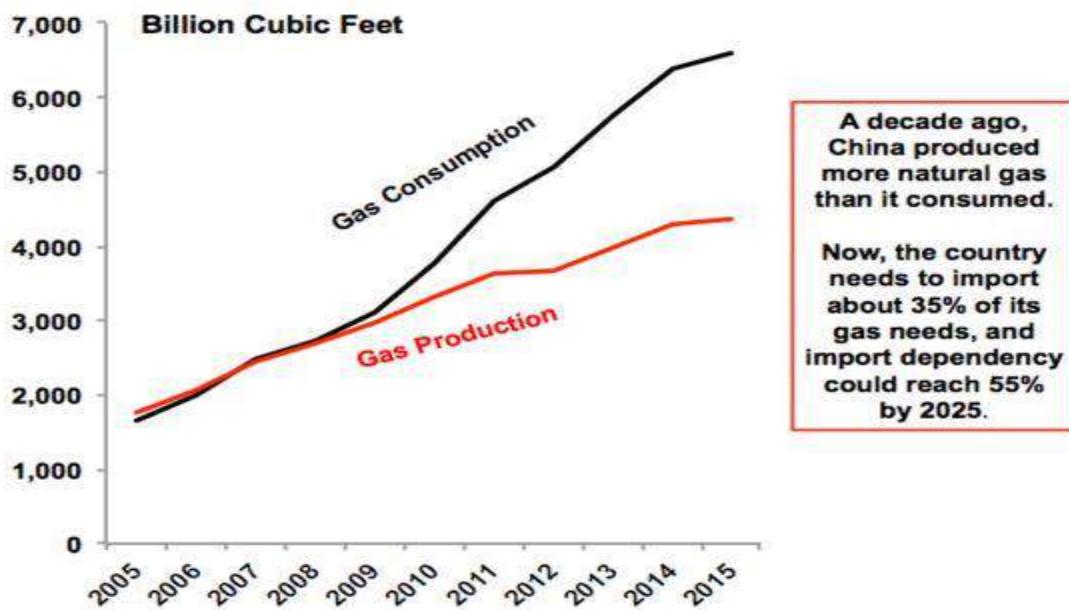
In addition to the Middle East and African oil importers, China has emerged as a big buyer of oil in the South American market, where Venezuela, Brazil, and Colombia are constantly expanding their oil trade relations with China. The latest figures show that China is importing 8.8 billion barrels of oil from Brazil, 6.6 billion barrels from Venezuela, and 3.37 billion barrels of oil from Colombia in 2017 (Workman, 2018).

China's daily oil import reached 6.7 million barrels per day. A clear indicator of China's unprecedented import dependence to run its huge industrial setup (Bloomberg, 2016). Huge demand for imported oil and gas along with low prices of oil is a major concern for China as

drilling cost becomes higher when oil prices in international market fell below \$ 50 per barrel (Clemente, 2016).

The case of imported natural gas is not much different for China. As its natural gas consumption is rising constantly, domestic production of natural gas has become insufficient to meet demands in the industrial sector as well as transport and households. The demand for natural gas has quadrupled in China during the last 10 years. According to the Energy Information Administration, China consumed 19 billion cubic feet of gas per day in 2015. Moreover, it is expected to reach 57 billion cubic feet per day by 2040. An interesting fact about the monumental increase in gas consumption in China is indicated in a report of Forbes, which says that China consumed 35% more natural gas than expected in 2010 also indicated in the International Energy Outlook report of EIA (Clemente, 2016).

China's Need for Imported Natural Gas is Rising



Source: EIA; JTC

Figure 15: Rising Natural Gas Export (EIA, 2016).

The demand for natural gas is growing by almost 6% per year. While China's domestic gas production stood at 127.1 billion cubic meters in 2015 (National Bureau of Statistics China, 2015). While, data for natural gas consumption in the same year shows that China consumed 191 billion cubic meters of gas (Xinhua, 2017). This trend continued to grow in 2016 when its gas consumption reached 224 billion cubic meters growing at 6.4% in a year. Meanwhile, a colossal increase of 22% equal to 75 billion cubic meters of gas in exports was observed ("China's oil and gas consumption", 2017).

China's gas sector developed comparatively at a slower pace than oil. However, it has gained considerable importance in the 21st century. China's gas consumption has reached nearly 7000 billion cubic feet in 2015. It is almost 6% of the total energy mix (BP, 2016). China's domestic gas demand constantly grew at a faster pace in the first decade of the twenty-first century due to the higher economic growth rate. However, the declining growth rate brought a downturn in domestic demand by 8.3% in 2014. Even then, it is expected to reach almost 10 % of the energy mix by 2020.

The natural gas industry is developing rapidly as an alternative to clean energy replacing coal (Li, 2015). Since 2010, China's coal consumption patterns are experiencing a decline. Despite China's desperate efforts to increase gas production domestically by new drilling and through shale gas, growing demand will outpace it. According to the International Energy Agency, China's gas demand will reach 600 billion cubic meters by 2040, whereas, domestic production will remain around 340 billion cubic meters by the same year. It indicates the growing dependence on imported gas (IEA, 2017). IEA has also predicted a sharp rise in natural gas demand in China in the coming decade. According to its recent report, China will dominate the globe as the biggest consumer of natural gas in the coming decade.

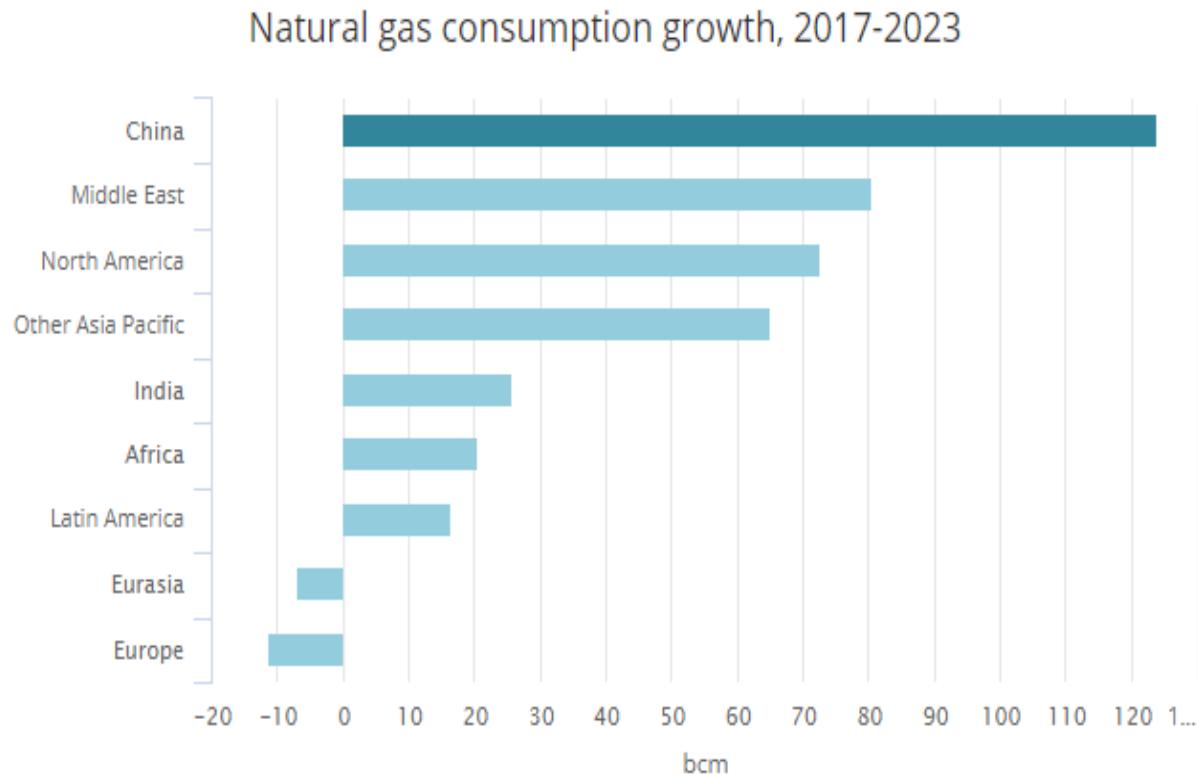


Figure 16: Comparison of China's Natural Gas Consumption (International Energy Agency, 2018).

In recent years, China has emerged as a major buyer of LNG Liquefied Natural gas. The Chinese government has set the goal to increase LNG share in the total energy mix to 10 percent by 2020 (Pathak, 2017). On the one hand, China is constructing gas pipelines with its western neighbors for gas import; while on the other hand, it has also pursuing import of LNG using maritime routes. It imports LNG from Australia, Malaysia, Indonesia, and Qatar, becoming the third-largest importer of LNG after Japan and Korea. It is ready to replace South Korea to grab the second place as the largest importer of LNG. Its estimated import will cross 50 million metric tons by 2019, while South Korea's import will remain around 40 million metric tons (Xin, 2017).

4.5 Geostrategic Vulnerabilities of Energy Import and its Securitization

Energy security is no more just an economic security issue for China. It has gained a geostrategic connotation. And it must be analyzed in the context of China's size, location, domestic resource base, and import dependencies.

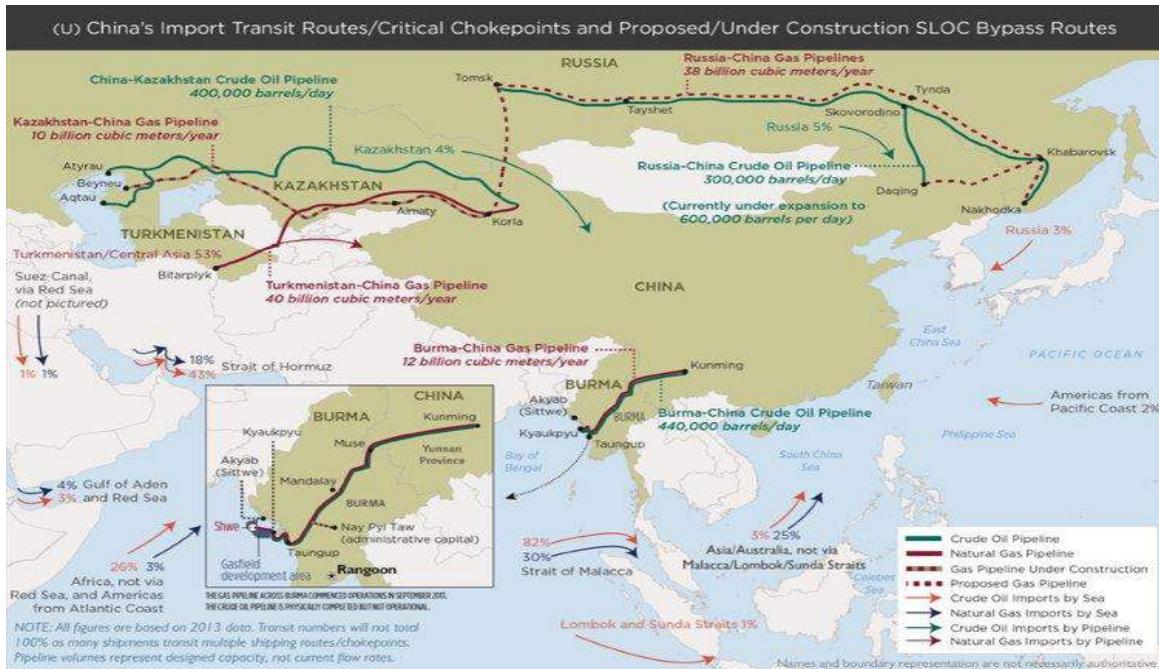


Figure 17: China's major import routes including chokepoints (US Department of Defense, 2018).

Besides, the location of imported resources, who controls and owns them, their total cost of transportation, and most importantly their transportation routes are also very important. The demand for energy resources has increased enormously and import dependency has raised many geostrategic concerns for oil and gas imports (Lee, 2012). It is expected that oil dependency in China will increase from the current 53% to 84 % in 2035 and it will remain the largest consumer of oil by 2040 (OPEC, 2017). Its usage will increase from 6 million barrels per day to 17.8 million barrels by 2040. And most of this oil will be imported from multiple sources.

Several factors make China's oil and gas imports vulnerable to its energy security. The most important threat that breeds in for oil import is that China overwhelmingly depends on the Middle East and Africa for its oil requirement

Initially, the share of oil from Middle Eastern countries was dominant in China's imports. However, the changing geopolitical situation of the region and growing US presence in the region especially after 9/11 has compelled China to put its eggs into more than one basket. This led Chinese policymakers to look for more potential markets. Albeit, founding such suppliers in Africa, South America, and elsewhere, they are not without any security vulnerabilities of their own. The flow of oil trade between China and its importers in the Middle East and Africa is subjected to two great geopolitical security risks at two very important choke points. One in the Strait of Hormuz and the other is in Malacca Strait.

4.5.1 First Choke Point: The Strait of Hormuz

The Strait of Hormuz is one of the most important and risky chokepoints for oil trade. Located in the Persian Gulf, almost one-fifth of the world's oil trade passes through the Strait of Hormuz (Cunningham, 2018). This is considered as the narrowest strait with only twenty-one-mile width. The Iranian island called Abu Musa is located very close to the starting point of the strait and is directly controlled by Iranian security forces. The US invasion of Iraq and its hostile relations with Iran, the Saudi-Iran conflict, and other regional issues have greatly put the energy security of all those states at risk who depends heavily on imports from the Gulf region. Moreover, the tanker war of 1980-88 Iran-Iraq war has already set historical precedence that how much damage might be caused in case of any armed conflict in the region. During the Tanker war phase, 239 oil tankers were attacked with most of them drowned and caused so much financial loss and environmental damage (Mills, 2016). Therefore, Chinese leadership

understands the risks involved if they continue to depend on Gulf oil. Most importantly the presence of the US in the region has raised the chances of conflict thus jeopardizing the Chinese energy security, especially at a time when China's naval capability to defend its oil trade is still far behind that of the US.

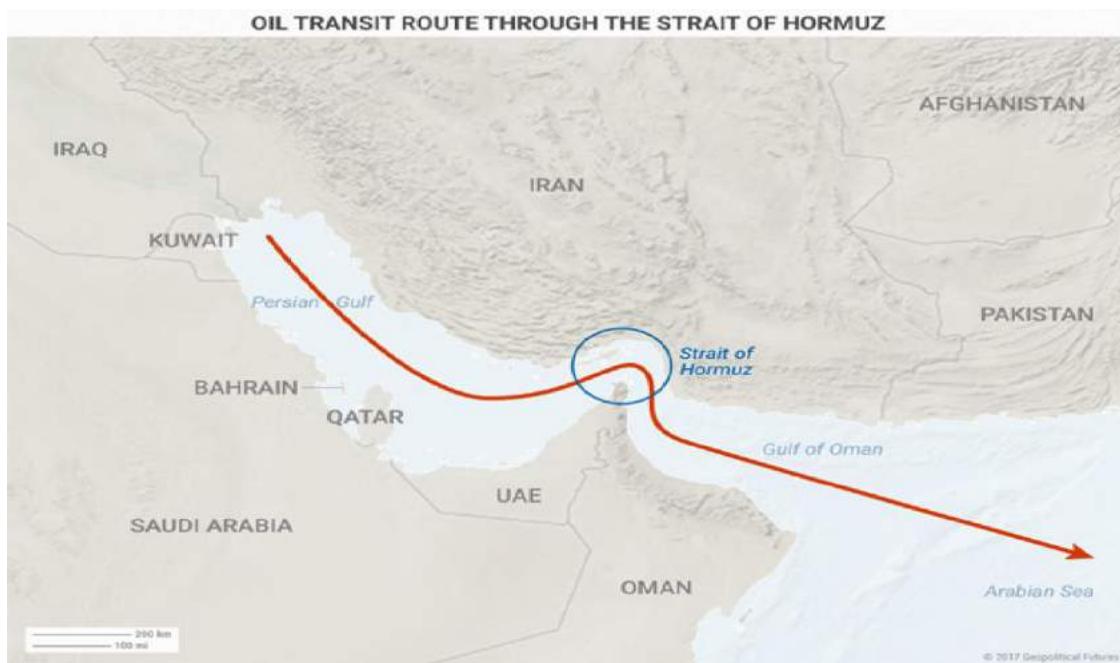


Figure 18: Map of the Strait of Hormuz (Mauldineconomics, 2017).

The strait of Hormuz provides an exit to other states like the UAE and Saudi Arabia. Both are important oil sellers to China. Despite having oil pipelines to circumvent the dangerous strait, Saudi Arabia, and the United Arab Emirates have not been able to utilize them fully. According to the Energy Information Administration, 17 million barrels of oil are shipped through the Strait of Hormuz every day, which is equal to 35% of all maritime oil exports (EIA, 2012). It is equally significant for China's oil trade with the Middle East. Almost 43% of China's oil imports from the region must pass through the Strait of Hormuz (Bender & Rosen, 2015).

The Persian Gulf region and Strait of Hormuz has geostrategic importance. Iran has already set precedence by closing the strait during the Iran-Iraq war of the 1980s. The ongoing tension between Saudi Arabia and Iran and the Iran-US row have again made it perilous to continue oil trade through this strait unabated. This situation puts China's energy security in a jeopardy. Any disruption of oil trade in this region would not only delay the oil supplies but also the loss of significant monetary losses to the exporters and a severe shortage of oil (Mauldin, 2017).

4.5.2 The Strait of Malacca

The Case of the Strait of Malacca is even more intimidating. Almost 90% of oil imports of China and the entire East Asian region crosses Malacca a tiny strait, which runs through Indonesia, Malaysia, and Singapore. This strait connects the Indian Ocean with the South China Sea. The Strait of Malacca is considered to be the most important chokepoint for China's energy security. It is 550 miles long. At its narrowest point, its width reduces to only 1.7 miles making it more prone to maritime piracy and terrorist attacks. These threats from nonstate actors are equally compelling for all the regional states. Thus, creating a convergence of interests on the issue of safe passage of ships through the straight. All regional states have made efforts unilaterally and in collaboration to deal with these menaces.

Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia was signed by sixteen regional states in 2004. Consequently, there has been a significant reduction in piracy and terrorist activities observed (Sliwinski, 2014).

The strong US naval presence at patrolling is the biggest cause of concern for China in the Strait of Malacca. The Sea-lane security is parallel to energy security for not only China but also for the other growing regional economies. Although China heavily depends on imported oil and LNG, it still lacks comprehensive mechanisms and services required for the technical support,

insurance, and safe passages of the tanker. Moreover, China's disturbing relationship with some of its neighboring states in the South China Sea are already undermining the Chinese efforts to secure this route.



Figure 19: The Malacca Strait (Friedman, 2017).

The Strait of Malacca is also a geopolitical hotbed. As most of China's oil imports cross Malacca, it might be called the lifeline of China's energy security. Maritime security capabilities are a prerequisite for energy security in this region. It is not less important for Japan whose 60% oil trade comes through Malacca (Friedman & Mauldin, 2017). Both China and Japan have been involved in their maneuvering to establish their firm control over the trade routes of the region. The presence and patrolling of the US military fleet in the region and its close ties with the regional states like Japan is a constant threat to China's energy security. Unfortunately, China does not control the Malacca nor does its maritime security capabilities match that of the US. The measures it has taken to ensure maritime and eventually energy

security have sparked the conflict between multiple regional players and the US, whose trade interests clash with that of China in the region. Apparently, China's threat-perception in energy matters is influenced by the western approach towards the region, which is based on containment of China. On the other hand, China's occasional military drills in the South China Sea sparks sharp criticism from regional states as well as the US. As a result, US military cooperation with its closest ally Japan and other regional states is burgeoning (Swaine, 2015). The biggest concern for China is that most of its maritime trade including oil and LNG passes through Malacca Strait, which comes under the jurisdiction of three states jointly. China has constantly looking for alternate options to reduce its heavy reliance on the Strait of Malacca. The construction of the Kra canal in Thailand and the oil and gas pipeline through Myanmar are two important steps in this regard. However, no alternate has solved the Malacca problem for China. Thus, the Malacca dilemma shows the limitations of Chinese capability in securing this most important sea-lane.

In such a scenario, energy security has become a two-edged sword. China's reliance on imported oil and gas on the one hand and the delivery route on the other has made it inevitable for China to find alternate sources and routes. Though, it is not possible at least in the near future to completely circumvent the Malacca Strait and shun reliance on Middle Eastern and African oil. However, alternate importers for oil and gas and alternate routes for a limited supply might be a sound strategy for Chinese energy security. China has already taken several steps in this regard. Like opening the land route for Middle Eastern oil through Central Asia, and Pakistan's Gwadar port has gained considerable importance in this regard (Cunningham, 2018).

4.6 Alternate Options for Oil and Gas Imports

China suffers a geographical disadvantage in its energy trade that it is located at the eastern edge of the globe. Whereas, major oil-rich nations are located far away from China, either in the Middle East, in Africa, or South America. These disadvantages range from financial to geostrategic issues. This compels China to look for a more secure supply route. The richest country in both oil and gas, Russia is located in Chinese suburbs. China and Russia do not have a strong history of economic relations. Despite having great potential in the energy trade sector for the growth of bilateral economic ties, both neighboring states could not establish a strong foundation of their relationships after the fall of the USSR.

Nevertheless, an important aspect of China's growing energy dependency in recent years is its growing relations with Russia. China and Russia could have established a strong buyer and seller relation. China being the largest buyer of oil and gas and Russia as the biggest exporter of oil and gas could become the strong trading partners soon after the end of the cold war. It is only after 2015, that China and Russia have been able to greatly enhance their energy trade relationship. And in 2017, Russia has replaced Saudi Arabia as the biggest oil supplier to China by providing 14.6 % of its total oil requirement (Workman, 2018).

4.6.1 One Belt One Road and Energy Interests of China

The large-scale infrastructure projects for energy trade are considered vital for the energy security of states and the establishment of strong and long-term relationships among them. The decision to select a specific pipeline route reflects the economic and geopolitical priorities of states. The energy projects under the Belt and Road initiative signifies China's changing economic, energy, and geopolitical priorities. It indicates China's dire need to diversify its energy supply. It also exhibits its strategy to find transit free or less vulnerable land transit

routes for a secure supply of oil and gas. The idea of Belt and Road addresses China's major foreign policy and economic goals. Enhancing the energy security of the country is one of them. BRI is mapped out to feed the energy-hungry economy. It is not only a mere connectivity project but it also envisions constructing oil and gas pipelines with the neighboring states to gradually reduce dependence on the Gulf region (IEEFA, 2018).

4.6.2 Energy Trade Options in Immediate Neighborhood

China has realized the potent role, some of its neighboring states and regions can play in the pursuit of energy security. By placing energy security as a top foreign policy agenda, Beijing has oriented policy of establishing access to resource-rich regions. The policy of going abroad has also created many investment opportunities for China's petroleum companies. And they have specifically targeted the neighboring energy-rich regions. The construction of the trans-Myanmar oil pipeline has already completed in 2013 and the second phase of the pipeline is under construction. The construction of the China-Pakistan Economic Corridor is also one such effort by the Chinese government to ensure its energy security. This route will be important for providing an alternate land route to China for its oil deliveries from the Gulf region through the construction of pipelines, roads, and railway infrastructure.

The development of China's energy relations with the neighboring former-Soviet states of Central Asia and the Caspian Sea region and its biggest neighbor Russia is of paramount importance (Binhong, 2017). Through Belt and Road initiative, China has started pouring billions of dollars in energy projects. Its relationship with Kazakhstan and Turkmenistan is more significant than any other regional states in this regard. Kazakhstan richness in oil along with geographic adjacency makes it a bright prospect for China's energy security. Turkmenistan's affluent gas reserves have attracted China's attention. Therefore, it has emerged as the largest

gas importer of Turkmenistan. Both states enhanced their natural gas trade in 2007 when Turkmenistan was supplying 30 billion cubic meter gas per annum. Now with the construction of two more parallel lines of their gas pipeline, it is expected to reach 65 billion cubic meters by 2020 (China Daily, 2015). Both Turkmenistan and Kazakhstan have prospective onshore and offshore resources of oil and gas. China-Kazakhstan energy sector cooperation accounts for almost 30 % of their bilateral economic cooperation. In Kazakhstan's crude oil production sector, the share of Chinese companies stands at 25 % (Junmian, 2017).

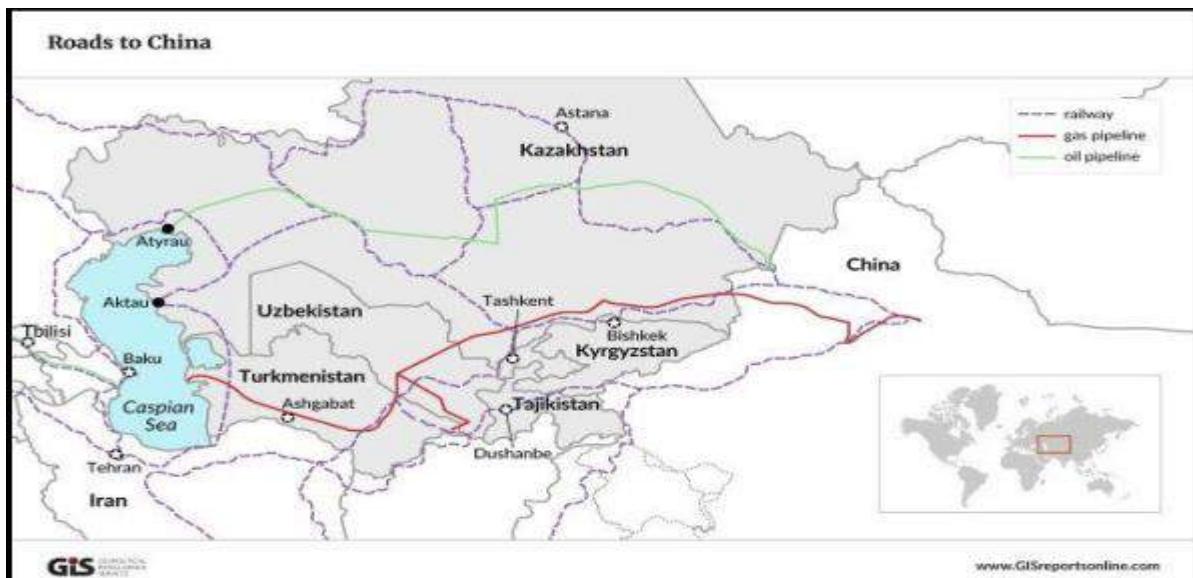


Figure 20: China's Energy Infrastructure in the Post-Soviet Region (Geopolitical Intelligence Service, 2017) .

Through Belt & Road project China is not only developing road and rail connections with these states but the construction of huge oil and gas pipelines is contributing to the diversification of energy trade routes of these resources rich but less developed states. Therefore, this region has become the most important part of the whole Belt & Road Initiative. China has been pouring huge financial resources in the infrastructure and energy projects of the region.

As far as Russia is concerned, the largest neighbor and the world's most resource-rich country, it has great potential for developing an energy relationship with China. Russia holds a unique position in the energy trade diversification strategy of China. Initially, both states could not consolidate their economic and energy relations after the collapse of the Soviet Union. Only recently, have they started developing their energy ties more vigorously. The development of China-Russia energy relations in recent years is remarkable. Contrary to the expectations of many critics and analysts, they have taken their energy ties to a great height. Chinese and Russian companies have started many joint ventures in eastern Siberia. China is using its financial strength in the bilateral energy trade with Russia. The development of the Eastern Siberia Pacific Ocean pipeline (ESPO) is significant in this regard. Energy cooperation with Russia gives China the advantage of transit free trade. It is also helpful in exploring the huge energy potential of Russia's far east. It holds tremendous importance for the Russian energy sector, which was in dire need of financial and technological assistance for the development of this area's energy resources. Its remote location, too far from the major oil and gas consumers of Russia in Europe was a major obstacle in the development of the eastern Siberia energy sector. The pragmatism between the two states for strengthening their bilateral trade has resulted in making Russia an important part of BRI. Russia has received more than \$46 billion under BRI and it has taken the bilateral trade volume up to \$100 billion at the end of 2018 (China Daily, 2019). In this way, energy security has become one of the prime objectives of China's BRI related projects in its immediate neighborhood. This has caused huge interdependence in energy matters linking the energy security of one state with the other.

4.7 Conclusion

It is beyond any doubt that energy Security is the main pillar of China's economic miracle. Ever since the first oil crisis in the 1970s, China, just like every other nation, is striving hard for its energy security. Initially, its coal and domestically produced oil were enough for its requirements. However, the post-reform scenario posed great challenges for its energy security. It has paid special attention to the development of its local resources. Domestic production has grown tremendously. Still, it is far behind the required levels. Henceforth, China's economic take-off not only made China an import-dependent country. Perhaps it has emerged as the biggest importer of crude oil in the world. China has paid special attention to the development of the energy sector. The reduction in the share of coal in the economy and the increase of oil and gas and some renewable sources has become the top priority of China's energy policy. Oil and gas have emerged as the most important energy resources. Despite focusing on the renewable energy sector, it is unlikely to decrease the share of oil and gas in the near future. According to estimates of the International Energy Agency, the use of oil and gas will continue to rise in the next twenty years. China has already become the biggest oil and gas consumer in the world as well as the largest importer of oil. Such a huge import dependency is not without challenges. It also raised suspicions regarding import destinations especially in the aftermath of the 9/11 attacks. In this scenario, China was faced with dual challenges. Not only were its major import destination susceptible to security. The Middle East and the Persian Gulf region have been facing volatile security situation due to the US invasion of Iraq and Afghanistan. Its maritime routes have also become a security concern. Thus, diversification of energy trade sources and routes has become a major foreign and energy policy agenda of China. China's energy security is indeed synonymous with its strategic stability now. China's immediate

neighborhood including Russia and its post-Soviet states in the Caspian region has emerged as strong energy partners of China. There is no doubt that the energy sector has become one of the prime security issues for China. It is not less susceptible to Russia and the Caspian states. The details of energy as a security issue for these states will be discussed in the next chapters.

Chapter 5

Dynamics of Russian Energy Security

The importance of energy resources for economic development, political stature, and strategic strength is inevitable. This is an inescapable reality for both resource-dependent and resource-rich nations. Although energy import-dependent nations like China are considered more vulnerable to securing energy supply considering the international price fluctuation, geostrategic issues, conflicts, and other factors. Self-sufficient states in energy resources also face mired challenges in the realm of energy. Energy self-sufficiency is self-contradictory. No energy-rich nation can claim to be secure in the energy sphere. Russia is a prime example. The world's largest hydrocarbon resource-holding nation faces inescapable challenges in its energy sector (Ellman, 2006).

5.1 Russian Energy Sector at a Glance

Russia is playing multiple roles in global and regional energy politics. It is the largest non-OPEC producer of hydrocarbon resources, and one of the biggest exporters of oil and gas in the world (Workman, 2018). It also holds strategically important transit routes for energy trade. It is the beholder of one of the biggest pipeline networks in the world. Moreover, Russian energy relations are so extensive that they extend from Eastern Siberia to Western Europe (Omonbude, 2013). The internal and external dynamics of Russia's energy sector are quite different from China's energy sector discussed in the previous chapter. So, what makes Russia's role in the energy sector so important internally and externally? Why Russia, despite being so rich in its

resource base, faces great challenges for its energy security? And what strategy it has adopted to ensure its energy security? To find the answers to the above-mentioned questions, this chapter will be divided into two parts. It is appropriate to first have a detailed look at Russia's energy resources, especially oil and gas in the first part. In the second part of the chapter, Russia's challenges and strategies for energy security will be discussed in detail to find out how Russia's contemporary energy security has changed the outlook of Russia's relations with China and combined its energy interests with its former states around the Caspian region and China to form an energy security complex.

Part One

The first part of the chapter like the previous chapter provides comprehensive detail of Russian energy resources and work as a tool for the analysis of energy as a security issue for Russia and for understanding the challenges and strategies adopted by Russia to ensure its energy security.

5.1.1 Russia's Oil Sector: Threshold to the Russian Economy

Russia leads the world in energy resources production and export, maintaining its important role in global energy security as well as in the Russian economy. Its economic development is highly dependent on the exports of oil and gas. Together they account for 40% of Russia's national budget in 2018 (MIOGE , 2017).

The Russian oil industry has been developing rapidly since the Soviet era. It is one of the biggest producers of crude oil in the world (EIA, 2015). The proven crude oil reserves of Russia are more than 80 billion barrels. Its crude oil production stands at over 10 million barrels daily. Russia's domestic oil consumption is 3.9 million barrels. The gap between supply and

consumption reflects total exports. Russia exports 5.9 million barrels of crude oil daily (EIA, 2017).

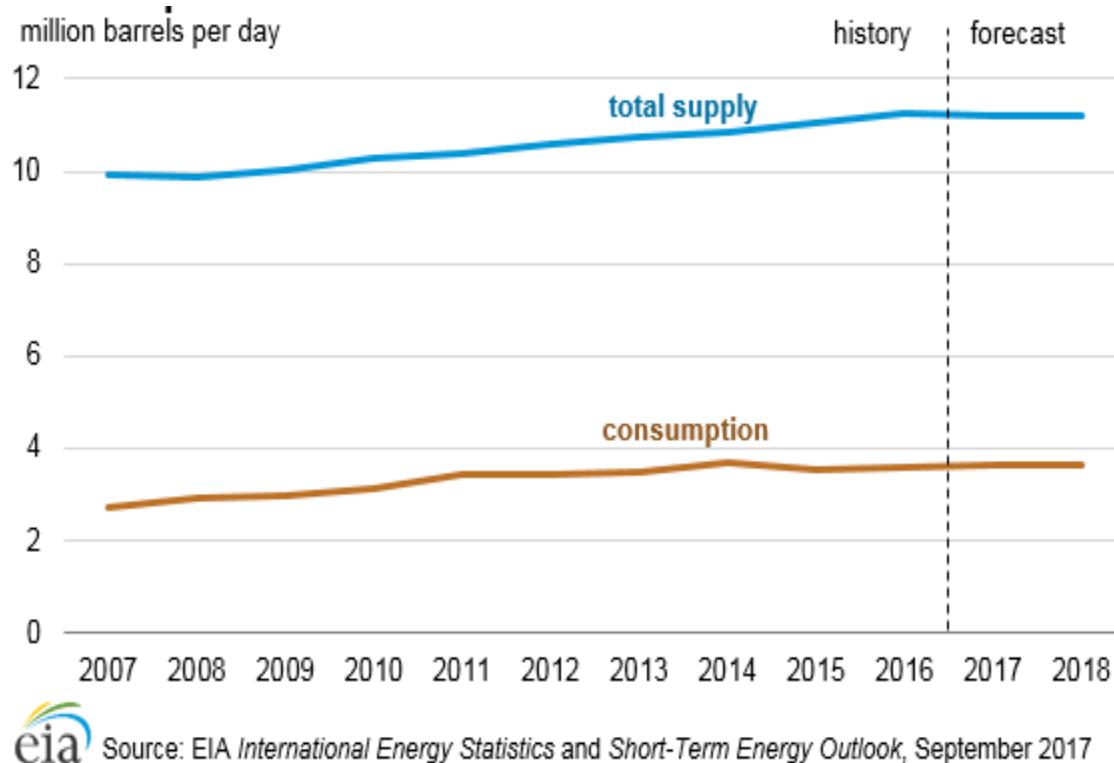


Figure 21: Russia's Petroleum Production and Consumption (Energy Information Administration, 2018).

5.1.2 Natural Gas in Russia

Russia is one of the most influential players in the international gas market, due to its vast natural gas reserves and control over the gas transportation pipeline system. The natural gas production is estimated at 21 trillion cubic feet. It holds approximately 1.688 trillion CF of natural gas, the largest reserves in the world (Oil and Gas Journal, 2015). These reserves are equal to a quarter of the global reserves. The U.S has just surpassed Russia in gas production after the shale gas discovery, becoming the biggest producer of gas. Most of the reserves are located in Northern Russia, Yamal Nenet region of Western Siberia.

Russia's oil and gas reserves are geologically distributed in different areas, like Eastern Siberia, Western Siberia, the Arctic region, the Caspian Sea region, and northern Russia. The Black Sea region also holds some rich untapped oil and gas reserves (Dodgson, 2016).

The details of the rich oil and gas resources in different geographical regions of Russia are given below.

- (a) The Western Siberia region: It is the richest region for the Russian oil and gas industry. It includes the Urals and Volga regions. Its share in oil production is more than 23% of total oil and gas production. The Khanty Mansiik region contributes 45 % of Russian oil output.
- (b) The eastern Siberia region: It holds huge tapped and untapped oil and gas reserves. This region is playing an active role in the oil and gas trade between Russia and East Asian countries in recent years. It includes Yakutia, Irkutsk region.
- (c) Russia's far east is a resource-rich region. Located at the easternmost shores of the Okhotsk Sea, the Sakhalin Island in the far east is rich in oil and gas reserves. Many international companies are taking great interest in developing the oil and gas reserves of the area. Sakhalin 1 has estimated oil reserves of 2.3 billion barrels and gas reserves are approximately 17.1 trillion cubic feet (Arctic Econ, 2011).
- (d) Arctic Region: This region includes the Yamal-Nenets region, Krasnoyarsk. This region produces more natural gas than oil. The lack of oil exploration facilities and infrastructure is the biggest hurdle in the exploration and development of oil fields in the region. Rosneft manages the onshore oilfields of this region, while Gazprom operates the offshore oil field of the Arctic region.



Figure 22: Russia's Oil and Gas Producing Regions (Petroneft, 2016).

5.1.3 The Coal Industry in Russia

Russia is rich in coal reserves too. It occupies the second position for the largest proven coal reserves after the United States. It holds 69.6 billion metric tons of proven coal reserves (The statistics Portal, 2018). Russia's annual coal production stands at around 300 to 330 million tons from 2015 to 2017 according to official Russian sources (Ministry of Energy Russian Federation, 2017). Russia consumes 45% of its coal production domestically and 55% is exported.

The following figure shows the Russian coal production in detail, including the major coal reserves and production sites.

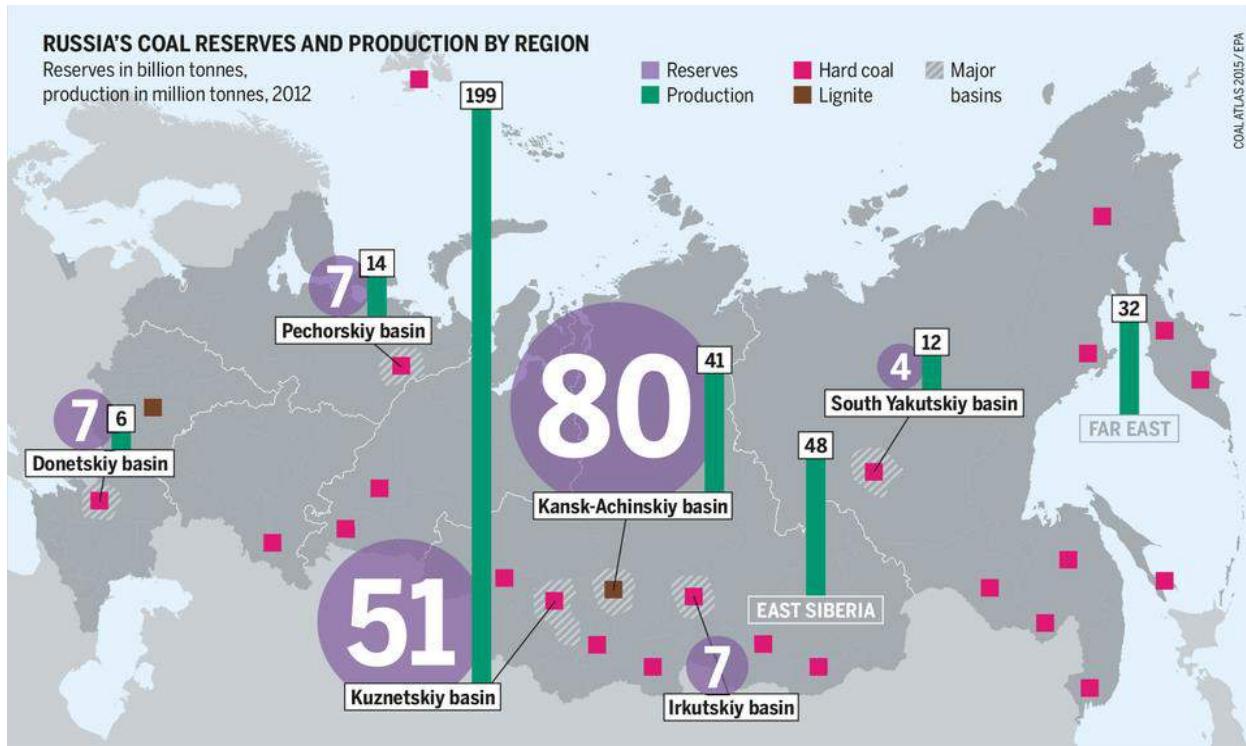


Figure 23: Coal Reserves in Russia (Reddit, 2017).

Kuzbass region in central Russia is considered to be the richest region in terms of coal reserves.

It contains 80 billion tons of proven reserves but its share in production is 41 million tons only.

In comparison, Russia's far eastern region of Yakutskiy holds 4 billion tons of total reserves, and its share in total production stood at 32 million tons. While Russia's western region including Donetskiy Basin, Pechorskiy Basin, and Kuznetskiy Basin collectively produce 65 billion tons of coal and they produce 219 million tons of coal. The biggest drawback for the Russian coal industry is the huge transportation cost it has to pay for transporting from Central Russia to the east for a growing number of Asian buyers. Similarly, it becomes so expensive to transport it from the eastern Siberia or northeast Pacific region to western Russia or to export it to its European customers (EIA, 2017).

5.1.4 Nuclear and Other Renewable Energy Sources in Russia

Nuclear and other renewable sources account for one-sixth of Russia's total energy mix.

According to World energy data, Russia holds 34 nuclear power plants in 2015. With advanced nuclear technology, its 20 nuclear power plants are used for export. The share of nuclear plants in the national electricity production is around 19% equal to 25264 MWE in 2015 (World Energy, 2016).

Solar energy is the least developed area of the Russian energy sector. With its vast territory and extremely cold climate, a huge number of people do not have access to electricity generating units. For this purpose, the Russian government is planning to develop the nuclear energy sector. It's North Caucasus and Black Sea regions have great potential for solar energy. The case of wind energy is not much different. It is also one of the most underdeveloped energy generation sectors. The availability of fossil fuel energy at a cheaper rate will continue to hinder the development of renewable sources other than hydropower. Moreover, from a very unobtrusive base, its share will increase in the Russian energy mix and reach 3.3 % by 2040 (The Analytical Center for The Government of Russian Federation, 2016). As far as Russia's energy consumption is concerned, the natural gas share is the largest in primary energy consumption followed by petroleum. The share of coal is proportionate to other renewables.

Russia has a colossal base of the hydropower generation facility. It has the capacity of producing 2295 TWh electricity annually. Its share in total electricity production is around 19%.

Most of the hydroelectricity generation facilities are located in the Eastern regions of Russia. Russia also possesses great potential for geothermal energy; however, the fossil fuel-based economy has not given much consideration to this sector. Few geothermal power plants are located in Daghestan, Krasnodar Krai, and Kuril-Kamchatka regions (World Energy, 2016).

Russia's primary energy consumption,

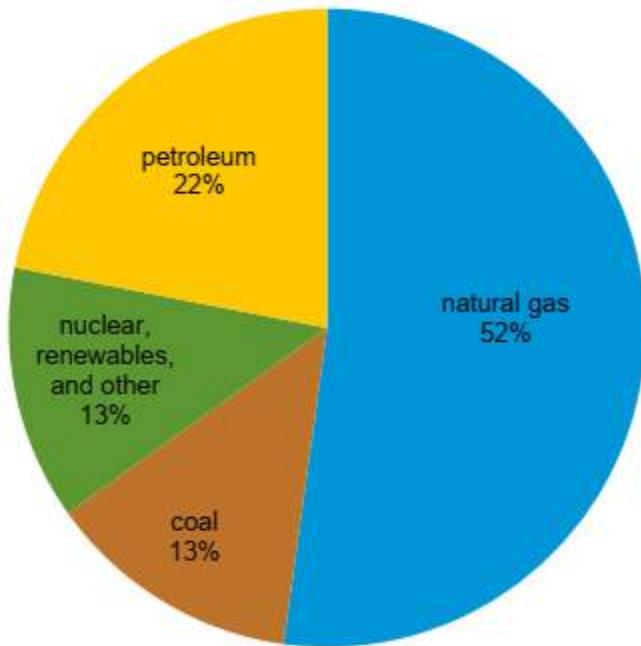


Figure 24: Russia's Energy Mix (US Energy Information Administration, 2017).

5.2 Major Domestic Players in Energy Sector

With such a powerful resource base, Russia has set up a few of the world's top petroleum companies. Their role is not only significant in the domestic energy sector, but they have a compelling impact on the regional energy market too.

Gazprom is the biggest gas company in Russia as well as in the world. The Giant company with the capital of \$50 billion produces 12% of total daily global gas production and 68% of Russian gas output. It also holds 17% of the world's gas reserves and 72 % of Russia's local gas reserves (Gazprom, 2018) equivalent to 36 billion cubic feet of gas (Carpenter, 2018). The Gazprom also deals in the oil industry with third place in the Russian oil industry.

Rosneft is another leading petroleum corporation involved in exploration, extraction, and transportation activities in upstream. It is the second-largest Russian company after Gazprom, It not only exploring key oil and gas reserves in Russia but also in Latin America and Southeast Asia. Rosneft maintains the largest network of oil refineries as well. As a state-owned company, it is the largest hydrocarbon-producing public firm (Rosneft, 2018).

As the first experiment to create a private oil company with a decentralized structure, Lukoil emerged as one of the prestigious names in the oil business in Europe. It originated from the relics of the Soviet Union's oil ministry and remained as the bellwether of the Russian hydrocarbon industry in the post-Cold War era (Lukoil, 2018). It has extensive operations in Eastern and Western Europe, post-Soviet states, Africa and South America. In fact, it is the first company that entered the US gas market in 2000 (Behr, 2000).

Surgutneftegas is another important hydrocarbon company created in the early 1990s. It operates in the upstream reserves of the Eastern and western Siberia region. It accounts for 18% of drilling in Russia, 11% of oil production, 22% of exploratory drilling, and 7% of domestic oil refining in the country. The only oil refineries located in northeastern Russia are owned by Surgutneftegas (Surgutneftega, 2018).

Tatneft was established in 1950. Earlier it was primarily engaged in the domestic oil and gas sector. Later, it started operations abroad. Currently, it is engaged in oil and gas exploration operations in Libya, Syria, Iran, Angola, Saudi Arabia, Belarus, and Ukraine. According to 2015 figures, Tetneft was producing 27.2 million tons of oil and 947.96 million cubic feet of gas (Tatneft, 2018).

5.3 A Huge Pipeline Network: Russia's Strategic Asset

In addition to massive oil and gas reserves, Russia owns a comprehensive and strategically located pipelines network for oil and gas trade. Provided the vast territory and remotely located oil and gas producing areas, transportation of these resources to market and consumers become a big issue. The role of pipelines is no doubt critical in boosting energy trade. Russia has played special attention to this issue. It possesses a comprehensive network of oil and gas pipelines connecting its far-eastern regions to central and European parts of Russia and vice versa (IBP, 2013). Most of these pipelines were constructed during the Soviet era, demonstrating the significant role of energy resources in the Soviet economy. Russia has added several oil and gas pipelines in its network after the disintegration of the Soviet Union. The following detail of these strategically located pipelines network would set the stage for understanding and analyzing the true meaning of energy resources for Russia.

The Russian Federation acquired 46000 km of pipelines for the transportation of crude oil. Along with this, Russia got hold of a huge network of gas pipelines extending over an area of 152000 km in 1991 (Chow, 2004). Russia has shown a discouraging attitude towards private ownership of pipelines since Soviet times. Its major oil and gas companies, especially Gazprom, and Transneft have maintained a monopoly over the major oil and gas exploration, extraction, and production as well as the construction of major pipelines. Even then Russia has established a comprehensive, well integrate oil and gas pipeline system to connect all major production sites with the transit facilities.

5.3.1 Druzhba Pipeline System

Russia holds an extensive oil pipeline network domestically. Most of the oil in Russia is produced in Siberia. Transportation of oil from an extremely cold region to ports requires a vast

transportation facility. The Druzhba pipeline system is one the largest pipeline system of the world, which brings oil from the far eastern regions of Russia to central and western Russia covering a distance of over 2500 miles connecting Russia with Ukraine, Hungary, and further in the western European market (Foreign Policy, 2006). The Druzhba Pipeline originates from Tatarstan receiving oil from the western Siberia region. From Almetyevsk onwards this pipeline splits into two branches. One is the northern route and the other is the southern. This pipeline was built to transport oil to Russia's European customers as well as to the Baltic States. The most important aspect of this pipeline is that it helped in replacing oil transportation through railway, reducing the cost and time of transportation (Pipelines International, 2009).

5.3.2 Baltic Pipeline System

Russian oil giant Transneft operates another huge pipeline system called the Baltic Pipeline System. The project is completed in two phases with the cost of \$4billion. An important objective behind laying down Baltic Pipeline system 2 is to reduce transit dependence on Belarus after its differences with Russia emerged in 2007. This pipeline connects the Druzhba pipeline near the border of Belarus and concludes at the merchant port in the Gulf of Finland. The Baltic pipeline system phase 1 has the capacity of carrying 30 million tons of oil annually. With the completion of phase 2, an additional 20 million tons of oil will be added to the pipeline system.

5.3.3 Eastern Siberia Pacific Ocean Pipeline System

The Russian oil sector is so diverse. Given the remote location of most of its major oil reserves, it has constructed a pipeline system, which delivers oil from its eastern reserves to the East Asian states. Transneft initially built the Eastern Siberia Pacific Ocean pipeline system, a 2046 km long pipeline across the Amur region, Khabarovsk, and the Primorsk Territories (Transneft,

2018). The first phase of this huge pipeline was completed in 2009 and the Russian government announced the commencement of the second phase of the pipeline, which was completed in 2012. The giant East Asian economies like China, Japan, and South Korea are connected to this pipeline stretching its length to 4188 km (Hydrocarbon Technology, 2018). The following image shows the huge pipeline network of Russia, which encompasses the whole post-Soviet region too.

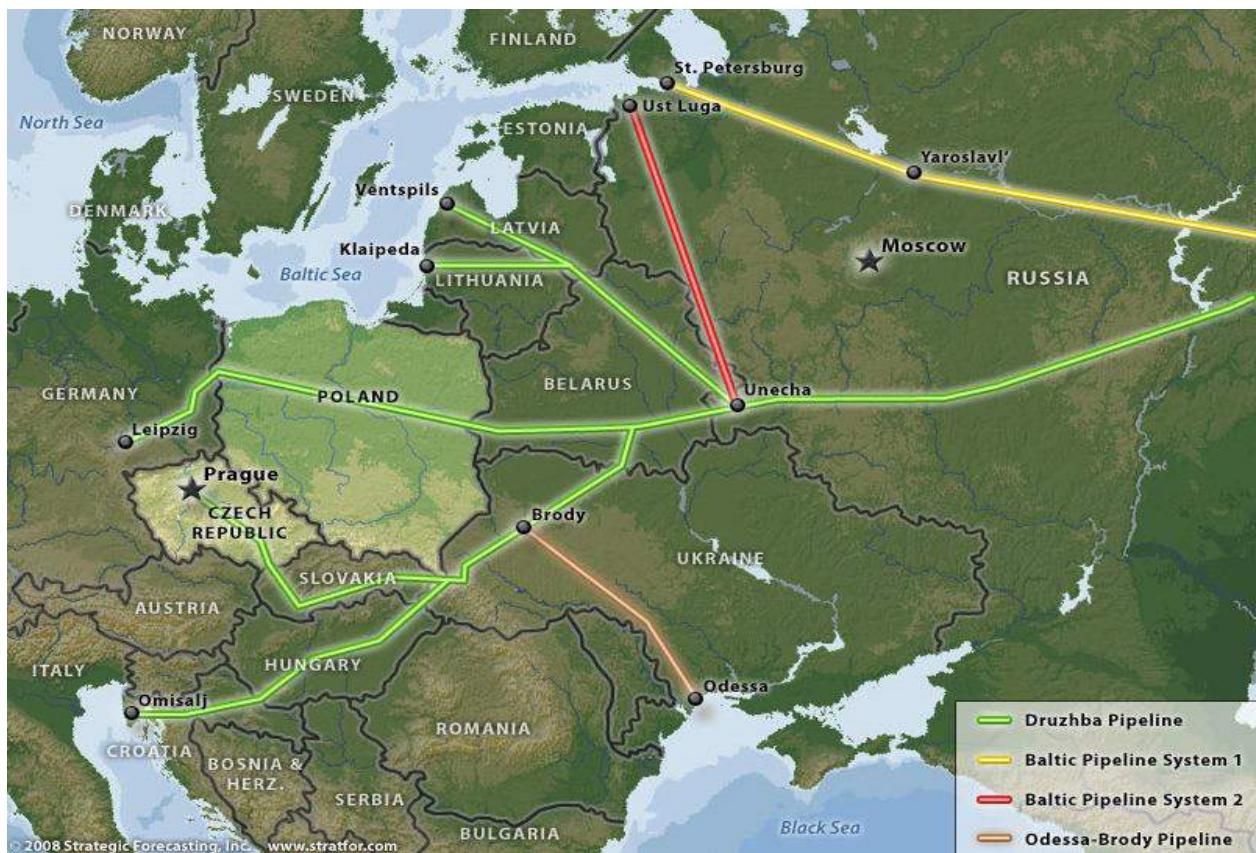


Figure 25: Oil Pipeline Network (Europeandialogue, 2018).

5.3.4 Baku–Novorossiysk Pipeline

Baku–Novorossiysk pipeline is a 1550 km long pipeline, which provides Azerbaijan's oil access to Russia's Black Sea port of Novorossiysk. Transneft owns the Russian part of this oil pipeline, which is more than 1300 km, and Azerbaijan's state oil company SOCAR owns 231

km of the pipeline. Baku-Novorossiysk Pipelines remained a strategic asset for Russia in the 1990s, as it was the most important oil transit route for Azerbaijan towards the Black Sea, giving Russia a strategic advantage over the Caspian Sea region's energy resources. However, the war in Chechnya, oil price issues, and Russia's assertive approach in regional affairs compelled the Azerbaijani government to look for options for its oil export towards Europe (Zhiltsov et al., 2016). Russia's pipeline system is also very significant for other Caspian Sea states like Kazakhstan. Its giant oil field in Tengiz is connected with an oil pipeline to the Russian Black Sea port of Novorossiysk through Caspian Pipeline Consortium. This consortium is signed between Russia, Kazakhstan, and Chevron (Caspian Pipeline Consortium, 2018).

5.4 Russia's Gas Pipelines Network

Russia owns the most extensive gas pipeline network in the world stretching over 100,000 miles. Most of the gas pipeline system was built during the Soviet era. After the collapse of the Soviet Union, Gazprom has added some important routes to that system. The integrated system of domestic and western Russia's pipelines is called the "Unified Gas Supply System". A separate gas supply system has been established by the Russian government for the eastern Siberia region (Gazprom, 2018).

5.4.1 Proposed Pipelines: Altai Gas Pipeline Project

Altai Gas pipeline also called Power of Siberia is a proposed project for exporting Russia's natural gas to China. Both countries signed a memorandum of understanding in 2006, but differences emerged over the price mechanism and no further progress was made. Gazprom and CNPC agreed to renew talks in 2013. Both decided to implement it in the eastern route. Originating from Purpeyskaya compressor station, this 2800 km long pipeline would deliver gas from western Siberia to the Xinjiang region in China where it will connect to the East-West

Gas pipeline to deliver gas to China's eastern regions. This pipeline is designed to deliver 30 billion cubic meter gas annually. China has to agree over the price issue due to its growing gas demands domestically (Helmer, 2008). Both countries have signed another MOU for the second phase of the Power of Siberia in 2017 (Oilprice, 2018).



Figure 26: Altai Gas Pipeline (Gazprom, 2017).

5.4.2 Central Asia Center Pipeline System

It is the oldest pipeline system built during the 1960s to integrate the oil and gas reserves of Turkmenistan, Uzbekistan, and Kazakhstan with the Soviet centralized system. It consists of five branches. CAC1, 2, 3, and 5 are eastern branches while CAC4 is the western branch of the pipeline. The eastern branch of CAC originates from the Daulatabad gas field in Turkmenistan and runs towards connecting Shatlyk gas fields in Khiva, Uzbekistan. Then it turns north-west, enters Kazakhstan, and finally reaches Russia. The western branch of CAC starting from the Iranian Turkmen border runs parallel to the Caspian Sea towards the north. Although this

pipeline system is outdated, it remained the only source of energy export for Central Asian states after 1991 (Chaw & Hendrix, 2010).



Figure 27: CAC Pipeline System (Gazprom, 2017).

5.4.3 Blue Stream Gas Pipeline

Blue Stream Pipeline holds a lot of importance for Russia's gas delivery to Europe. This onshore pipeline delivers gas to Turkey through the Black Sea. The strategic importance of this project lies in the fact that it prevents Russia to depend on a third country for the transit route (Rosner, 2006). The earlier gas transmission system to Turkey used to transit from Ukraine, Moldova, Romania, and Bulgaria. The agreement for the construction of this pipeline was signed in 1997. Blue stream pipeline became operational in 2003.



Figure 28: Blue Stream Pipeline (Gazprom, 2017).

5.4.4 Nord Stream Pipeline System

Nord Stream pipeline is a vital export system of Russian gas to Europe. It runs through the Baltic Sea connecting Greifswald Germany with Russian Vyborg Leningrad Oblast. The first phase of 1224 km long gas pipeline was inaugurated in 2011 and the construction of the second phase was initiated in 2012 (Gazprom, 2018). Nord Stream has immense importance for both Russia and Europe as it provides almost 10 percent of European gas requirements. With the construction cost of \$ 10.1 billion, this pipeline can deliver 27.5 billion cubic meter gas annually to Europe (Spiegel, 2011).

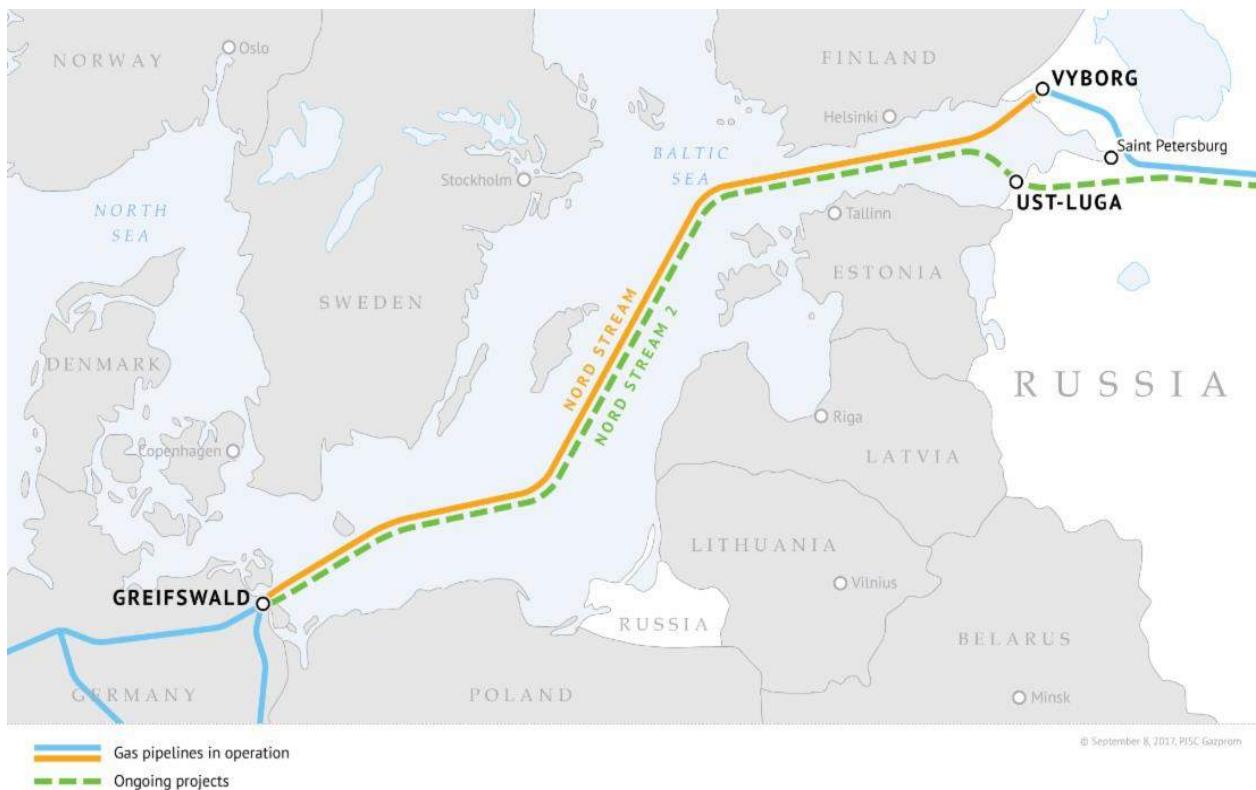


Figure 29: Nord Stream Pipeline (Gazprom, 2017).

5.4.5 South Stream Pipeline

South Stream pipeline is built to deliver Russian gas to the countries of Eastern and Central Europe through the Black Sea. This project was announced in 2007 and construction started in 2012. However, Russia had to suspend the construction of the south stream pipeline due to its non-compliance with the EU regulations for the construction of the pipeline, and the Crimean invasion by Russia (Reuters, 2014). It was proposed that this pipeline would run underneath the Black Sea to enter Turkey and onwards to Bulgaria, Romania, and Hungary. Most critics view this pipeline as the competitor of the Nabucco pipeline proposed by the EU. Russia's Gazprom and Italian company ENI started the project with a cost of €15.5bn. After the EU objected to the project, it was canceled in 2014 and later replaced with the Turkish Stream pipeline project (Hydrocarbon Technology, 2018).



Figure 30: South Stream Pipeline Route (The Economist Intelligence Unit, 2014).

5.4.6 Yamal Europe Pipeline

Yamal Europe Pipeline is yet another project for delivering gas to European countries. The construction of this project started in 1994 and it was operational by 2006. Yamal pipeline originates from the Yamal peninsula Russia and runs through Belarus, Poland, and Germany. It has the capacity of carrying 32.9 billion cubic meters of gas. The Russian section of this pipeline covers an area of 402 km, the Belarus section extends over 575 km, Polish section 683 km, concluding at the German-Polish border (Gazprom, 2018).

The second part of the chapter will discuss the other aspects of Russian Energy sector. It includes the challenges faced by Russia as an energy super power.

Part Two

5.5 Russian Energy Security in a Wider Perspective: Emergence as a Petro Power

Russia's energy sector developed gradually in the twentieth century. Its oil resources remain among the most important energy source for Europe since the late nineteenth century. During the Soviet era, its oil industry flourished between the interwar periods. The ideological cleavages did not hinder the oil trade between the Soviet Union and Europe (Perovic, 2017). They emulated the practice of their predecessors by exporting oil to the west and importing technology from them before the cold war. However, this policy elevated the level of technological dependence over Europe compromising the Russian position. Later, the Soviet Union's upsurge for the exploration of new oil and gas reserves during the cold war period strengthened its position in the global energy market. Even though Europe's suspicions of growing Soviet influence in the energy domain led them to impose an embargo over steel and pipes exports to the Soviet Union, but their oil imports from USSR did not experience any downturn (Stent, 1981). The sanctions were lifted during the 1960s and this set the stage for the Soviet Union's emergence as a petro-state.

The oil crisis of the 1970s was a crucial juncture in the Soviet energy policy. The susceptibility of Middle Eastern oil supplies not only increased the reliability of the Soviet Union as an oil import destination for the west. It also generated financial revenues and strengthened the Soviet economy (Goldman, 2008). The Soviet Union not only poured heavy investment for the exploration of new oil and gas reserves in the eastern and western Siberia, Central Asia, and the Caucasus region during this period. It also established a huge pipeline network for its oil and gas exports and bringing dispersedly located oil and gas reserves to one pipeline network. Central

Asia Center Pipeline system discussed above is one such extensive pipeline system for exporting energy resources to Europe, the biggest buyer of Russian oil and gas since then. A decade later the construction of the Urengoi gas pipeline from Russia to Germany, the first-ever east-west gas link was another project of immense importance (Perovic & Orttung, 2009). This served two very important purposes domestically, one by integrating the energy zones with diverse ethnicity and religious background into one centralized Soviet energy matrix. Moreover, it increased the share of the energy sector in the overall Russian economy. This trend sustained during the cold war era and increased after the disintegration of the Soviet Union.

5.5.1 Russian Energy Sector: Post-Cold War Era

Post-Cold war years totally transformed the Russian economy. It had to face many challenges as a consequence of the disintegration of more than a dozen states, especially, oil and rich states east of the Caspian Sea and important transit states in its west. Russia's reliance on energy resources tremendously increased in the post-cold war era. The first decade after Soviet disintegration brought unprecedented challenges for the energy sector. Russia had to overhaul the whole energy sector after losing some of its resource-rich region and transit routes. It focused more on the development of its remaining resources in Siberia, North Caucasus, Volga, and arctic regions. Moreover, it took some important measures to enhance its energy trade, especially with Europe. The sudden turn of events and hike in the importance of energy as the backbone of the Russian economy was visible in the rising share of the energy sector in the overall GDP of the country. The energy resources account for 70% of the total Russian exports (Belfer Center, 2018). The revenue generated by the export of oil and gas has reached 40% of the total federal budget of Russia in the second decade of the twenty-first century (Paraskova, 2018). The oil and gas sectors experienced rapid development than any other energy sector. For instance, nuclear

energy, which has been making strong imprints across Europe, did not see any meaningful development in Russia as compared to the hydrocarbon sector. It happened with other renewable resources too (Øverland & Kjærnet, 2016). The reliance of the Russian economy on oil and gas made it a petro-state of the 21st century. Three important factors emerged as absolutely crucial for Russia's energy security.

- (a) Fluctuation in petroleum prices.
- (b) Its energy trade with Europe and
- (c) Transit issues with post-Soviet states and pipelines issue.

The above-mentioned factors are closely interrelated and play a critical role in the twenty-first-century Russian energy policy. The impact of oil price fluctuations on the Russian economy remains critical for Russia. Consequently, it affects the revenue generated through oil and gas export to Europe. It also causes many price disputes. Thus, a policy shift from the west to the east emerges as a priority policy for Russia. Although, Europe cannot be eliminated in Russia's energy scenario in the near future, as there is an interdependence between Europe and Russia (Smith, 2008). Similarly, Russia's oil and gas trade requires settlements with transit states adding more strains for the Russian energy sector. Let's have a look at the energy economy of Russia, its energy trade with the EU, and the factors that led it to look towards the eastern market, before turning head towards Russia's Asian pivot in the twenty-first-century.

5.5.2 Oil and Gas a Double-Edged Sword for Russia

The importance of energy resources for Russia's strategic importance is undeniable. However, they also pose great challenges for it. Russia's heavy reliance on oil and gas imports create domestic and geopolitical challenges. The following discussion is based on the challenges the energy sector presents for Russia. These challenges are important for the securitization of the

energy sector in Russia's case. It plays the role of a double-edged sword. There is a general assumption that Russian oil and gas are a strategic weapon or a political tool in the hands of Russia and it often uses this weapon against the weaker states in its neighborhood. Especially the former Soviet states, who are dependent on Russia for their exports and they are heavily indebted by Russia. Additionally, Russia uses its territory for transit to Western Europe. Ukraine, and Belarus, and other states are the major examples. Russian oil and gas provide strategic leverage to it. On the other hand, the same resources make Russia handicapped, when it comes to the fluctuation in oil and gas prices, dealing with the western European customers, and finding the new markets.

5.5.3 Impact of Oil over Russia's Energy Economy

The Post-Cold war era brought a lot of challenges and opportunities for the Russian Federation. For the first time since WW2, Russia has allowed private energy firms to operate in its energy sector. The traumatic events of disintegration temporarily caused a decline in the oil output of the country, but Russia was able to recover it soon. Russia established multiple oil and gas companies out of the ruins of the Soviet energy sector and diversified its extraction projects in the wake of its growing economic requirements and international oil demand (Perović, 2016). Consequently, the Share of oil and gas accelerated. The hydrocarbon sectors used to provide 12% of the total GDP in 1991 and within the span of only one decade, it rose to 31% of total Gross Domestic Product (Geography of Russia, 2018). The Asian financial crisis was a testing time for all petroleum exporting countries. The Russian economy was severely hit due to decreased demand in Asian markets and falling oil prices, which touched as low as \$11.29 per barrel. It was nevertheless a severe blow to the economy who has just recovered from the remnants of disintegration, but it started recovering in 2000 (Oil & Gas Journal, 1998).

Some dramatic development in the early years of the 21st century like 9/11, the US invasion of Afghanistan, and the invasion of Iraq in 2003, created an instant rise in oil demand and its prices. Another major development concerning oil price hike is related to an increase in oil demand in Asia in general and China in particular. The rising economies in Asia and especially the double-digit growth rate in China have quadrupled the oil hunger in China and by 2003; it has become the second-largest oil-consuming nation after the U.S (Reuters, 2008).

The second decade of the 21st century exposed these fragilities of the Russian economy. Russia's dependence on exports increased further, and in 2012 oil and gas share in its total exports reached 70% (EIA, 2014). The growing reliance of the Russian economy over oil and gas sectors increased its vulnerability with regard to international oil and gas mechanism increased tremendously. As soon as the oil and gas prices started declining after 2009, the Russian economy also experienced a downward trend. Russia experienced a 3.7% decline in its GDP since then (The Gaurdian, 2016). According to recent estimates, Russia's natural gas and oil share in total export income has decreased and now stands at 60%. The year 2014 again proved disastrous for Russia. The sudden Saudi withdrawal from the US market sharply drowned the oil supply and its prices fell to as low as \$25 per barrel (Bloomberg, 2017).

5.6 Energy Trade With EU and Issues Of Transit States and Pipelines

The energy sector of Russia is a double-edged sword for its economic and geopolitical stability. Resources are a political tool in strengthening its position around the post-Soviet region. Russia has specifically used its energy resources for geopolitical leverage. Secondly, vulnerability for Russian energy security comes from it's overwhelmingly Europe diverted energy exports. It also involves the issues of transits routes and pipelines. The trade of oil and gas is the most

important source of revenue generation in Russia and Western Europe is the biggest consumer of Russian oil and gas. Two important aspects of this energy trade make it very crucial.

(i)- Transit states (ii)- Pipeline issues.

The enormous oil and gas export ensure the stability of the country's economy. However, it requires a smooth international trade. Russia's recent accession to the World Trade Organization also entails a further improvement in its export system. Russia must ensure long-term export stability for relatively stable economic growth patterns. The higher exports are actually positive for the economy but overwhelming reliance over few commodities like oil and gas and transit issues have an enormous impact on Russia's domestic political landscape, its economic stability, and its geopolitical stature.

Oil and gas have been crucial for its political and economic stability since Soviet times. During the early 1970s. It was contributing 22% of the national income, which rose to 74% in 1985 an all-time high. The falling oil prices in the late 1980s was a great setback for the Soviet economy and brought its disintegration much closer (Perović, 2016). Russia reformed its energy sector and established its major oil and gas companies after the collapse of the Soviet Union. Unfortunately, it failed to reduce the reliance of the economy over the energy sector. It also failed to diversify its exports and Europe remained its most important trading partner. Any fluctuation in oil and gas prices in the international market or any geostrategic tension with Europe severely hit the cash inflow of the Russian economy (Högselius, 2013).

5.6.1 Domestic Political Dynamics of the Energy Sector

Russia's domestic political system and its energy sector have some deep-rooted bonds. The emergence of oligarchs during the reorganization period of the Russian energy sector left some

far-reaching effects on Russian politics. The fragility of the political system and overdependence on the energy sector for national income contributed to strengthening the hold of energy corporations like Gazprom and Rosneft in the decision-making structure. Since then, there has been a constant struggle between government and energy corporations. With Putin's ascendance to power, the Russian government devised the strategy to contain the power of energy oligarchs (Ross, 2010). For this purpose, President Putin decided to appoint some close and loyal associates at the top hierarchy in major energy-related companies like Gazprom and Rosneft. The appointment of Alexey Miller to Gazprom and the nationalization of Rosneft and Gazprom were some major decisions for the consolidation of the government's authority in the energy sector. The government tacitly allowed Gazprom's authority over the gas sector and Rosneft's authority over the oil sector making them two major stakeholders in the Russian energy sector (Goldman, 2010). In this way, the Russian government successfully curtailed the power of the energy sector. Despite this, private energy companies are active in its energy sector but with very limited political influence.

Any downturn in oil prices in the international market has a profound impact on internal stability. It greatly disturbs the balance of payment and sometimes results in the devaluation of the currency and cut on the development budget (Kuzemko, & Belyi, 2012). While high earnings from the energy sector help the government provide a subsidy to the people. Therefore, Russia successfully paid back loans to the Paris club. The higher oil sale has also contributed to an increase in GDP growth of 6% since 1999. Consequently, the social sector of the country developed and the poverty levels were reduced (Mellon, 2014).

5.6.2 External Dynamic: Oil and Gas as a Political Tool in Transit and Pipelines Issues

Vulnerabilities not only emerge internally for the Russian energy sector, but external issues are equally compelling for Russia. It produced 418.5 billion cubic meter gas in 2015 and has exported 159 billion cubic meters gas to Europe only, which is over one-third of the total gas consumption of Europe (Reuters, 2016). During the next two years, Russia's export to Europe rose by 8.1 % annually, reaching 40% of total European consumption. The concerns are lateral for Russia and Europe. For Russians, dependence on European customers is increasing simultaneously to the growing demand for Russian gas. EU's concerns are also growing over too much dependence on Russian gas, the unreliability of Russia as a gas supplier, and security issues of transit states like Ukraine and Belarus.

This mutual dependence between Russia and the EU is problematic for both. Russia faces multiple issues in energy trade especially gas trade with Europe. Natural gas is supplied to European countries through an established pipeline system. Most of the recent pipeline projects are also diverted towards Europe as it is the biggest consumer of Russian gas. Ironically, transit states and their geopolitical differences with Russia put it and Europe both in jeopardy. In this situation, Gazprom is sometimes left with little choice to divert the gas deliveries. On the other hand, Russia sells oil and gas to Western Europe at a competitive price that adds to the severity of the situation. Most of these gas deliveries are sent through Ukraine and Belarus. They also get oil and gas from Russia at a subsidized price but as long as they do show compliance with the Russian policy. This policy not only increases the reliance of the eastern European state on Russia's energy resources but also provide strategic leverage to Russia. Many European states are increasing the use of LNG from the US to reduce dependence over Russia. They are also

opposing the Nord Stream 2 project to spank Russia for its aggressive policies in Ukraine (Financial Times, 2018).

The case of transit states is even more delicate for them as they get most of their gas supplies from Russia. For example, Belarus gets almost 99% of gas from Russia. Georgia acquires more than 80% of its gas from Russia and Ukraine almost 70 % dependent on Russian subsidized gas deliveries (Newnham, 2011). In return, these states are compelled to provide their land as a transitway on a very low tariff. Any non-compliance with the Russian policy results in a heavy price for these states. Ukraine and Belarus present two important cases in this regard. For many years, Ukrainian president Leonard Kuchma (1994-2005) remained a close associate and ally of Russia. As a result, it enjoyed the gas deliveries at a highly subsidized rate of around \$50 for 1000 cubic meters of gas. In fact, Russia used to provide a huge volume of gas as a transit fee to Ukraine. It resulted in a huge debt problem. The change of government in Ukraine after the Orange Revolution suddenly changed the outlook of Russian energy relations with it. Europe's support for Victor Yushchenko created an energy crisis for both Ukraine and Western Europe. It receives almost half of its gas supplies through Ukraine, which is equal to 86 billion cubic meters of gas. Since 2004 Russia raised the gas price for Ukraine from \$50 per TCM to \$286.5 in 2013. And as soon as the Ukrainian government signed a trade deal with the EU, Russia's raised the gas prices by 81% reaching an all-time high gas rate of \$485 TCM punishing both Ukraine and EU with the same stick of energy (NATO, 2014). Hence, oil and gas play the dual role of a carrot and stick for Russia.

Belarus is another example where energy is being used as a tool to gain political and strategic leverage. Under President Lukashenko, Belarus remained loyal to Russia, hence enjoyed a \$47 TMC gas rate for a long period. Until a dispute occurred between Belarus and Russia over

alleged illegal oil extraction from the Dzhurba oil pipeline in Belarus. Halting oil supply to Germany and Poland. Another important consequence of this trade dispute was Russia's all-out support for the Nord Stream pipeline to avoid any transit state. Nord stream caused a severe outrage from environmentalists in Europe. The case of Georgia is not much different, where Gazprom has announced to spend \$ 600 million on energy infrastructure in breakaway regions of South Ossetia and Abkhazia. (Bader & Gerrits, 2016).

5.7 Russia's Energy Security Strategy: Asian Pivot

Russia's energy policy has always been focused on intentionally keeping the majority share of any energy project related to the extraction, development of a resource site, or pipeline, in its own hands. Thus, successfully keeping all foreign actors under considerable control. Russia has also developed differences with the Baltic States over their inclinations towards the European Union. The Russian rhetoric has also spelled out in its opposition to important pipeline projects aimed at diverting oil and gas deliveries from former Soviet republics to Europe. The case of the Nabucco pipeline is the most important in this regard. Russia has come up with its own project of the South Stream pipeline to counter Nabucco (Orban, 2008). Moscow has also vehemently opposed the Baku Tbilisi Ceyhan oil pipeline, which contributed to liberating Azerbaijan's oil industry from the Russian grapnel.

Contrary to Russian expectations of gaining a strategic bargaining chip. Both sides fear the asymmetrical consequences of energy interdependence in the future. It has exacerbated energy security issues for both. Europe has devised its strategy of diversifying its oil and gas imports, support for the construction of new pipeline routes, and emphasize on renewable sources of energy. While Russia has adopted its own approach to diversifying its consumer market. Both sides have failed to realize that no one can achieve ultimate energy security by threatening the

energy security of others. Russia has been trying to achieve its security in the energy realm by exerting pressure on transit states and halting deliveries. While West has been pursuing the same objective of containing Russia by extending its membership to the former communist states in Eastern Europe, South Caucasus, and Central Asia. Neither side could achieve its objective by undermining the security of others.

Russia has used energy as a bulwark around its geographical territory from the Black Sea towards the east of the Caspian Sea. Where rich offshore and onshore oil and gas deposits in Kazakhstan, Turkmenistan, Uzbekistan, and Azerbaijan have retrospectively fascinated Russians. Soviet era's pipeline infrastructure was constructed to divert all energy trade to Europe via Moscow. During the initial years of independence, this becomes the biggest dilemma for the newly independent states and their economic development. They remain dependent on the Central Asia Center pipeline system for more than a decade to export their oil and gas. Later, their efforts to diversify export routes met with severe opposition from Russia. The legal position of the Caspian Sea among three new littoral states Kazakhstan, Turkmenistan, and Azerbaijan, and two old contenders Iran and Russia aggravated the energy-related issues for Russia. The outside forces were more concerned with the spatial settings of the pipeline then the newly independent states. This is yet another matter, where Russia developed differences with the European Union and the US, whose support for new pipeline routes rose a storm of criticism and opposition in Russia. Secondly, their advancement in the Caspian region alarmed the regional contenders for dominance, Russia, and China. Such geopolitical constraints leave Russia and its oil and gas companies with little options for alternate customers and supply routes.

The economic tides are taking a new turn in the new century. Europe is no more central to world politics and the economy. The emergence of Asian states as the economic hub of the world” provides a great opportunity for energy producers and consumers. Russia’s new energy strategy announced in 2009 substantially differs from earlier policies because it realizes Asia’s potential for Russia’s energy sector development. The 2003 energy strategy demonstrates Russia’s determination to strengthen its eastern infrastructure for energy trade (Ministry of Energy Russia, 2003). Since President Putin’s ascendancy to power, Russia has been trying to articulate Eurasianism in its foreign policy. Historically, Russia considers itself as a European power, and relations with Europe have been more important. The Atlantic school of thought remained dominant during Yeltsin’s presidency; However, Putin changed the approach and tried to balance Russia between East and west. This change was visible in all sectors especially in the energy domain (Rangsimaporn, 2006).

Given the extreme vulnerability of the Russian energy sector, another important development was Russia’s new policy for reducing the share of energy in overall national income by 2030. The new energy strategy 2009 stipulates the concerns over the transit issue. It maintains that the amount of energy trade with Europe will gradually decrease and Russia would seek diversification of its energy resources towards the Asian market. The share of oil will increase from 6% to almost 25 % while the share of gas trade with Asia will reach around 20% from a scratch, a historic shift in Russian energy strategy. China, Japan, and South Korea will be its major consumers. The role of China would be extremely important in this Asia pivot economically but also geopolitically (Ministry of Energy Russia, 2009). Russia has started exploring new opportunities for extending its energy supply system in all directions. Its projects in eastern Siberia are of great significance. The \$55bn Power of Siberia pipeline is of utmost

importance in this regard. Gazprom in collaboration with China National Petroleum Corporation is working on this 3000 km pipeline project. It will start carrying the gas to China in 2019. Gazprom is also spending \$13bn on a pipeline to Turkey. Opposition inside the EU has delayed the \$11.5bn Nord Stream 2, which is also threatened by US sanctions that could stop European companies from funding part of it, forcing Gazprom to pay for the entire project. The company also faces domestic competition from Russia's largest private gas producer Novatek, whose Yamal LNG project began exporting recently.

5.8 Conclusion

An overview of the Russian energy sector resource base, consumption and export statistics, and pipelines demonstrate two very important aspects. First, in this globalized and interconnected world, the energy security of every nation is vulnerable even those with the richest energy resource base. Second, resource richness is a paradox. It is security and vulnerability at the same time. Russia's case is the testimony. Russia is one of the largest producers of oil and gas in the world. Energy resources are strategic assets for Russia. Oil and gas are two important pillars of Russia's economy and its stability of domestic political and social spheres as well as geostrategic strength. Economically, Russia heavily depends on the export of oil and gas for the national income.

Historically, Europe has been its major trading partner in oil and gas. Almost one-third of the European oil requirement is supplied by Russia. The share of gas export has touched the 70% mark in 2016 (EIA, 2014). Due to oil and natural gas abundance, Russia has not given much attention to the development of other renewable sources of energy and remained heavily dependent on oil and gas since the times of the Soviet Union. During the post-cold war era, oil and gas played a crucial role in the development of the Russian economy. During the early

years of the 1990s, low prices of oil in the international market created huge challenges for the Russian economy. The economic crisis of 1998 proved to be the lowest ebb for the Russian economy (Letiche, 2007). The fragility of the Russian economy was exposed in face of low oil prices. However, the rise in world oil prices gave the Russian economy a boom and it could pile up hard currency essential for the construction of new pipelines and its overall economic development, and in strengthening its geostrategic position in the regional affairs.

Russia has developed a huge pipeline infrastructure for its oil and gas trade with the west. Since the construction of the Central Asia Center pipeline system in the 1960s, it has developed many new pipelines in Eastern Europe, Caucasus, and southern Europe for oil and gas trade with Western Europe. These pipelines, on the one hand, provide strategic leverage to Russia, as Europe's reliance on Russian oil and gas is on the rise. On the other hand, Due to a huge subsidy, Russia provides to transit states, increase their dependence on Russia (Kandiyoti, 2015). The whole scenario binds the energy security of Russia and Europe in one axis. This makes oil and gas a power tool in Russian foreign policy for exerting pressure on weak neighbors.

The overwhelming share of oil and gas in exports and critically important pipeline routes and Russia's diverging interests and policies over pipeline routes have exhumed its vulnerabilities. Russia has developed a severe difference with the European Union over energy trade issues and they remained at loggerhead with each other. Both have been trying to undermine each other's energy security. Russia vehemently opposes the EU's eastern partnership program and considers it as an intrusion in its stronghold. While Russia's intimidating policies in Ukraine, Belarus, and Georgia raised severe criticism in Europe.

The whole scenario took a historical turn when Russia in its 2009 energy security strategy announced its Eastern Pivot. Although, Russian foreign and energy policy have remained

inclined towards Europe. The states of constant conflict and vulnerabilities in energy trade with Europe bring a considerable change in the new Russian approach. The emerging economic powers in Asia presented Russia with a unique opportunity to diversify its energy trade with China, Japan, and South Korea. However, diverting oil and gas from Europe to Asia is not an easy task. Russia could have exploited this opportunity before. Ironically, it failed to realize the potential in the early years of the new century, when the Chinese economy was booming and it was successfully maintaining a double-digit growth rate. Such flourishing economies present a constant appetite for oil and gas to feed their industry. This upsurge has opened many new markets for energy trade in the post-Soviet space. China has already established a strong energy trade relationship within the post-Soviet states of Kazakhstan, Turkmenistan, and Azerbaijan, making Russia's eastern pivot a test for the Russian energy sector and its economy.

Chapter 6

The Caspian Energy Enigma: Conflict & Cooperation for China & Russia

6.1 Introduction

As discussed earlier, energy security largely depends on the energy trade diversification. The diversification strategy led China and Russia to explore each other potential for their energy security bilaterally. This chapter will discuss the second dimension of their energy relationship. China and Russia not only interact directly in the energy sector, but they have also formed an indirect relationship in the energy sector. Without analyzing their energy relationship at both levels, one can hardly understand the true dynamic of their energy relationship and the impact of the energy sector on their relation. For this purpose, it is necessary to look at their indirect interaction in the energy sector of the former Soviet states of the Caspian Sea region, Kazakhstan and Turkmenistan. Both states have rich onshore and offshore resources. Secondly, their economies are overwhelmingly dependent on the revenues generated by the energy sector. Third, Russia still plays a significant role in their energy trade, and their energy resources are vital for Russia's strategic significance. Finally, and more importantly, they are eager to diversify their energy trade and China provides a good opportunity for them in this regard. Hence, energy security becomes a common security concern and all these states form a regional energy security complex, where they share, common interest, threat perceptions on the one hand

which securitize their energy sector and finds common challenges and opportunities on the other.

It is appropriate to have a comprehensive detail of the rich energy resources of the Caspian states of Kazakhstan and Turkmenistan for understanding their significance for their giant neighbors China and Russia. The discussion in this chapter will proceed in three parts. The first part will present a complete scenario of resources. The second part is based on the geopolitical issues faced by the Caspian region. And the third part will consider the role of major powers in the region with a special focus on the role of China and Russia, two adjacent powers in the regional energy politics, and how their shared interest and challenges form a regional energy security complex.

Energy resources played a major role in China's huge economic success. However, the events of the 21st century have greatly compromised China's energy security and it has led China to look for diversified sources of oil and gas supply. Its growing ties with Russia are an important development in this regard. Energy trade diversification emerged as the common interests of both states. China's hunt for energy resources led its policymakers to investigate another area whose rich oil and gas resources, geographic proximity, and the dire need for energy trade diversification, provide China a safe supply route. The former Soviet republics of the Caspian Sea region represent the stage for the indirect interaction of both adjacent powers.

6.2 Importance of the Caspian Sea Region for Oil and Gas: A Statistical Review

The Caspian Sea region located at the crossroads of Asia and Europe has strategic significance. Currently, the Caspian Sea region consists of five states around the Caspian Sea. It includes

Russia, three of former Soviet states, Kazakhstan, Turkmenistan, and Azerbaijan. Iran is the fifth state located in the south of the Caspian Sea. The region lays between two great powers, Russia and China, and holds rich hydrocarbon resources enhancing its appeal for great powers. It is considered one of the most important regions for oil and gas resources after the Persian Gulf region. (Johnson, 2007) The Caspian region has rich onshore and offshore oil and gas resources. The susceptible security situation of the Persian Gulf and the Middle East augment the significance of this resource-rich region. The richest region for hydrocarbon, the Persian Gulf remains a region vulnerable to terrorist presence and area of active conflicts (Pascaul & Elkins, 2010). In this scenario, many regional and global powers find the Caspian region as an important alternate or safe supply route for oil and gas supply.

Currently, the Caspian energy resources are the biggest attraction for regional and global powers like the U.S, EU, and China in the region (Amineh M. P., 1999). The region and its resources have their own significance for Russian regional supremacy as the previous master of the region. The Region has been going through some drastic changes since its independence from the Soviet Union. It has not experienced internationalization to such an extent during the last century as happened after 1991. The energy resources of the region have a profound impact on recent power reconfiguration in the region (Amineh & Guang, 2010).

The regional states rely on the exports of energy resources for their economic development. Their struggle for the construction of new export corridors and new customers has caused a strained geopolitical environment in the region. The economic boom in Asia in the early twenty-first century and the major industrial powers of western Europe presents some potential consumer markets for the newly independent states of the region (Garibov & Frappi, 2014).

Before initiating a discussion on the Caspian region's energy issues, it is important to have a brief look at the background and estimates of oil and gas in the region.

6.2.1 Kazakhstan: Flourishing Energy Economy

Kazakhstan is the second-largest oil producer after Russia among post-Soviet states of the Caspian Sea region. It had a special place in the Soviet oil sector before 1991. Energy resources used to provide an overwhelming share of 80% in the Soviet Economy during its last decade (Ostrowski, 2010). The contribution of Kazakhstan was crucial in this regard along with Azerbaijan. It used to produce 40,000 barrels per day during the 1960s. This share saw a phenomenal increase with the discovery of two major oil fields Tengiz and Karachaganak (Hardin, 2012).

The Tengiz oil field was discovered in 1979 on the northeastern coast of the Caspian Sea. However, its development was slow due to the lack of resources and technology necessary for the development of offshore resources. Many geopolitical factors were responsible for this dearth of resources in the development of oil fields. The major development work of Tengiz started after 1991. Independence also opened new avenues for the development of the energy sector. The Kazakh energy sector became so competitive for European and US companies after independence. Kazakhstan government signed its first deal with the Chevron in 1993 for the development of the Tengiz oil field, initiating a new era of the rapid development of the energy sector as well as the economy (Amineh, 1999).

The post-independence development of the energy sector with foreign investment raised the production of oil to almost 1 million barrels per day. The Tengiz and Karachaganak oil fields produce more than half of the country's oil production. The third important oil field of Kashagan also produces valuable 347000 barrels of oil per day. While many reports suggest

that the offshore resources of Kashagan oil fields might have 50 to 100 billion barrels of oil. As far as, daily oil production is concerned, Kazakhstan produced 1.6 million barrels of oil per day during 2015-16. While its consumption was limited to 0.3 million barrels during the same period (EIA, 2017).

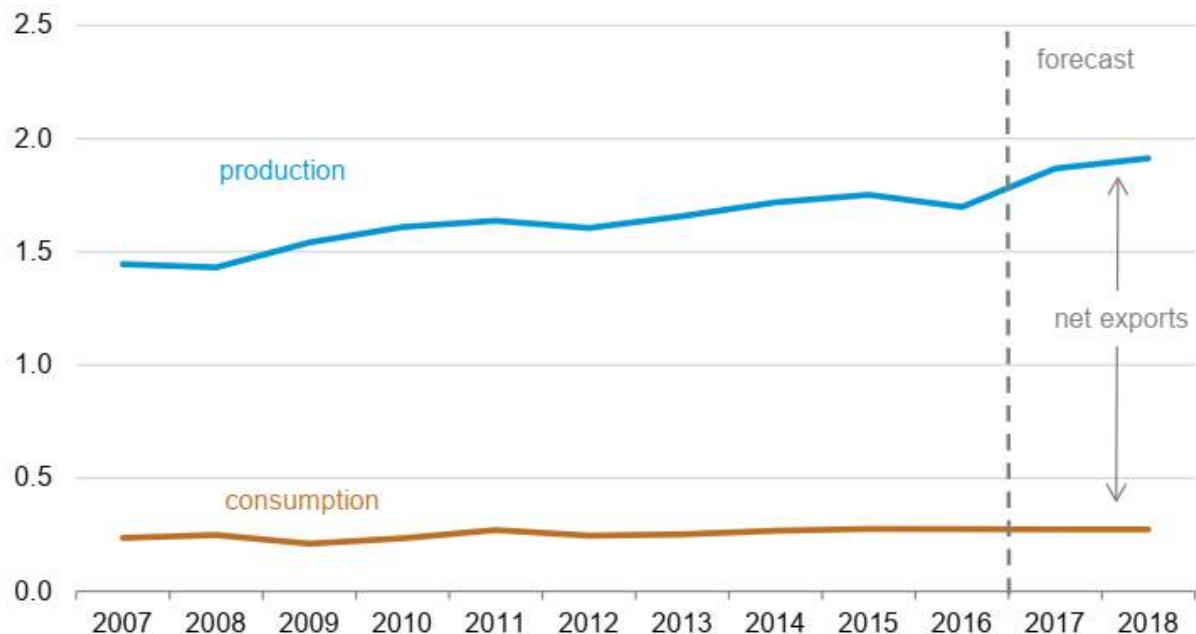


Figure 31: Kazakhstan Oil Production and Consumption (The U.S Energy Information Administration, 2016).

Kazakhstan's estimated oil reserves are 30 billion barrels (EIA, 2019). It is the 11th largest oil reserves holder in the world. Most of the oil reserves are located in western Kazakhstan. The Kazakh section of the Caspian Sea is considered to be the richest Caspian region for oil and gas. Therefore, it plays an important role in the economy. Kazakhstan government has successfully maintained the state monopoly over the energy sector through the energy ministry and national oil company KazMunaiGas. It is authorized to sign contracts with foreign

companies or abort any deal at any time. Petroleum exports comprise almost 40% of the country's total exports (OEC, 2018).

The first decade after independence did not see any significant development in the economy. The development of the energy sector was in the infant phase. However, the early twenty-first century did see a significant growth of GDP due to rising exports of oil and its high prices in the international market. In recent years, the falling oil prices have declined the growth rate of the Kazakhstan economy from 4.1 % to 1% in 2015-16 (Halyk Finance, 2017).



Figure 32: Major Oil Fields on Caspian Shores of Kazakhstan (Geological Society of London, 2015).

Kazakhstan is located at the northern shores of the Caspian Sea, which is a closed sea. Therefore, no access to any open sea is a big handicap for its energy trade. This geographical peculiarity makes it dependent on pipelines. Initially, it was reliant on Russian pipeline

infrastructure. Its pipeline infrastructure is integrated with the Russian system due to its geography. Nevertheless, it has developed some new diversified routes for the export of oil. Caspian Pipeline Consortium is one of them, which transit Russian territory and export oil through the Russian Black Sea port of Novorossiysk. The KazTransoil is the official caretaker of the pipelines for oil and gas trade (IBP, 2003).

The post-independence period also marked the beginning point of receding Russian control over the Kazakh energy sector. With the arrival of European and US companies in Kazakhstan, exploration, and development of Kazakhstan's offshore oil and gas resources in the Caspian Sea kick-started, which could not be done during the Soviet era. Secondly, proposals for new pipeline routes started pouring in for spreading out Kazakh oil and gas to other European customers (Pepe, 2016). Kazakhstan successfully found new routes lessening dependence on Russia. Oil is shipped from its Caspian Sea coast to send it to Baku. From here, it is exported to Europe using the Baku-Tbilisi-Ceyhan pipeline. Kazakhstan has expanded its energy relations towards the east with China. After the construction of the Kazakhstan-China pipeline, China is emerging as a big importer of Kazakh oil (Petersen & Barysch, 2011).

6.2.2 Turkmenistan: The Gas Republic

Turkmenistan, the “gas republic” of the Caspian Sea region also found itself in hot water soon after independence, given the extreme dependence over Soviet currency, economy, and energy infrastructure. Turkmenistan's economic situation was not much different from other Soviet states. However, unlike Kazakhstan and Azerbaijan, its post-1991 policies constitute the worst transition experience towards a market economy.

Turkmenistan remained under the clouds of the obsolete economic system of the Communist era (Pomfret, 1995). Nevertheless, independence from the Russian monetary system and

circumvention from the Soviet-era energy transportation system emerged as the biggest requirements for the Turkmen economy like the other two Caspian states. Moreover, attracting foreign investment in the energy sector entangled the challenges in a highly centralized economic system. The establishment of trade relations with the states beyond CIS (Common Wealth of Independent States) was a challenging task given the geographic constraints (Anceschi, 2009).

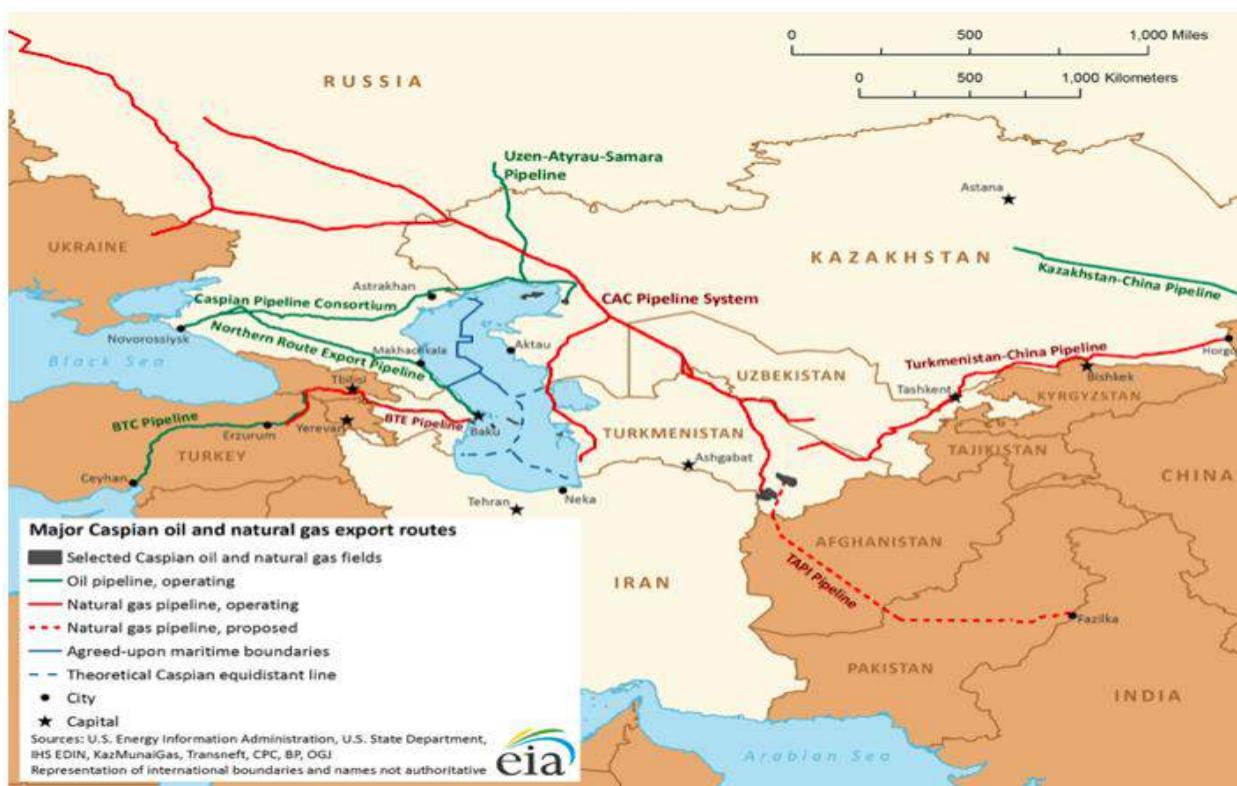


Figure 33: Major Oil and Gas Reserves and Pipeline Routes in the Caspian Sea Region (The U.S Energy Information Administration, 2017).

The Turkmen economy is reliant on huge gas resources. According to the US Energy Information Administration, Turkmenistan possesses 17.5 trillion cubic meters of natural gas reserves. The Amu Darya region of the country is the richest in gas reserves with ten gas fields

holding more than 3 trillion cubic feet gas reserves located. The world's second-largest natural gas reserve was discovered in the Galkynysh region making it the sixth richest country in natural gas reserves. The south Caspian and Murgab basin areas also hold significant gas reserves. Overall Turkmenistan possesses 9.3% of the total natural gas reserves of the world. In addition to proven reserves, Turkmenistan also holds 6.9 trillion cubic meters of unexplored recoverable reserves (Oil & Gas Journal, 2015). The demand for natural gas has been rising for the last two decades and it is estimated that its share in global energy consumption would be one fourth in the next decade. This consolidates the Turkmen position in the global natural gas market. Turkmen gas export has exceeded one trillion cubic feet annually making it the 8th biggest natural gas exporter of the world (CIA Factbook).

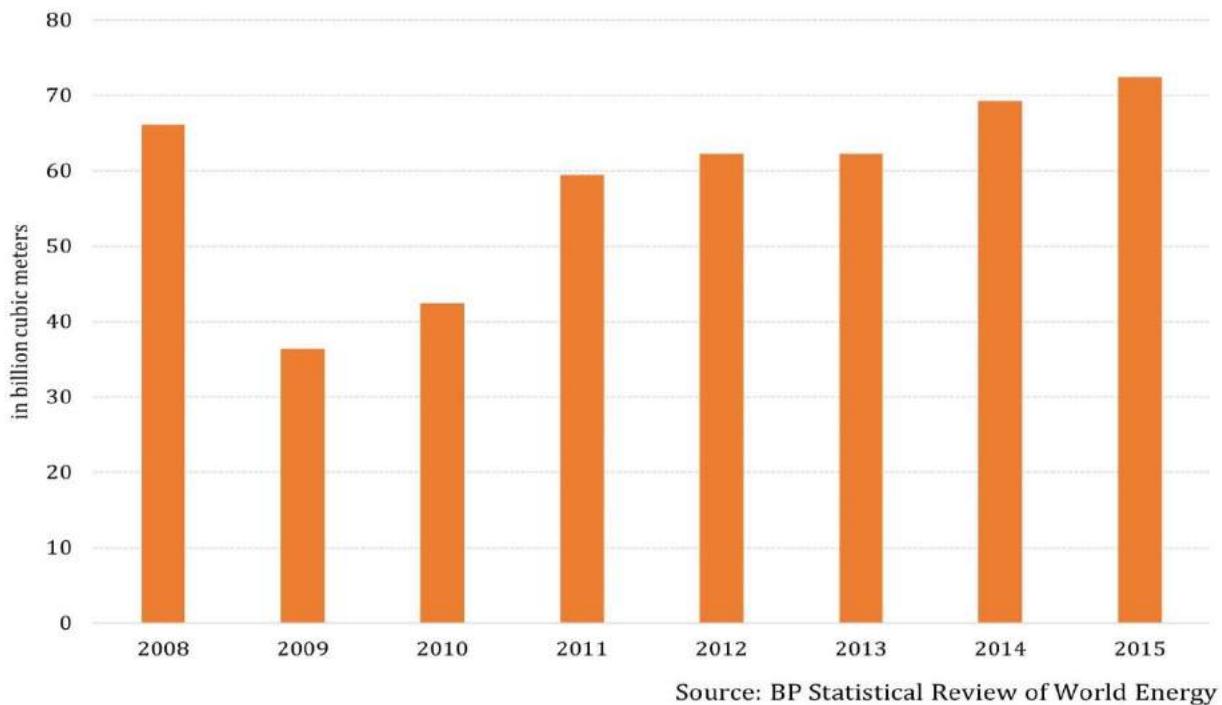


Figure 34: Turkmenistan Natural Gas Production (BP Statistical Review of World Energy, 2016).

The geographical inexpediencies are detrimental for Turkmen export potential. It is located far away from the major consumer markets like Europe and China. Turkmenistan does not have a border with either of them. Secondly, the Caspian Sea does not have an outlet in an open sea or ocean makes it more reliant on pipelines for transit. The poor infrastructure remained a problem for Turkmen energy sector development. The Russian-Turkmen gas transit issues began in 1997 and aggravated the problem for Turkmenistan. Initially, it initiated with the construction of a small 200 km gas pipeline with Iran (SIPRI, 2001). Later, Russian bullying brought Turkmenistan to consider the construction of the most important pipeline project, the Central Asia China pipeline system. Since then, China has emerged as the biggest importer of Turkmen gas with more than 70% purchases of total gas exports from Turkmenistan (Kandiyoti, 2015).

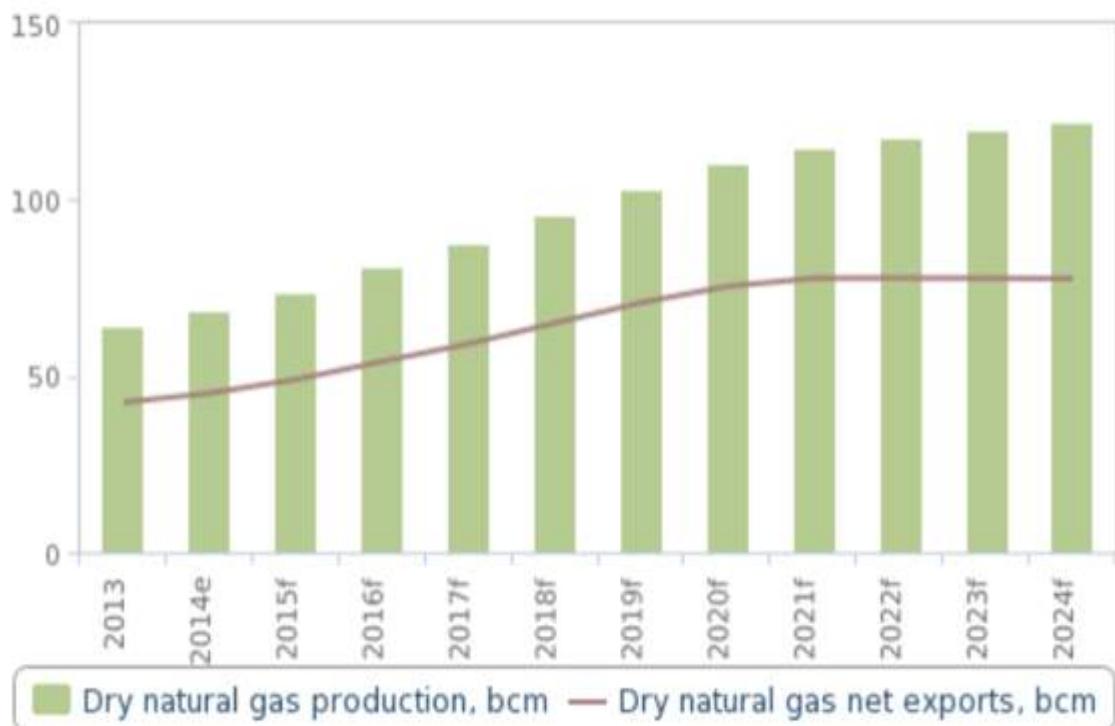


Figure 35: Turkmenistan Natural Gas Production and Export (Natural gas World, 2015).

Turkmenistan presents impressive opportunities for energy-deficient states of South Asia. TAPI pipeline would further enhance gas exports in the most populous region. Europe presents another potential market for Turkmen gas. The proposed Trans Caspian pipeline would lay down an important outlet for its gas deliveries westwards (Petersen & Barysch, 2011). However, the unresolved legal status of the Caspian Sea has hampered the construction of the Trans Caspian pipeline. Russia is the biggest opposer of the proposed pipeline. Other than natural gas resources, Turkmenistan possesses a handsome amount of 600 million barrels of oil reserves as well (World Energy, 2016). Furthermore, its recoverable oil reserves are approximately 100 million barrels according to the BP Statistical Review. Turkmenistan has successfully increased its oil production over the years and it has reached an all-time high 261 thousand barrel per day in 2015 (BP Statistical Review, 2016). Almost half of its oil production is consumed domestically. The energy sector is of utmost importance for Turkmenistan's economy. As oil and gas together, occupy more than 80% of the country's exports. The share of gas stands around 74% and oil is 10% making the energy sector a security concern for the country (OEC, 2016).

6.2.3 Importance of Caspian Sea for Azerbaijan

The Caspian Sea region has a historical significance for oil and gas production. It is considered as one of the most resource-rich regions for the last 100 years. The energy reserves of the Caspian Sea region were largely unexplored at the time of the Soviet Union's disintegration except for Azerbaijan the birthplace of the oil industry in the region. Its energy sector was developed in the second half of the 19th century and received eminence in the world oil market (Adle, 2005). The technological backwardness during the Soviet era hindered the exploration of its rich offshore resources.

Azerbaijan is the oldest region to produce oil. The extraction of oil began in the 1840's in the Absheron peninsula near Baku (National Encyclopedia Azerbaijan, 2018). The first successful oil drilling laid the foundation of the modern oil industry. Thus, the Caspian Sea region might claim to be the birthplace of modern deep oil drilling on the Caspian coast. Its energy sector was developed in the second half of the 19th century and received eminence in the world oil market. Oil remained a strategic asset for Baku during the last one and half centuries. However, until the mid-19th century, the development of Azerbaijan's oil sector remained stagnated given the low consumption levels and less demand in the market (Rzayeva, 2015).

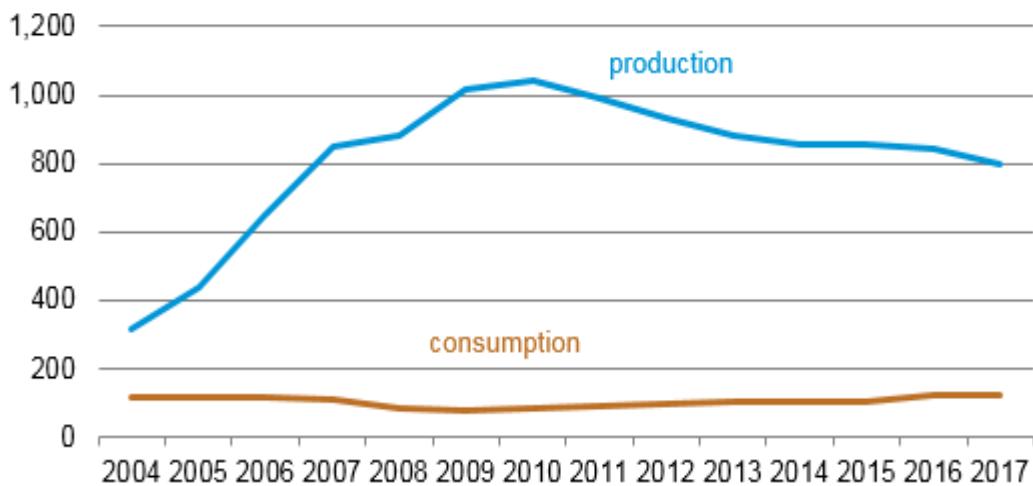


Figure 36: Azerbaijan Oil Production and Consumption (EIA Azerbaijan Country Analysis, 2018).

After independence in 1991, Azerbaijan's oil industry proved to be the backbone of the economy. It remained the driver of the economy during the post-Soviet era. The Caspian region has rich onshore and offshore oil and gas resources. Most of the oil is drilled from offshore reserves located in the Absheron Peninsula near Bibi Heybatt. The technological backwardness during the Soviet era hindered the exploration of its rich offshore resources. According to EIA

estimates, the total proved reserves of Azerbaijan's oil stand at 7billion barrels placing at the twentieth number in the world (EIA, 2016). The production of oil has constantly been increasing in Azerbaijan for the last 25 years. However, recently oil production has shown some decrease. Between 2004 and 2010, oil production increased from 315000 b/d to 1 million b/d. The oil production has witnessed some decline since 2015 reaching 850,000 b/d in 2015 (EIA, 2016). Azeri Chiragh Gunashli is the largest oil field contributing to almost two-thirds of total oil production in the country. Similarly, the Shah Deniz is the largest gas field in the country. With the development of Shah Deniz phase 2, Azerbaijan would enter a new era of its energy sector becoming the net exporter of the gas (BP, 2018). The development of the gas sector has also increased domestic gas consumption and reduced oil consumption in the country. Now natural gas accounts for almost two-thirds of total domestic energy consumption and oil one-third in ratio. It shows that the consumption of oil has also declined in Azerbaijan in recent years. Azerbaijan's oil production has also declined from 50.7 million tons in 2010 to 41.03 million tons in 2016 (SOCAR, 2017).

The ministry of Energy Azerbaijan established state oil company SOCAR to overlook the matters of the oil industry in 1992. It is not only involved in the development of the oil industry, exploration of new resources, and pipeline construction but attracting foreign investors is the major responsibility of state oil companies. Azerbaijan received relatively early foreign investment than other post-Soviet states given its already developed oil industry (Nuriyev, 2007). Hence, it successfully evolved a more independent foreign policy than its neighboring states. Azerbaijan's petroleum sector received sudden foreign attention soon after its independence from the Soviet Union. Among foreign multinational companies, BP (British Petroleum) became the most important one, who played a leading role in the development of the petroleum industry in

Azerbaijan in the post-independence era. BP is the largest foreign investor having the responsibility of developing both Azeri Chirag Gunashli and Shah Deniz fields (OECD, 2011).

As far as the export infrastructure of Azerbaijan's oil and gas is concerned. Initially, it was dependent on the northern route through Russia, which was the main outlet for Azeri oil. Later, with the construction of the Baku Tbilisi Ceyhan pipeline and the Baku-Supsa gas pipeline, Azerbaijan's reliance over the Russian pipeline system decreased considerably (Ismailzade, 2006). The construction of the BTC pipeline removed the major bottleneck from Azeri oil export. This landmark pipeline opened new markets for oil exports to Europe. BTC proved a double-edged sword for Azerbaijan's oil industry, giving strategic advantage as well as a great hike in export revenues (Stratfor, 2006). Almost 80% of the Azeri oil is exported through Baku Tbilisi Ceyhan Pipeline and Europe is the major consumer.

Facility	Status	Capacity		Origin	Destination	Details
		(thousand barrels per day)	Total length (miles)			
Baku-Tbilisi-Ceyhan (BTC)	Operating	1,200	1,100	Sangachal terminal, near Baku, Azerbaijan	Ceyhan terminal, on Turkey's Mediterranean coast	First tanker loaded at Ceyhan in June 2006
Baku-Novorossiysk (Northern Route Export Pipeline)	Operating	105	825	Sangachal terminal, near Baku, Azerbaijan	Novorossiysk, on Russia's Black Sea coast	Started operation in 1996
Baku-Supsa (Western Route Export Pipeline)	Operating	100	515	Sangachal terminal, near Baku, Azerbaijan	Supsa, on Georgia's Black Sea coast	First tanker loaded at Supsa in April 1999

Figure 37: Major Export Pipelines of Azerbaijan (SOCAR, 2015).

Besides three major pipelines systems, a small quantity of oil is also exported by railway. Azerbaijan sold some of its oil through the swap system with Iran. For this purpose, it used to deliver oil to Iran at its Caspian port of Neka to enter it into the Iranian pipelines. In return, Iran used to sell the same amount of oil through its Persian Gulf ports. This swap system could not be sustained and ended after 2010 (Kalehsar, 2016). The oil exports reached almost 1million barrel a day in 2010. However, the depleting oil resources of the country are unable to maintain the growth in export. Therefore, oil export has been experiencing a decline since 2009. The share of oil in overall exports fell from 81.5% in 2009 to 76% in 2015-16 (Caspian Oil & Gas Azerbaijan, 2016).

As far as Azerbaijan's gas sector is concerned, it developed in the early twenty-first century. The estimated reserves of natural gas in Azerbaijan are approximately 35 trillion cubic feet (EIA, 2016). The major gas field of Shah Deniz began its operation in 2006. The following graph shows the remarkable increase in gas production as well as in its domestic consumption after the Shah Deniz gas field development.

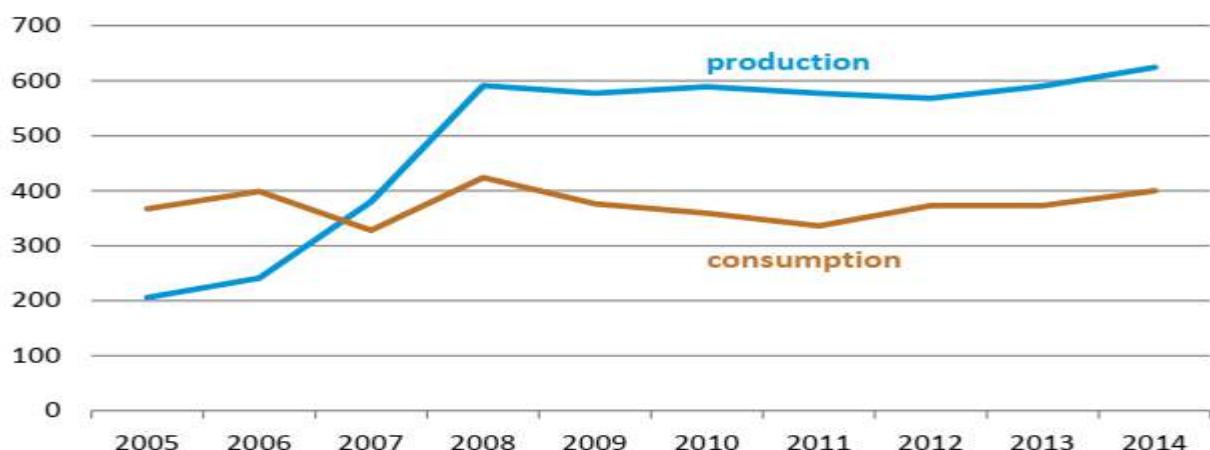


Figure 38: Natural Gas Production and Consumption pattern (The U.S Energy Information Administration, 2017).

Most of the Azeri gas reserves are located in offshore fields. With the completion of Shah Deniz phase two at the end of 2018, it is expected that natural gas production would surpass 565 billion cubic feet annually (EIA, 2016). The major gas export pipeline is 980 km long Baku-Tbilisi-Erzurum pipeline, which runs parallel to the Baku-Tbilisi-Ceyhan oil pipeline (SOCAR, 2018). Baku Tbilisi Ceyhan and Baku Tbilisi Erzurum pipeline are part of the Southern Energy Corridor. This route is critical for Azerbaijan's energy security. The gas pipeline of the southern corridor carries Azerbaijan's natural gas to Turkey, its biggest gas customer. Turkey is not only an important transit route for Azerbaijan's oil export to Western Europe. The southern corridor is considered the biggest blow so far for the Russian monopoly on oil and gas supply routes. Moreover, it greatly undermined the Russian position in the Caspian Sea region and its energy politics.

6.2.4 Iran's Energy Interest in the Caspian Sea Region

Although this study focuses on Russia, Kazakhstan, and Turkmenistan among the Caspian littoral states, the discussion of Caspian energy politics cannot be complete without discussing the role of Azerbaijan and Iran.

Iran's role in the affairs of the Caspian Sea is primarily determined by its domestic and regional political, economic, and energy interests in the region. These interests relate to the presence of a considerable number of Azerbaijani population in Iran, the presence of energy resources in the Iranian part of the Caspian Sea, and the presence of external forces in the region. Albeit, Iran's vital energy resources are found in the Persian Gulf, Iran attaches tremendous importance to its role in the Caspian Sea region. It sees it in its national interest to find a peaceful solution to the Caspian issues and maintain cordial relations with the regional states. Only in this way, it can strengthen its role in the former Soviet states who share a historical, cultural, and religious

affinity with Iran. Secondly, Iran's role in deciding the future of the Caspian Sea legal status is really important. It used to share jurisdiction over the Caspian Sea along with Russia. Historical precedence forms the basis of Iranian claim on 20% of the seabed. Currently, Iran holds 14% of the territorial sea and seabed. Iran's Caspian Sea port of Neka holds importance for Iranian energy trade with the South Caucasus. Iran opposes the sector-based division of the Caspian Sea, as it will undermine its vital energy resources in the Caspian Sea's southern coast. The strong presence of other international forces like the US and EU in the region makes Iranian policy in the region very significant.

6.3 Problems and Challenges for the Caspian Sea Region's Energy Security

The above statistical review of the energy sector of three states of the Caspian Sea region indicates that all Caspian region states are extremely reliant over the energy sector. The exploration and development of more energy resources and their diversified export are not less than a strategic challenge for these oil and gas driven economies (Crandall, 2006).

This 750 miles long and 250 miles wide, body of water is located at the crossroads of Asia and Europe in the south of Caucasus Mountain. Many rivers including Volga, Ural, Kura, and the Amu Darya provide inflow to the sea (Mehdiyoun, 2000). The U.S Energy Information Administration estimates that the Caspian basin has approximately 48 billion barrels of oil deposits and 292 trillion reserves of natural gas making it one of the richest regions in hydrocarbon resources (EIA, 2013). These resources are absolutely crucial for the states of the region. Therefore, these offshore resources have made the Caspian sea an important strategic ground, where political, economic, and energy interests of not only regional states clash, but the strategic interests of the external powers make it one of the most important regions for energy politics.

The following map shows the major oil and gas field located in different parts of the Caspian Sea.

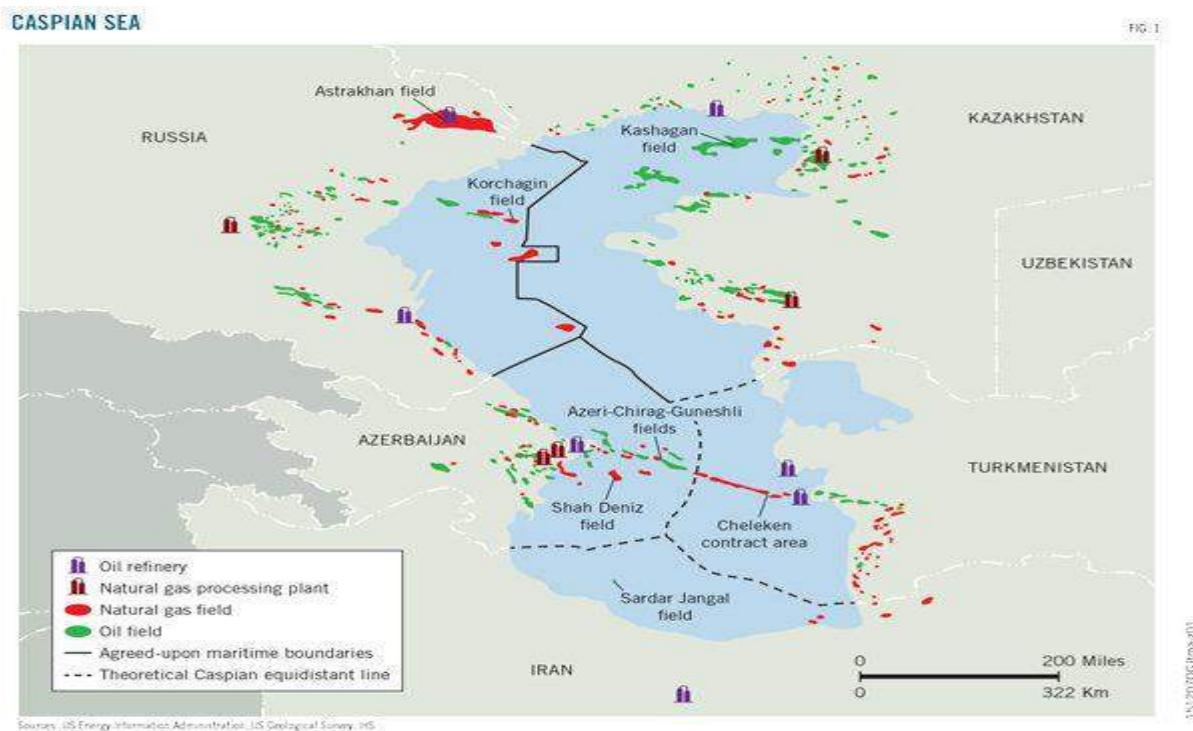


Figure 39: Major Oil and Gas Reserves and Maritime Boundaries of the Caspian Sea (Oil and Gas Journal, 2018).

6.3.1 The Legal Status of the Caspian Sea

The dispute over territorial rights in the Caspian Sea has severely affected the oil and gas exploration prospects. The five littoral states of the Caspian Sea—Russia, Kazakhstan, Turkmenistan, Azerbaijan, and Iran—have failed to develop a consensus over its legal status as it is a sea or a lake?

Almost 41% of oil and 36% natural gas reserves are located in the northern Caspian Sea near Kazakhstan and Russia's North Caucasus region. In addition to northern resources, 45% of gas and more than 35% oil crude oil reserves are located in the southern Caspian basin. Such a rich

resource base is the biggest cause of dissension over its delimitation between the coastal states.

Most of the offshore resources of oil and gas are still unexplored. The following map shows the difference between the status of a lake or a sea for the Caspian Sea.

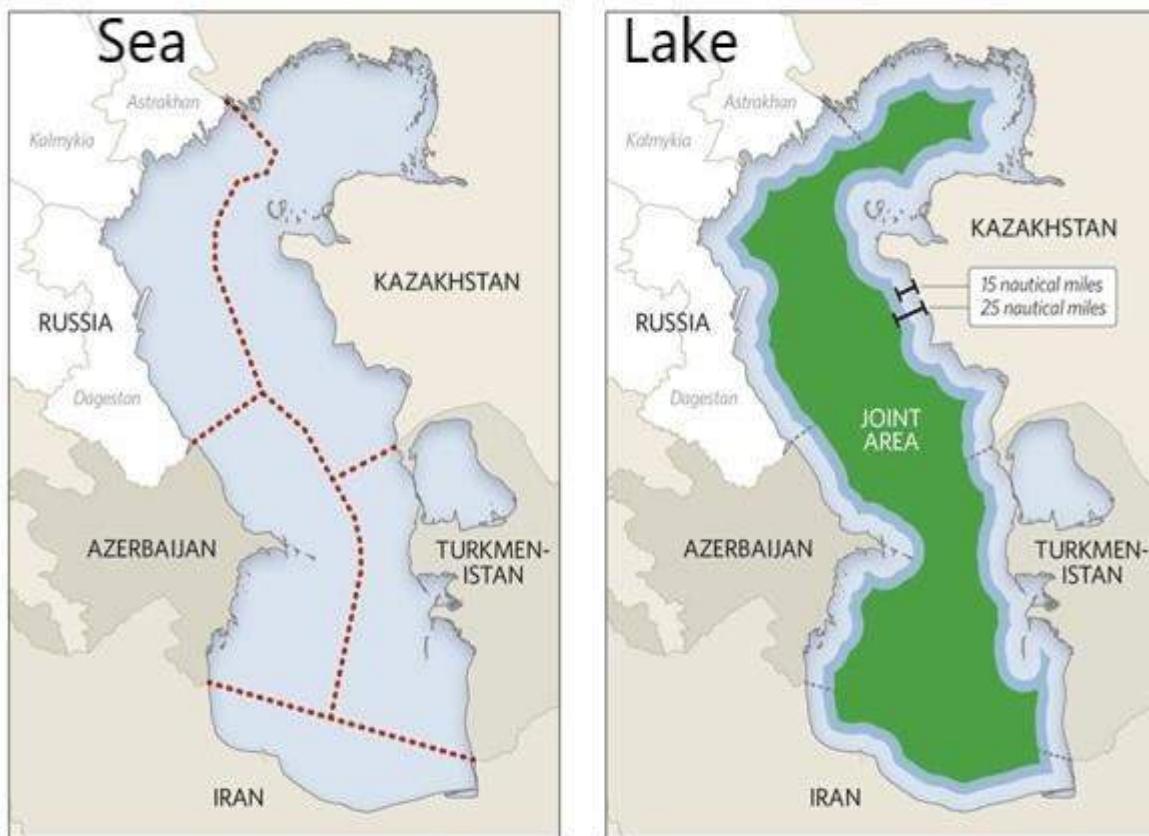


Figure 40: Difference between Caspian as a Sea and Lake (Heritage Foundation, 2016).

The estimates of oil and gas reserves in the Caspian Sea are not enough to understand its importance. They are extremely critical for the energy security of the adjacent states and their political and economic independence. For the three post-Soviet coastal states, these resources are of paramount importance for their economic development. All of them have been trying to overcome economic and technological barriers in the exploration of offshore resources to achieve higher economic growth. Azerbaijan began oil exploration back in 1994 after signing the “deal of the century” with a consortium led by British Petroleum in the Azerbaijan claimed

territory of the Caspian Sea. The oil and gas comprise more than 80% of the country's total exports (WITS, 2015). Revenue generated through oil and gas export is crucial for economic development and the strategic strength of the country. The cases of Kazakhstan and Turkmenistan are not much different. Kazakhstan's 63% and Turkmenistan's 91% of the total exports consist of oil and gas respectively (World Top Exports, 2018). The geographic location of both states makes them more dependent on Russian territory for the exports of oil and gas. The solution of Caspian Sea legal status would open a new avenue of opportunities. They would be able to pursue their long-desired trans-Caspian pipeline, which will assist them in achieving independence from the Russian export pipeline system. However, Russia is a big opposer of the pipeline.

Apart from oil and gas resources, the Caspian Sea holds some strategic significance too for Russia and Iran (Garibov & Frappi, 2014). Although both states are the top oil and gas producers and their strategic reserves of oil and gas are located beyond the Caspian region. Russia has huge oil and gas reserves in Siberia, the Arctic, and the North Caucasus region, while Iran's Persian Gulf region is very important for its oil trade. Their political rivalry with the west plays an important role here. Both are against the US or the EU's entry into the Caspian Sea (Gardner, 2007). Besides Caspian littoral states, many nonadjacent actors like the U.S, Turkey, EU, and China are also interested in the Caspian region. Although they do not have any jurisdiction over its resources and seabed. Yet their economic and strategic interests are vital. Turkey presents an important transit route for the export of these oil and gas resources. EU for its energy requirement and offset the reliance on Russian oil and gas has a keen interest in this region. As far as the U.S is concerned, it does not require oil and gas from the Caspian region, but it supports the construction of multiple pipeline routes to debilitate the Russian

position in the region (Brooking Institute, 2009). Secondly, it will strengthen the hold of respective states over their oil and gas sectors reducing Russian meddling in them.

Before the fall of the Soviet Union, the Caspian Sea was mutually divided between Iran and Russia under a friendship treaty signed between them in 1922, giving them equal shipping rights (Cronin, 2013). After the disintegration of the Soviet Union, transformation in the configuration of the Caspian region geopolitics has made the whole region an area of influence to neighboring states and distant powers (Kuniholm, 2000). The emergence of five coastal states with a divergent position regarding its legal status has created further complications. Every state seeks more favorable conditions to safeguard its political, economic, and energy-related interests. As the exploration of vast untapped oil and gas resources under the Caspian Sea is not possible without resolving its legal status. It has become more crucial for the coastal states as almost all littoral states are overwhelmingly relying on the export of oil and gas resources for their economy (Amineh, 1999).

6.3.2 Inter-Regional Conflicts Over Resource Exploration

This game of interests between regional and extra-regional powers is overlapped by the competition between the coastal states of the sea to gain more and more access to the offshore resources. Most of the offshore resources are still undeveloped. The disputed legal status of the Caspian Sea is a bottleneck behind this. The five littoral states have failed to decide that the Caspian is a sea or a lake? The salinity of water and its size is usually considered enough to make it a sea. However, The International Law of the Sea in its Article 22 says, “that a water body is recognized as enclosed or semi-enclosed sea means it is a gulf or basin or two or more states around it. Further, it has an outlet with an open sea (Barbara, 2007). The Volga river is the only water body that falls into the Caspian, but it does not link it with any other open sea or

ocean. Seas are regulated by the UN International Law of the Sea, which specifies the seabed and surface water closer to the shore according to the coastline area. If it were declared as a sea, each state would be allotted an area of 12 nautical miles as the territorial sea, exclusive economic zone, and further a continental shelf according to the International Law of the Sea. Whereas, lakes are equally divided between the adjacent states (The Economist, 2018).

Looking at it from a wider perspective, countries with a longer coastal belt prefer to call it a sea. While states with shorter shorelines recognize it as a lake. Kazakhstan has the longest coastline of 2320 km followed by Turkmenistan's 1200km. Azerbaijan has 955km long Caspian coast. Iran and Russia are at the bottom of the list with 724 and 695km each respectively (Geographic Society Azerbaijan, 2018). Both Iran and USSR recognized it as a lake before the disintegration of the Soviet Union and it was equally divided between them. Initially, Iran and Russia wanted to continue joint control of the sea. According to them, it does not fall under the 1982 United Nations Convention of the Law of the Sea and all littoral states should jointly control the Caspian Sea. However, Russia changed its policy in 1996 and proposed to redistribute the Caspian Sea among all littoral states. The jurisdiction of each state could enter 45 miles from its shoreline (Akiner, 2004). In addition to this, the area beyond exclusive jurisdiction would be controlled jointly. In early 1997, Russia changed its position again over the Caspian Sea and signed an agreement with Kazakhstan over the division of seabed, and to jointly control surface water and airspace. Each littoral state has its specific dispute with other states regarding the Caspian Sea.

i- Turkmenistan and Azerbaijan are fighting over their boundary lines in the Caspian.

ii- Iran and Azerbaijan have differences over the rights of exploring the seabed.

iii- Iran is of the view that a legal framework for the division of Caspian is a prerequisite before starting any exploration of its oil and gas. While Russia aggressively projects its policy that not a drop of oil will flow from the Caspian and no pipeline would be laid in the Caspian basin before the resolution of the conflict.

Iran favored the “Condominium Approach” that every state should hold 20% of the seabed and joint control of the surface. In the case of any proportionate division, Iran would have 16% of the seabed. While Russia 15.6%, Kazakhstan 29%, and Azerbaijan with 20%, and Turkmenistan 19.2% respectively. Later, some developments were seen on the issue where Russia, Kazakhstan, and Iran showed agreement over the 20% control of seabed (Diba, 2003). While Turkmenistan did not show its agreement. Iran’s isolation on the issue has been increasing since 1998. Consequently, it adopted a more flexible stance over the Caspian Sea. Now it acquiesces the equal division of resources with a 20% share of each. However, it supports the division of both seabed and surface water. Russian agreement for 20% hold of the sea has some strategic objective. The northern part of the sea has rich gas resources. In the case of joint jurisdiction, these resources would be the joint property of all littoral states. The presidents of all five littoral states held a meeting in 2002 in Turkmenistan to discuss the issue of Caspian legal status. However, the summit failed and five states could not reach an agreement (Radio Free Europe, 2002). Instead, it looked as the tension has increased between the littoral states. After this summit, Azerbaijan and Kazakhstan carried on some oil exploration projects near their coast of Caspian despite a warning by other states.

Iran and Turkmenistan severely opposed the exploration by Azerbaijan & Kazakhstan. In 2001, Iran and Azerbaijan came very close to a military confrontation over a survey conducted by Azeri naval vessels. Many experts have been talking about the expected military conflict over

the hydrocarbon resources of the Caspian that could be a limited or large-scale confrontation involving more than two or three states (Mahnovski, 2003). In 2004, Kazakhstan initiated a new proposal for the settlement of the legal dispute over the Caspian Sea. Kazakhstan proposed a clear division of water surface to facilitate the laying of pipeline in the Seabed and deployment of military forces for monitoring.

Caspian Summit held in Tehran in 2007 too failed to produce any significant result. Another Caspian summit was held in Ashgabat in 2009. However, a standoff between Azerbaijan and Turkmenistan caused a failure to the summit (Stone, 2010). Besides the interest of five littoral states, the US is also keen to play its role in this regard. The US offered its mediation between Turkmenistan and Azerbaijan. United States has been increasing its role in Caspian energy affairs to decrease the monopoly of Russia and GAZPROM over the Caspian energy resources. In 2009, Turkmenistan's announcement that it would take the matter in international arbitration and it would build naval coast guards further worsened the issue (Diba, 2003).

6.3.3 Recent Developments On Caspian Legal Status

Despite the rich resources endowment, the Caspian Sea region faces many geopolitical and geo-economic problems and challenges for the energy sector. The biggest hurdle in the development of the Caspian energy sector is its geography. These oil and gas resources are located far from their major buyers. Secondly, the landlocked nature of the region requires the development of a huge infrastructure of pipelines to export oil and gas and generate revenue for the resources-based economies (Pawletta, 2015). The two-decade-old impasse finally ended with the signing of an agreement, resolving some issues regarding the Caspian Sea territorial claims and resources. The recent agreement stipulates that all coastal states would use 15 nautical miles area from the coastline for oil and gas exploration and 25 nautical miles for

fishery. Beyond this area would be a “common maritime space” of all states (Stratfor World View, 2018). The agreement also announced some strategically important decisions that the Caspian Sea would be free from any military presence of non-adjacent states bestowing clear advantage to Russian and Iranian position keeping the U.S military presence at bay from the region. It also allows the construction of the underwater pipeline with the consensus of all littoral states paving the way for the Trans Caspian pipeline apparently (Warsaw Institute, 2018).



Figure 41: Recent Convention on Caspian delimitation (Stratfor Worldview, 2018).

Despite a breakthrough, the recent convention presents ambiguity regarding many issues. For instance, it failed to produce any meaningful decision to divide the seabed where most of the oil and gas resources are located. Secondly, Russia has overtly compromised by allowing the construction of undersea pipeline like Trans Caspian. However, it does not specify its position about the involvement of multinational companies. Because every major pipeline project

involves more than one stakeholder states and companies. Secondly, If Turkmenistan successfully implements the project, the cost of gas supply to Europe and route beyond Azerbaijan would remain a big question (Stratfor World View, 2018). It would require the consent of any participating state of the southern gas corridor to transport its gas to Europe. Finally, the question of the legal status of the Caspian Sea whether it is a sea or a lake remained unanswered. Nonetheless, the recent convention on the Caspian Sea is a big breakthrough and has paved the way for more developments. However, it has not completely ensured the energy security issues of small states.

6.4 Caspian Sea Region and its Energy Security in the 21st Century

In the post-cold war era, the Caspian region has emerged as a region of conflict and competition of major regional and extra-regional powers enthralled by the region's energy resources. Observing the fact that there is a growing energy deficit of available energy resources in the global market. It has increased the activity of multinational companies and foreign actors in the Caspian region's energy market. It will surely contribute to the diversification of oil and gas supply, and transportation consequently enhancing regional energy security for multiple actors (Stratfor World View, 2017). Both producing and consuming states, as well as transit states, would be benefitted. Nevertheless, to exploit the full potential of the resources of the region, it is imperative to develop a consensus among involved states. Unfortunately, right from the independence of, the Caspian states, the political involvement from different regional and global actors emerged and energy politics became the pinnacle of this involvement. This rivalry for the control of energy resources intensified with the arrival of the 21st century. The export diversification efforts also diversified the conflict for the control of the resources. Along with Russia and the U.S, Iran, Turkey, India, the EU, and China emerged as major players in the

Caspian energy game (Bahgat, 2007). In other words, all these states emerged as potential buyers of the resources. Notwithstanding the export potential of the state, the decision to select the most appropriate export destination and transit route reflects the geopolitical interests of the states.

6.5 Geo-Political Pluralism in Caspian Energy Politics: Involvement of Major Powers

With the dawn of the 21st century, the energy politics of the region entered a new era. The emergence of new regional powers and especially the rise of China in the east and re-assertive Russia in the north overshadowed the U.S role in the region. It started with some major developments on the geopolitical landscape of the region. The initiation of war against terror in the aftermath of 9/11 and the attack against the Taliban regime in Afghanistan created a big security dilemma for the whole region (Alam, 2006). Thus, it is necessary to look into the role of some big players, who shaped the energy politics and energy security strategies of the regional states in the twenty-first century. The emerging geopolitical pluralism in the region with the U.S and NATO involvement in the early twenty-first century caused an alarming situation for the Russian influence and interests of other regional powers especially China in the region (Kazantsev, 2008).

6.5.1 The U.S Strategy in the Region

As far as the US is concerned, it does not enjoy such geographical advantages as enjoyed by, Russian Federation from the north, the EU from the west, and China in the east. The U.S does not agree to let Russia maintain its monopoly in the energy sector of a region, which is the strategic threshold for the west due to its proximity to Afghanistan, the epicenter of war against terror, and the Middle East (Shaffer, 2009). Secondly, the control of energy resources of the

region and their exit passages seems to be the only way for the success of the U.S strategy to maintain its hegemonic position, which is immensely opposed by Russia and China too. Therefore, the U.S engagement in the energy sector of the region assumed multiple dimensions, First, it is trying to maintain its control through heavy investment in the projects, by capturing sizable shares in all mega projects through western multinational petroleum companies, especially, BP (British Petroleum). Major U.S companies, like Unocal, ExxonMobil, Chevron, and some other remains the largest partners in the major oil and gas development projects in Kazakhstan's Tengiz oil field and Azerbaijan's Azerichirag and Shah Deniz field development.

The political dimension of the US strategy reflects the same objective, the diversification of the Caspian energy trade. It supported multidirectional export routes to minimize the dependence on the Russian export system. Bypassing Russia emerged as the prior objective of US foreign policy in the region. The U.S even rejected the possibility of export through Iranian territory. On the other hand, the Trans-Afghan pipeline, despite US support, remained impossible due to the security situation in Afghanistan and the Taliban threat (Nichol, 2009). The U.S emerged as the greatest supporter of the BTC pipeline against heavy Russian criticism. Moreover, its support for the Trans Caspian pipeline despite the conflict over the legal status of the Caspian Sea proves its support for the policy of diversification. However, covertly seeking geostrategic objectives.

6.5.2 EU Energy Security and the Caspian Sea Region

Since the independence of the Caspian region from the Soviet Union, European Union and European petroleum companies emerged as the early entrants in the region. British Petroleum (BP) was the first major multinational company that successfully secured a major share in energy projects in Azerbaijan and Kazakhstan. Europe's dependence on Russian oil and gas

supply is not a new phenomenon. The disintegration of the Soviet Union only changed the dynamics of their energy relations by dividing the early supplier state into multiple supply sources (Bahgat, 2006). Among other European companies ENI, Total, and Royal Dutch Shell emerged as leading investors in Kazakhstan and Azerbaijan. Turkmenistan, the third Caspian coastal state, remained skeptical of foreign investors in its energy sector.

As far as the European state's policy regarding the Caspian energy sector is concerned, they followed almost the same policy as Washington. Although Washington was more concerned about its geopolitical objectives, the EU remained concerned about its energy requirements and decreasing its reliance on Russian oil and gas. In this way, the diversification of their own imports becomes their priority too (Correljé & Linde, 2006). Even though the European Union engagements in this post-Soviet region remained modest and focused on bilateral relationships throughout the last decade of the twentieth century, they gradually emerged as a major external player in energy politics. A major reassessment of EU's policy for the region came after 2007 when it published "The EU and Central Asia: Strategy for a New partnership" (European Union, 2009). This document proclaims three main reasons for the EU's growing interests in post-Soviet states. Among them, the energy export diversification policy of the regional oil and gas-rich states was one of the top priorities. It was described as complementing the EU's objective of import diversification of oil and gas.

6.5.3 The Oscillating Russian Regional Hegemony in the Caspian Sea Region

The Caspian Sea region holds tremendous importance for Russia due to multiple reasons. It includes geostrategic, geopolitics, and geo-economic interest. The role of energy interests relates to all three.

- (a) Russian geostrategic interest in the Caspian Sea region: The presence of anti-Russian forces like the US and EU, since the end of the cold war have intensified the competition for the control of resources in the region. The Caspian region holds geopolitical, military, economic importance. Among these interests the role of energy is pivotal in maintaining the Russian historical supremacy in the region. Hence, Russia had to adopt a contentious approach. The control over regional energy resources is of paramount importance to keep a stronghold not only on the CIS region but also to combat the politics of the European Union and the US in the region. Previously its involvement in the regional energy projects was constantly reducing given the lack of financial resources relative to the western states and multinational companies. However, the rise in oil prices in the international market finally gives much-needed support to Russia.
- (b) Russia's geopolitical interests: Caspian Sea region is not only a resource-rich region but also home to some of the most important pipeline routes in the world. These pipelines transit through neighboring regions of North and South Caucasus. They might face security threats from separatist groups. Russia is the most powerful regional actor to counter such threats. For this, Russia's dominant role in the region is crucial.
- (c) Geo-economic interest: Russia's geo-economic interests extend from the resource division in the Caspian basin to the use of pipeline routes by the regional states. Russia must counter alternate pipeline routes to ensure the flow of oil and gas through its pipeline system. As it generates revenue for the Russian economy.

The Russian monopoly over the export routes has already been dwindling after the construction of the Baku-Supsa gas pipeline and later the Baku-Tbilisi-Ceyhan pipeline system. In this scenario, Russia adopted the policy to secure a handsome share in the pipeline projects to

maintain its position in the regional energy politics. For instance, it secured a 24 % share in the pipeline project between Kazakhstan and the Russian port of Novorossiysk called the Caspian Pipeline Consortium. This project balanced the western strategies for averting Russian territory for oil and gas export (Heinrich, 2014). Hence, CPC remained the biggest outlet of Kazakh oil for the next ten years.

Russia adopted a more explicit approach with the arrival of Putin to power. The Caspian region emerged as the top priority region in Russian foreign policy. Vladimir Putin himself visited the regional states and reiterated Russian resolve to intensify energy cooperation with the Caspian states (Baev, 2008). These efforts included the resolution of the Caspian Sea legal status, which saw some early success with the agreement over the division of seabed between Russia, Azerbaijan, and Kazakhstan. Russia was able to consolidate its position with at least two major oil producers Kazakhstan and Azerbaijan in the region. However, this could not stop the U.S and EU's advancement in the region. It appears that diversification has emerged as the priority policy of not only the Caspian states but also of the EU and the U.S. The western supported BTC pipeline is a clear example of this policy (Roberts, 2011). Despite growing competitiveness between Russian and Kazakh oil in the global energy market, Russia remained involved in the energy sector especially in the exploration of new reserves in Kazakhstan's onshore and offshore regions of the Caspian Sea. Thus, the 21st century Caspian energy politics diversified the political and economic relationship of the region too. The energy sector has transformed into a real security threat in political geostrategic and geo-economic terms. According to the securitization theory, when a matter is securitized, concerned actors take extreme measures to ensure security. Russia's all policy initiative in the region revolves

around energy interest one-way or the other. This fact clearly securitizes the Russian energy sector.

Notwithstanding the Russian interest, the Caspian states realize their extremity in relying on one export route. They also comprehend the interests of external forces in their energy sector. The situation brings a through realization in the Caspian states that an overwhelming reliance on any one regional or external power would compromise their energy security. Diversification of supply routes is a prerequisite to their energy security. Cooperation with multiple customers would be the best policy in this regard. They are not only looking to expand their energy ties with the west but also exploring the potential of the Asian markets. China's huge oil and gas consumption is a perfect alternate for them to diversify their export routes other than Russian and the EU supported routes. Their already established energy ties with Russia and compulsion to diversify and establish energy trade links with China bring them together in a regional energy security complex. The role of China is compelling in the diversification strategy of the Caspian state.

6.5.4 China's Emergence on the Caspian Energy Landscape

In addition to vast oil and gas reserves, the Caspian region presents two more interesting scenarios. Its energy security issues are not necessarily discussed in the European or western context. The regions' location essentially makes it geopolitically very important for emerging Asian powers too. Located in the center of Eurasia, and in the neighborhood of the economic giant of the twenty-first century China, makes Caspian energy resources even more significant (Boas & Spaiser, 2016). China's growing role in the region has added a new dimension to regional energy politics and energy security. China's rise as an economic power in the last decade of the twentieth century enhanced its importance as a big energy consumer in the world.

However, China was not an important player in the Caspian region initially, and its interests were limited to security matters. In a bid to combat separatism, extremism, and terrorism, it formulated Shanghai five with four Central Asian republics excluding Uzbekistan. Later, it brought Russia into the group and the foundation of the Shanghai Cooperation Organization was laid down in 2001 (Marketos, 2009). China gradually increased its importance in regional affairs. The Chinese engagements in the affairs of the former-Soviet state have modestly initiated with the signing of a pipeline agreement between China National Petroleum and Kazakhstan. However, logistical and financial issues delayed the project. It was in the early twenty-first century, that China's active participation in the regional energy affairs was initiated when it signed a deal with SOCAR the Azerbaijani state oil company. As mentioned above, European companies such as BP and Exxon Mobil were actively involved in Azerbaijan's energy sector since the early 1990s. China met a lot of opposition from BP and others in securing some shares in Kazakhstan's giant Kashagan field (Campaner & Yenikeyeff, 2008).

Another factor that spurred Chinese interests in the energy sector of former-Soviet states was the Japanese growing ties with Russia and its desire to extend the Siberian oil pipeline to the Pacific Ocean. Before this China has started seeing Russia's significant role in its energy security. However, Japanese overtures in extending energy trade by offering a financial package of worth US\$ 7billion during Japanese Prime minister Junichiro Koizumi's visit to Russia in 2003 caused alarm in China (Brooke, 2003). Moreover, China's desire to reduce dependence over maritime supply routes for the import of oil is a major reason for its growing interest in Kazakhstan, and Turkmenistan's energy sector. Especially, the vulnerability of the Malacca Strait remains a constant threat to China's energy security (Yergin, 2011). The discovery of giant Kashagan oil and gas fields in Kazakhstan stimulated the Chinese interest. The

diversification of supply routes becomes an important feature of Chinese energy security too. Until 2003, China's energy requirement has surpassed 90 million tons of oil with 75% of imports from Middle Eastern countries and some African states (Takamine, 2006). The perilous security situation of this supply route intensified the Chinese interest in the region. China's other big achievement was the successful acquisition of PetroKaz company's full share along with full ownership of the Kumkol southern oil field and joint ownership of the northern oilfield with Russian Lukoil. This greatly helped in increasing China's CNPC's share in Kazakhstan oil. It also enhanced the share of Kazakhstan's oil in China's total oil imports to 15 % (Marketos, 2009).

Similarly, China's role has constantly been evolving in Turkmenistan's energy sector. The historic agreement for building a gas pipeline with a capacity of 30 billion cubic meters of gas established a strong Chinese hold in the Turkmen energy sector. With the construction of the China Central Asia gas pipeline, China emerged as the biggest importer of Turkmen gas with 84% of total Turkmen natural gas exports to China. (Kleveman, 2003). China's increased role in the Turkmen natural gas sector played an important role in reducing its reliance on the Russian pipeline system.

BRI has added a new dimension to the Chinese interest in the region. The immediate neighboring states of Kazakhstan and Turkmenistan in the region are located at the crossroads of one of the most important corridors of BRI, the China-Central Asia-West Asia corridor. China is investing in building transportation infrastructure for trade in these states. Therefore, the region has gained tremendous importance in Beijing's Foreign Policy. Eventually, it formulates Russia and China's indirect interaction in the energy sector. In this way, the Caspian

Sea region presents a range of competing interests, conflict, and cooperation. Notably, the diversification strategies of Caspian states, Russia, and China bring them together in this region.

6.6 Conclusion

The Collapse of the Soviet Union, the emergence of oil and gas-rich independent states, and the emergence of regional economic powers generated severe competition for the energy resources of the newly independent states. Considering the deficit of energy resources in the global market, rising prices of oil and gas, and heavy cost of development of resources and infrastructure for their supply in far off regions, it was rightly anticipated that the interest of major economic players and multinational companies would increase in the energy reserves of the Caspian Sea region (Akiner, 2004). The independence brought with it a mammoth of opportunities for these states, whose energy sector was once dominated by the Soviet Union and isolated from the outside world.

The post-Soviet states of the Caspian Sea region have a century-old history of oil production. Among them, Azerbaijan has a unique status as the birthplace of the modern oil industry. Baku maintained its strategic importance throughout the twentieth century. During the post-cold war era, it was the first country that made some successful moves to diversify its oil supply from the Soviet Union and gained some freedom in its foreign policy decisions regarding energy security (Kuniholm, 2000). The development of Shah Deniz and Azericgiragh Gunashli fields and construction of the Baku-Tbilisi-Ceyhan pipeline greatly enhanced Azerbaijan's importance in the energy sector of the region as well as its energy ties with the west. The energy sector emerged as the biggest contributor to the country's national income.

Similarly, Kazakhstan used to be the second-largest oil-producing state during the Soviet era. Even though it remained under Russian clout for a long time after independence, its energy sector became vital for its economic development. The discovery of the Tengiz and Karachaganak oil fields attracted many foreign powers, like the EU, China, the U.S, and some regional powers towards the Kazakh energy sector. Kazakh oil production increased with foreign investment and the development of the Kashagan oil field. The construction of multiple pipeline routes remained a priority for Kazakhstan's government to maintain its sovereignty in its energy sector (Ostrowski, 2010). The case of Turkmenistan is not much different. This natural gas-rich state did not make much progress towards an open market economy and remained under the sway of the obsolete Soviet system. However, it achieved much freedom in its natural gas exports with the construction of the China-Central Asia gas pipeline.

Initially, the huge reliance over the Russian pipeline system thwarted the development of the Caspian energy sector. Another factor that proved to be fatal for the exploration of much of the offshore Caspian oil and gas reserves was the legal status of the Caspian Sea. The five littoral states are divided over its status as a sea or lake, distribution of sea surface and seabed, and exploration right of offshore resources.

The Caspian energy scenario presents some geopolitical and geo-economic challenges. The geopolitical challenges include avoiding the Russian transit system and choice of alternate pipeline routes, which includes geo-strategic objectives of major powers. Geo-economic challenges include the financial cost of constructing new routes and exploration and development of new fields and diversification of exports. In any case, Diversification emerges as the main theme in the analysis of the Caspian energy sector. Diversification of export routes is essential for the development of the oil and gas sector of Turkmenistan, Kazakhstan, and

Azerbaijan (Amineh, 1999). While diversification is no less significant for the energy security of the importers as well as for their geostrategic interests. EU is interested in the diversification of imports for contracting dependence on Russia. This will serve two major objectives one economic and another geopolitical. The construction of multiple channels to let the oil and gas out of the Caspian region would weaken the Russian monopoly over the energy sector and more resources would be at the EU's disposal. Similarly, undermining Russia also serves the EU and U.S interests in the region.

As far as the Caspian's eastern neighborhood is concerned. China also follows the policy of import diversification that led it to maintain strong relations with the post-Soviet states. China's role in the Caspian energy sector has increased to the extent that it has emerged as one of the major importers of oil and gas from the region (Petersen & Barysch, 2011). Nevertheless, it has great implications for the EU, the U.S, and Russian interests in the region. One of the impacts of the diversification strategy is that the Caspian states while reducing the reliance on Russia, have gradually submerging under the heavy influence of other power China. It has become hard for them to maintain a balance between the two adjacent powers and their interests. On the other hand, this situation puts the interests of Russia and China in conflict, as both are struggling to maintain their stronghold in the energy sector of the region. This also presents opportunities for cooperation. The analysis of their direct and indirect interaction in the next chapter will present a complete picture of the impact of the energy sector on China-Russia relations on bilateral as well as multilateral levels.

Chapter 7

Converging and Diverging Forces and Impact on Energy Relations at Bilateral and Multilateral Levels

Energy security is a crucial aspect of today's global politics. It cannot be ensured without energy trade diversification. The previous chapters have tried to elaborate on this phenomenon that how the required diversification of energy trade has tied the energy interests of China, Russia, and the Caspian region in an energy complex. It has also emphasized that energy is a security issue in those states where economies cannot sustain without energy resources. The uneven geographical distribution of energy resources makes all countries dependent on each other for import or export.

7.1 Energy Trade Diversification: A Pre-requisite for Energy Security

The Caspian Region and its energy sector is one such region where the energy security interests of the regional states, as well as two giant neighbors, overlap. After examining the energy as a security issue and overlapping energy interests, this chapter will analyze the impact of the energy sector in two ways. As the title of the study suggests that it deals with China-Russia energy relationships and geopolitics of energy security in the Caspian Sea region. This study deals with the impacts of the energy sector on China-Russia relations in great depth. For this purpose, it is important to look at all of its aspects. This chapter will present an in-depth analysis

of impacts at two levels. Here comes the essence of this study. To understand the role of the energy sector on rapidly growing and strengthening China-Russia relations, it must be analyzed at bilateral and multilateral levels. The bilateral level presents the direct interaction and development in energy relations between China and Russia. Whereas, the multilateral level presents their indirect interaction in another region where the interests of both states are involved and the former-Soviet states of the Caspian Sea region are that particular region. This must be bear in mind that without understanding the nature of their bilateral and multilateral interaction in the field of energy, it is hard to understand the true dynamics of their relationship and what impact the energy sector might have on their contemporary as well as their future relationship. Besides, it will also help in testing the two widely believed notions, which are the main motivation behind this study that their relationship is shallow, cannot sustain for long, and second, their ties are mostly for geopolitical gains against the west.

Energy Security demands diversified sources of imports and exports. Reliance on one or a few sources might cause insecurity. However, diversification has its own repercussions, especially when overlapping interests of multiple forces both regional and external are involved. This strategy of diversification has brought Russia, China, and the Caspian states together in an energy security complex. The energy sector presents both challenges and opportunities for all actors. The importance of energy resources of this region for external forces has turned it into a security issue. This chapter presents a comprehensive analysis of this phenomenon, by analyzing the impact of the energy security strategy of Russia, China, and Caspian states.

The energy security of Russia and China present an interesting case to study how their interests overlap at different levels. Moreover, how they are managing it in a critical geopolitical environment. To understand these points, it is important not only to look at the developments

of their bilateral energy trade but their indirect interaction in the energy sphere. The Caspian Sea region provides a good case to study it at the multilateral level.

From a theoretical perspective, the regional and international level approach of Regional Security Complex theory is also useful to study this phenomenon due to its geographic dimensions, and security vulnerability of the energy sector and inter-related interests, advantages, and challenges. This part of the chapter will combine both sectoral and structural levels to analyze the impact of the energy sector on their relations and regional geopolitics. Russia, the largest exporter of oil and gas, and China as the largest consumer of these resources hold great potential for developing a strong bilateral energy trade relationship. Both states present the best scenario for a relationship in a geopolitical and geoeconomic sense.

Along with sharing a 4500 km long border, both share the views about the international development, structural changes in the world, and opposition to the unipolar world order, etc. Both have enjoyed similar ideological leanings in the past. Moreover, a straightforward, energy producer and energy consumer relationship could have been the biggest support for the establishment of a strong bilateral relationship right at the end of the Cold War.

China-Russia energy relations provide an interesting insight into their contemporary approaches towards each other. Many experts of international relations believe that their relationship is shallow and more political in its orientation rather than a strategic (Anonymous, Personal communication, January 22, 2019). Russia's energy resources are a strategic tool in its hand, as one of the world's leading exporter and largest non-OPEC member. Its relations with China are entrenched in the oil and gas trade, which gives them room for maneuvering and bargaining (Anonymous, Personal communication, February 10, 2019). Russia's realization of its energy potential got stronger with the global oil price hike in the early twenty-first century

for the restructuring of its status in regional and global politics. It views the stability of demand security as a prerequisite for its energy security.

7.2 Bilateral Energy Relations: Crossing a Threshold of Strategic Partnership

China-Russia relations have always been a hot topic in the geopolitics of the world. Both states have made some remarkable developments in their relations during the post-cold war era. The changing structure of the international system from bipolarity to unipolarity and then multipolar movement have great repercussions for their bilateral ties. The Chinese economic takeoff and Russia's emergence as a resource superpower seems to have some long-lasting impact on their bilateral relations. China's economic might and resource hunger and Russia's huge oil and gas reserves and geographic proximity complement each other's energy security. They have not been able to develop such a comprehensive and deep relationship in any other sector as the energy trade. Nor they have developed such a strong relationship with such a strong base in the past. Perhaps, energy has been a major determinant in defining their relationship or in changing the outlook of their relations in the past three hundred years (Jeff Schubert, personal communication, January 26, 2019).

7.3 Analyzing the Bilateral Level Trends in China-Russia Energy Relations Since 1991

Currently, it is the need to diversify the energy trade, which brings them together and position them in a straight consumer and buyer relationship. However, this was not the same in the early years of the post-cold war era. Initially, both states failed to realize the huge potential they hold for each other in the energy sector. The trust deficit and gross misunderstanding regarding each

other intentions kept them apart. Both states avoided making a strong commitment to the energy sector (Downs, 2010). An important factor that shaped their behavior in the energy sector was the fluctuating oil and gas prices in the world market. During the low-price years of the 1990s, China avoided investing in the expensive exploration and pipeline projects and preferred to get the benefit from the low oil prices by obtaining more supplies from the international market. However, the turn of the century also turned the energy game for both states. The dynamics of the energy sector started changing for both. China's economic takeoff and Putin's arrival on Russia's presidency were two important turning points. China's booming economy could not be sustained without energy security. Moreover, the conflict-ridden Middle East which has been the largest oil provider to China turns more vulnerable during the post 9/11 era. Similarly, the growing concerns over the Strait of Malacca started posing more threats to China's 90% maritime trade that crosses the Malacca. Out of this 90% sea-born trade, more than 42 % consists of just oil supply from the Middle East and Africa (EIA, 2018). These factors helped Chinese leadership realize the urgency of resource trade diversification in their immediate neighborhood. Therefore, China starts looking at Russia favorably as the potential energy trade partner. However, Russia was still reluctant to make any long-term commitment to energy trade with China for two reasons. First, Europe was still its biggest oil and gas buyer. To divert its energy trade towards China required huge investment for building new pipeline infrastructure. Secondly, Russia's fear that China's economic rise and growing energy trade with Russia might reduce its status to just a raw material supplier. This will create a great strategic imbalance in their relationship. This kind of relationship could only strengthen China (Mankoff, 2012). The Energy sector plays an important role in Russia's foreign policy. The financial crisis of 1998 and falling oil prices in the global market finally paved the way for the Russian and Chinese

energy relations. Oil prices fell as low as \$18 per barrel causing a severe shortage of cash for Russia. China offered a \$25 billion-dollar energy deal for the next 20 years and proposed an oil pipeline from Russia to China. This set the stage for further developments not only in the energy trade but also in bringing both states closer and enhancing the trust.

Since the late 1990s, China-Russia energy trade has increased manifold. The bilateral oil trade was below 1000 barrels a day in the mid-1990s and it has reached 1.2 million barrels a day leaving behind Saudi Arabia in 2017 (EIA, 2018). With this increase, Russia accounts for 14.6% of China's total oil imports (Workman, 2018). China used to receive only 4 % of Russia's crude oil exports in 2005. Its share has increased to 18 % in 2016 (EIA, 2017). Although Europe is still the largest recipient of Russian oil, this period saw a gradual decrease in the share of overall energy imports from Russia to Europe. On the other hand, Russia has emerged as the biggest oil provider to China leaving behind Saudi Arabia (World Top Export, 2019). It shows constantly rising levels of interdependence between them and their seriousness for a long-term relationship.

7.4 Forces of Divergence

7.4.1 Mistrust and Fluctuating Oil Prices

One of the important factors relates to mistrust between the two states. Mistrust led the oil companies of both states to struggle to get more and more control over the oil and gas transportation projects. It caused an initial failure in reaching any breakthrough in any major oil and gas trade agreement. Therefore, mistrust played an important role in delaying the establishment of China-Russia energy relations, there were no direct oil and gas pipeline routes between the two states in the mid-1990s. Both states were initially hesitant to invest in such a project due to fluctuating oil prices in the world market. In Russia's view, low oil prices, do not

make it profitable to invest in such an expensive infrastructure project. Especially, when it was to deliver oil to only one buyer. Similarly, the Chinese leadership also avoided investing in any pipeline project given the low oil prices after the 1998 Asian economic crisis. As buying from other sources was a more attractive option for them. However, the hike in oil prices provided more advantages to Russia. The oil price rose from the lowest ebb of \$14 per barrel in the late 1990s to \$72 per barrel in 2007.

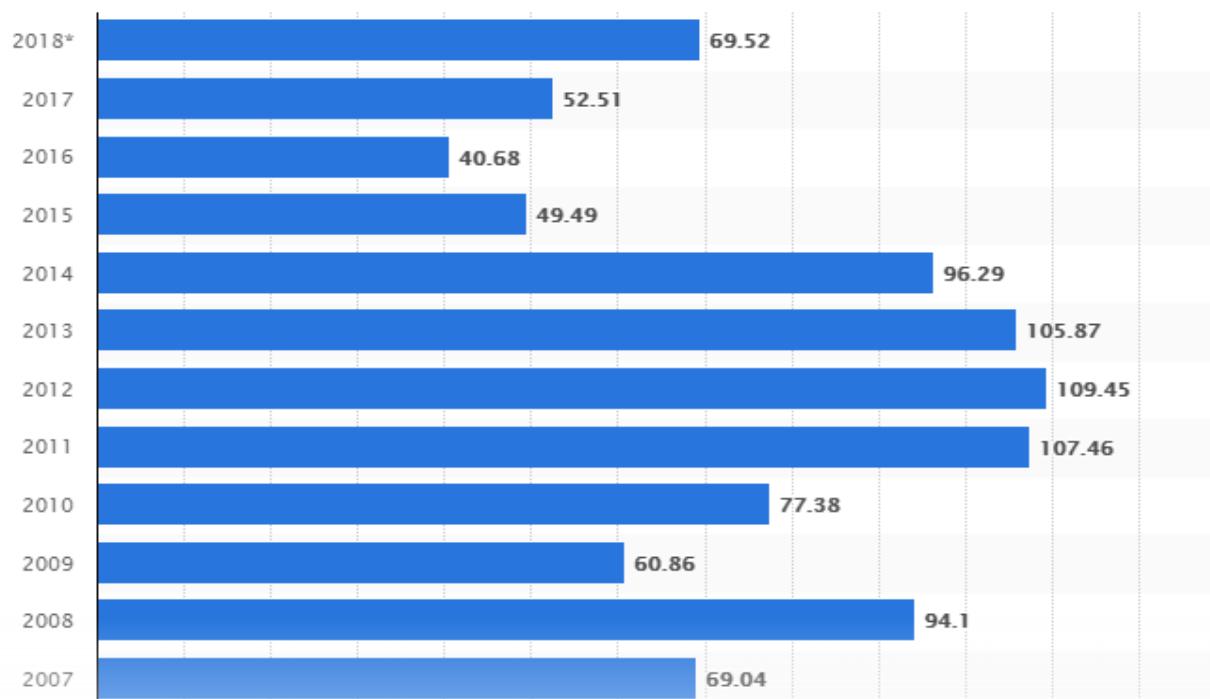


Figure 42 : Oil Prices from 2008 to 2017 (Statistical Portal, 2018).

The above data shows the fluctuation in oil prices during the last ten years. It also indicates that the oil prices remain comparatively high and did not go very low as it went during 1997-98. It provided Russia to earn huge profits and strengthen its bargaining position in its oil and gas deals. Similarly, it was the high oil prices and growing insecurity in oil supply that prompted China's interest to go for an oil pipeline with Russia.

7.4.2 Resource Nationalism in Russian Energy Policy

Another important aspect of divergence is the reinvigorated “resource nationalism” in Russia with rising oil prices (Heinrich, 2014). Although, resource nationalism is also found in other resource-rich states like Kazakhstan and Azerbaijan, where it is more economically driven. However, it has different connotations for Russia. As an energy superpower, Russia has increasingly used energy as a political tool for maneuvering. Thus, Russia’s resource nationalism is more politically oriented. This creates doubt in the consumer countries regarding its policies. Russian companies have always tried to get greater control of the oil and gas supply structure between China and Russia. This might have served two purposes for Russia. It not only provides much needed economic support but also strategic leverage. This fact has also been adhered to by Russian President Vladimir Putin. This resource nationalism in Russia caused the delay in major oil pipeline projects because Russia has officially opposed private oil companies in the major export projects. That became one of the major reasons behind the desertion of the Angarsk Daqing oil pipeline, which was to bring oil from Angarsk city from the Irkutsk region to China’s northern city of Daqing (Speed & Liao, 2002). Russia’s private petroleum company Yukos was the major shareholder in the pipeline and originally proposed the project in 2001. The resource politics led Russia to replace the project with the Eastern Siberia Pacific Ocean pipeline project. The Yukos not only posed a threat to state monopoly over large export projects but its plan to initiate more projects with the U.S company Exxon Mobil was also seen with suspicions by the Russian government. Such an approach from the Russian side always contributed to mistrust regarding Russian commitments to mega oil and gas projects with China. Although, the rising oil prices proved to be an unpleasant surprise for China because it left China with less bargaining positions. China realized that fluctuating oil

and gas prices could quickly shift the gear of resource politics to the energy resources producing states. A state, ravenous for oil and gas like China can hardly afford this.

The case of gas pipeline projects was not much different. Gazprom holds a monopoly over major gas projects. Moreover, unsettled price mechanisms created obstacles in the Russia-China gas trade during the early twenty-first century. The gas price offered by China in 2007 was 50% less than the price Russia sell gas to Europe. Thus, bilateral energy trade was unacceptable and unattractive for the Russian government. All these factors delayed the establishment of strong energy trade relations between the two states until the 1st decade of the twenty-first century.

7.5 Geo-Economic and Geo-Strategic Forces of Convergence

7.5.1 Diversification as the Most Important Converging Factor

The most important converging factor that brings China and Russia together in an energy trade relationship is the diversification. Diversification has both geo-economic and geopolitical connotations. It has raised new possibilities for their mutual trade. China and Russia's energy sector enjoy a complementary aspect. China's growing oil and gas demand provide bright prospects for Russia's Asian pivot for energy trade. Growing energy trade with Russia is gradually reducing China's oil imports from the Gulf region. Moreover, it also allows China to avoid a transit issue from any third state.

China's oil demand has seen an unprecedented rise since 1991. It rose from 2 million barrels per day to more than 12 million barrels in 2017 (CEIC, 2018). Similarly, China's gas consumption has hit a record high in 2017 and reached 114.6 billion cubic meters (Huan, 2017). According to the 13th Five-year Plan of China, its natural gas consumption will touch 57 billion

cubic feet a day by 2040 (CPC, 2015). Such a huge demand for oil and gas present Russia with an attractive opportunity to expand its market in the east. This provides the demand side security to Russia against the declining oil and gas demand in Europe. Russia has experienced uncertainty in its energy sector and a troubled relationship with Europe.

7.5.2 Russia's Asian Pivot and Beginning of a New Era in China-Russia Bilateral Energy Ties

The Russian Energy security strategy announced in 2009 set the stage for Russia's Asian pivot, A strategic move aimed at expanding its economic role in the growing Asian market. The 2009 policy indicates that Russia will increase its energy trade with Asian countries and its share in total Russian energy export will increase from 4% to 20% by 2020 (Government of the Russian Federation, 2015). Though many other factors contributed to Russia's Asian pivot, energy security seems to be the central issue. The economic slowdown after the financial crisis of 2008 along with western sanctions in the aftermath of the Russia-Georgia war had an unpleasant scenario for the Russian economy. Moreover, fluctuating oil prices deprived Russia of huge revenues it used to generate from the European market and its major source of income and biggest trading partner. In this scenario, moving towards the Asian market was an attractive option due to their rapid economic development, growing oil and gas demand in Asia, and the fall in European demands. Russia timely realized that the center of world economic activity is shifting towards Asia. It formally started moving with the Eastern Economic Forum held in Russia's far eastern city of Vladivostok. The rich resource endowment of the Far East presents impressive opportunities for Russian petroleum companies as well as giant Asian economies. China, due to its geographic proximity to Russia's far-east emerged as the most important beneficiary of Russia's Asian pivot. This new Russian strategy also accelerated trade with Japan

and South Korea. The role of the energy sector remains pivotal in this regard. According to the BP energy outlook, the rapidly growing consumption of oil and gas is expected to increase from 1,464 million tons annually in 2015 to 1708 million tons in 2020 (BP Energy Outlook, 2018). The biggest shareholders will be Asian countries, most notably China. This will not only help in generating more oil income for Russia but also reduce its reliance on the European market. Nevertheless, the Asian pivot becomes a balancing move from Russia, which aims at diversification of trade and for achieving strategic milestones.

Before the Asian pivot, both countries were insignificant for each other in economic and especially in the energy sector. Russia was hesitant in receiving Chinese investment in the upstream project, where exploration, drilling, and extraction require advanced technology and huge investment. Western companies were preferred in the upstream projects but the initiation of the nationalization program of the energy sector by President Vladimir Putin raised the concerns of western companies (Dellecker & Gomart, 2011). This initiative restricted foreign involvement in the energy sector. Russia preferred China in the downstream project related to transportation and pipelines. The post-2008 economic crisis brought challenges for Russia's upstream projects. First, the economic downturn globally and later western sanctions against Russia in the aftermath of the Ukrainian crisis turned the tides of the Russian energy strategy. Consequently, there emerged a great boom in the energy sector development between both states.

7.5.3 The Commonality of Views on Geo-Political Matters

The Ukrainian crisis increased Russia's European challenges and strengthened its commitment to Asian countries especially China (Jeff Schubert, personal communication, January 26, 2019). It augmented its economic and political relations with China in the wake of worsening relations

with the EU and the US. Both Russia and China share the strategic objectives against the west and availed this commonality of views, to strengthen their relations. And the energy sector provided the fundamental support for this cooperation. An important aspect that must be clear that Russia's Asian pivot should not be understood as approaching China only. There are other big Asian economies with whom Russia is taking great interest to develop the energy market. However, China's role is pivotal in Russia's eastern pivot. The construction of the Eastern Siberia Pacific Ocean pipeline is of utmost importance at the bilateral level relationship between China and Russia. It has led Russia to become the biggest oil provider to China, A relationship that cannot be easily undone or deteriorate. Secondly, the construction of Pipelines is a long-term investment, which is meant to build a lasting relationship.

Table 1: Major Projects and their cost

Year	Project	Description	Cost in USD
2009	ESPO pipeline project,	China Development bank Loan to Rosneft	25 Billion
2013	25 Years oil export deal	i- CNPC and Rosneft, ii- 10 years deal between Sinopec and Rosneft	270 Billion 85 Billion
2014	Power Of Siberia Project	Gas export agreement between CNPC and Russia's Gazprom	400 Billion
2015	Yamal LNG project	Silk Road Fund acquired a 9.9 % share of the project and provide around \$800 million loans.	1.2 Billion
2016	Yamal Project	China buys 20% shares of the Yamal LNG project.	12 Billion

Source: (Petroleum Economist, 2018)

7.5.4 Eastern Siberia: A New Energy Pivot

The first major deal came in 2009 when China provided a loan of \$25 billion to Rosneft and Transneft for the construction of the ESPO pipeline (Watkins, 2009). It proved to be the dawn of a new era. The year 2013 is considered the most significant in this regard when both states signed a \$270 billion deal (Financial Times, 2013). China's oil and gas demand is constantly rising at 1.6% annually. On the other hand, Russian gas demand in Europe is constantly falling since the 2008 financial crisis and according to EIA, European gas demand will not rise again and reach a level equal to 2008 (Godzimirsky, 2013). In this scenario, it is unlikely that Russia will weaken its energy relations in Asia and specifically with China. Though Russia has been skeptical of Chinese ambitions in the Eastern Siberia region, China's huge investment in the energy projects in the region has brought many other regional players whose interests are at stake in the eastern Siberian energy market, making any aggressive designs unlikely. Moreover, such an unprecedented level of energy cooperation between the two countries is contrary to Russia's previous approach regarding its energy relations with China. This level of investment gives credibility to the claims made by both states regarding their ties.

Despite the huge difference between the economic strength, growth rates, and GDP of both states, Russia sees more economic opportunities in China's growing economy instead of a threat. Regarding the fear that Russia's status will be reduced to a mere raw material supplier, it is important to look at the extent of energy trade between them. Russia has surpassed Saudi Arabia in 2016 as the biggest oil supplier to China (Henderson & Mitrova, 2016). In this situation, Russia's importance as a "raw material supplier" strengthens its position. The rapidly growing share of Russian oil in China directly relates to its energy security with the Russian oil supply. Although this fear exists in the minds of some Russians (Anonymous, personal

communication, January 29, 2019). The opportunities created by the energy trade for Russia create interdependence and which makes the Russian position stronger. Rather it gives Russia a more privileged position (Sun Xia, Personal Communication, January 27. 2019).

7.5.5 Decision-Making Structure And the Role of Leadership's Personal Interaction

There is another argument that supports the strength of China-Russia relations in the energy sector is related to the personal role of leadership. It is assumed that decision-makers in the petroleum sector are usually concerned with profit in their oil and gas trade. Moreover, if they do not find it profitable to extend business, they abstain from doing business in such areas. This fact might be applied to Chinese and Russian petroleum companies too, who might follow suit. However, the centrality of decision-making structures in both states rules out this possibility that the petroleum companies of both states can make such huge financial commitments in the energy sector without the consent of the highest authorities in their respective states. The personal interests and interaction of the head of the states from both sides have contributed a lot in strengthening this relationship. The decisions in the energy sector are not only directly related to their energy security but also an important foreign policy tool for both states.

Another factor that limits the danger of serious competition and rivalry between the two states and enhanced the chances of cooperation between them is the Chinese assistance extended to Russia in the wake of financial losses incurred due to western sanctions on Russia. Moscow has received almost \$11 billion in this regard from Beijing (Financial Times, 2017). China stands as the savior in this scenario. It provides great support in a difficult economic and geopolitical environment. Moreover, China has been increasing its volume of trade with Russia and the energy sector has emerged as the biggest trading sector between them. Weapon trade between

both states is declining after a period of relative boom. China is focusing more and more on indigenous production and reducing its reliance on foreign defense technology.

7.5.6 Energy Sector: As a Political Tool vs Complementary Factor

There is a big debate in scholarly as well as foreign policy-making circles that Russia uses its energy resources as a foreign policy tool. This view is hardly applied to its relations with China. This study does not fully agree with the argument that energy is a foreign policy tool in Russia's hands. Energy might be a tool that is sometimes used against Russia too. Because of its huge reliance over the energy sector for its survival. It uses energy as a tool in its dealings with the EU but not against China. The revenues generated through the oil and gas trade are vital for military mobilization in Russia. However, its military mobilization is not aimed at balancing China's growing power. Instead, their purpose is to meet the security challenges posed by the US and Western Europe. This fact is evident in the Russian Military Security Strategy (Government of the Russian Federation, 2015). Russia sees China as a partner in meeting shared global challenges. Russia's rapprochement with the west and the EU seems unlikely in the near future. Moreover, this has contributed to the emergence of strong relations between the two states and it will continue to make an impact.

Part Two

7.6 Analyzing China-Russia Energy Relations at Multilateral Level: The Caspian Sea Region

Since the end of the cold war, China and Russia have come a long way ahead in their relationship. Both states not only share common views to change the US-dominated international political system but they also share a geo-economic interest. Their evolving

relations in the economy, military, energy, and social spheres are of great importance and interest to the experts of IR. However, their relationship is very complex. Especially their interaction in the energy sector presents a more complex picture than any other sector. As mentioned in the earlier part of the chapter, China-Russia energy relations must be analyzed at two levels. First at a bilateral level where they interact directly and second at the multilateral level when their interaction turns indirect. This part of the chapter deals with the analysis of their indirect relationship in a region where both have strategic interests. It delves into the question raised earlier about the implications of China and Russia's energy relations with the oil and gas-rich post-Soviet states of the Caspian Sea region.

The initial trust deficit between both states in the post-cold war era prevented them from being engaged in any long-term energy project. However, the diversification of energy trade emerged as an important requirement for both. They realized their hidden potential for one another quite late. Meanwhile, China established a strong relationship in the former-Soviet states located in China's immediate west. Kazakhstan and Turkmenistan's rich onshore and offshore oil and gas resources attracted China's attention. The initial years of the twenty-first century brought China and the former-Soviet states of the Caspian Sea region quite close to each other in the energy domain. The complementarity of their energy sector paved the way for closer interaction.

7.7 Important Variables for Analyzing the Caspian region's Energy

Relations

The nature of relations between China, Russia, and the Caspian states and their petroleum industry is symbiotic. The three important variables for the analysis of energy security in the Caspian region are financial assistance, geography, and technological innovation. These three

variables equally, accountable for determining the energy trade directions of the Caspian states in eastern, and western directions. China presents a more lucrative prospect for financial assistance, the most important aspect to develop the energy trade infrastructure and diversification. Geographic proximity and advancing technology all make China an important partner. While Russia has some more historic roots in the region. Though it does not match the financial assistance by China or the west, it possesses the currently installed infrastructure, which makes it very important for the Caspian states.

Russia's central position in geographic, economic, and political affairs, lends it unique importance in the post-Soviet space. As the largest successor state of the Soviet Union, it plays the most important role in the post-Soviet affairs of the Caspian region. The establishment of CIS gives it an institutional shape in late 1991. Though Moscow was busy with the transition issues, it did not neglect the developments in the region. Since the mid-1990's Russian interests in the regional affairs began to evolve again. Russia was more concerned with geopolitical issues; the energy was not on top of the agenda initially, as it was a routine issue due to the integrated energy trade system of Russia and former-Soviet Caspian states. Therefore, Russian energy policy caused disincentives for the oil and gas production in Kazakhstan and Turkmenistan. The occasional shut down of Kazakh oil supply to Europe on the pretext of sulfur in oil and selling of Turkmen gas at a very low price in Ukraine was lucrative for Russia at the expense of the economic development of these oil and gas export-dependent economies. However, the changing regional scenario, the arrival of the US and EU in the region, and their interest compelled Russia to rethink its policy towards the regional resources of oil and gas. With the arrival of Putin in the Russian presidency, he made the energy security and energy

relations with its former republics a top priority. An intensified energy diplomacy was initiated by Moscow in both the eastern and western sides of the Caspian Sea.

7.8 Forces of Divergence in the Caspian Sea Region

7.8.1 Burden of History and Challenges for the Relative Status

China and Russia have a history of tense relations. They could not shed the burden of history even after the end of the cold war when both emerged as the biggest opposers of a unipolar world and west-centric international system. It was only in the second decade of the twenty-first century that they finally learned to leave the past behind. As mentioned earlier that their relationship is multidimensional and they enjoy direct and indirect relations due to their specific geography. Their interaction in oil and gas-rich former Soviet republics presents a complex scenario. The growing role of China in economic affairs and especially in the energy sector seems to be the biggest diverging force as it tends to deflate Russia's decade long monopoly in the regional economic and energy matters. In the post-cold war era, this perturbed the Russian policymakers. On the contrary, this energy politics would emerge as the greater converging force between the two states against the backdrop of US and EU involvement.

Conceivably, the biggest diverging force in regional energy politics is the EU and US policies. While tracing the divergence between Russia and external forces in the former Soviet states of the Caspian Sea region, it appears that divergence is more profound between the Russian and west rather than Russia and China. Although both states have competing interests in the region, the divergence on regional matters between them and the west has pushed them to defuse tension between them and create more convergence.

7.9 Forces of Convergence at Multilateral Level

The following converging factors have been identified in this study.

7.9.1 Common Threat Perception

China's policy with the former Soviet states has been of a peaceful rise in the region. For this purpose, one can easily understand the eminence of creating a region with secure borders from internal threats of extremism and separatism and the external threat of terrorism. One important converging aspect of China-Russia relations in the region comes out from this scenario. Both states are facing security challenges in the region. These challenges erupt from domestic regional and international origins.

- (i) At the domestic level, China and Russia both are facing separatist tendencies, which are having direct linkages with the former Soviet republics. Whether it is the issue of Uighur Muslims, which have strong roots in the neighboring states of Kazakhstan and Turkmenistan, or the separatist movement of North Caucasia. Therefore, shared security risk and its elimination is the biggest force of convergence in the region.
- (ii) While looking at these threats at the regional level, these separatist and extremist elements not only share beliefs but also have connections with one another. The threat of terrorist organizations like Al-Qaeda and ISIS due to geographic proximity with the Middle East, constantly looming large over them. They not only pose a serious security threat to the peace and stability in the region but also intimidate the energy trade and pipelines of gas and oil. And any miscalculation of this threat will put the energy security of all states in the region at great risk. Moreover, it is detrimental to the energy security of the whole region whose economies are solely based on energy trade.

(iii) Finally, the convergence at the international level of security threat comes from the involvement of external players like the US and the EU in the region. This region is located between the two great adjacent powers Russia and China. Both have a history of shared political, security, and economic interest. The US and the EU are relatively new forces in the region. The opposition of the western-centric world system in China and Russia gives credence to their efforts of peaceful ties in the region. The regional energy resources are one of the biggest attractions for the external forces and the US and the EU connivance in the region. On the other hand, both Russia and China are extremely concerned to minimize the role of external forces, especially of the US and EU in the region. Since the US withdrawal from Afghanistan, the US role in the region is somehow contracting, but the EU's interests are expanding. And energy security is undoubtedly their greatest concern in which they enjoy the support of the USA. This is perhaps another and the strongest converging factor for Russia and China. Russia who has always opposed the presence of EU and the US in the region finds in Chinese presence a great balancing force. In this way, China's growing presence in the region is a source of strategic balancing rather than a threat to Russia.

7.9.2 East-West Directional Dimension of Caspian Energy Trade

The location of post-Soviet states along the Caspian put them in different scenarios. Each state is faced with different kinds of economic advantages and disadvantages. For instance, Azerbaijan's energy trade is more western-oriented due to its location west of the Caspian and closer to the Black Sea and Europe. Secondly, its adjacency with Turkey provides it a more feasible route for its energy trade with Europe. However, Azerbaijan has still not explored much the Asian market on the eastern side where some of the world's largest and emerging economies like India and Pakistan are located.

On the contrary, Turkmenistan and Kazakhstan are more handicapped for an independent trade with Europe due to their location. Turkmenistan on the eastern shores and Kazakhstan on the northern coast of the Caspian Sea are still very much reliant on the Russian pipeline system. The other possibility could be the Trans Caspian pipeline, still in papers due to the legal status issue of the Caspian. Even though 2018, was an important year for the settlement of this dispute, still many questions are unanswered and Caspian states have not been able to fully resolve the issue. Rather, it looks more like maintaining the status quo (Azad Garibov, personal communication, January 29, 2019). They have divided the seabed and territorial sea but no definition of whether it is a sea or lake has been finalized. As both the sea and a lake are administered differently in international law. Unless its status is decided, there are bleak chances of the Trans Caspian pipeline. It means that the diversification of energy trade is still not finding any favorable terms for Kazakhstan and Turkmenistan (Rovshan Ibrahimov, personal communication, March 8, 2019). Despite this challenging situation, they can explore the mammoth of opportunities for developing their energy relations with the most dynamic eastern neighbor China (Akbota Zholdasbekov, personal communication, February 27, 2019). The geographical adjacency with China lends them two very important advantages, First, Kazakhstan does not need to cross any transit state.

As far as Turkmenistan is concerned, it does have transit issues, but the pipeline system developed by China with the Central Asian states is of so much significance for Turkmenistan because it leads to only one major consumer and that is China. Secondly, the Chinese market is giant, and Turkmenistan and Kazakhstan will continue to reap its fruits for a longer period. However, they will not be able to completely come out of Russian influence for their energy trade to the west (Irfan Shehzad, Personal Communication, February 6, 2019). Turkmenistan

and Kazakhstan are also focusing on expanding their trade links with South Asia, where India and Pakistan present some attractive opportunities for energy trade. In this way, the direction of the energy trade of eastern Caspian and western Caspian provides two different scenarios for the development of the energy market. For Russia and China, their energy resources are very important for specific reasons but their eastern and western directions diminish the danger of any potential conflict in the energy sector of the region. Instead, it provides the regional states some bargaining tools to adopt a more vigilant and diversified energy policy (Jeff Schubert, personal communication, January 26, 2019).

7.9.3 Russia's Conventional Advantages in The Caspian Energy Sector

Russia has always enjoyed a strong position in the Caspian energy sector due to two very important reasons. First, its political influence in the newly established states and secondly its pipeline infrastructure. Even in the late 1990s when Russia was short of capital to match western investment in the region, it was always extended an invitation by the Caspian States in the bids of all major projects. The fear of pipeline shut down would leave the post-Soviet states of the Caspian Sea region with no options to export. This also emerged as the biggest motivation for finding and constructing new routes in the east, south, and southwest. Despite the construction of some bigger projects, which finally broke the Russian monopoly over the pipeline system like the BTC and Central Asia China pipeline system, Russia still, holds considerable influence. For instance, it holds a 24% share in the Caspian Pipeline Consortium with Kazakhstan (CPC, 2019). Similarly, it is a major shareholder in all mega projects in the region.

Although China's relations with the Caspian states have been strengthening since the start of the new century. China is subsequently developing its relations with Russia in the energy sector too. Apparently, China's growing role in the economic sector and especially in the energy sector

of Kazakhstan and Turkmenistan indicates a growing divergence between China and Russia in the region. Moreover, it is believed that Russia as the successor state of the Soviet Union, the previous master of the region is getting at the back foot. It is usually taken as the “defection of former-Soviet states from the Russian influence. However, two important factors must be kept in mind while analyzing divergence in China-Russia relations in the former-Soviet states of the Caspian Sea region. One is that Kazakhstan and Turkmenistan are still not fully independent in their energy trade. Russia has successfully retained its position by signing large agreements with both for the oil and gas transit through Russian territory. One must keep in mind that China’s investment in the construction of the pipeline with these states is exclusively beneficial for China. Perhaps China is the only beneficiary of the China Central Asia pipeline system. And it has become a great source of revenue due to the size of China’s economy. Despite the attraction of the Chinese market, Kazakhstan and Turkmenistan are also eager to send oil and gas to other Asian consumers like India and Pakistan. Considering the westward energy trade of these states, the Caspian states are also eager to expand their energy ties with the west. Europe presents impressive opportunities for investment, technological assistance as well as energy trade. For Kazakhstan, EU trade comprises a total of 40% of its exports dominated by oil (European Commision, 2018). As far as Turkmenistan is concerned, its majority exports are routed to China. Turkey and Azerbaijan are other important customers. Turkmenistan has long been vying for enhancing its energy trade with European countries. However, it remained handicapped due to its geography. In the absence of the Trans Caspian pipeline and undecided legal status of the Caspian Sea.

The recent agreement on the Caspian Sea legal status has brought some hopes for Turkmenistan-EU trade development. Despite these opportunities and challenges, the important

thing, which put the Russian Chinese rivalry in the energy sector of the region as less likely, is that both states of the Caspian region will remain dependent on Russia for transit to Europe because of their geography and integrated pipeline system with Russia. It is unlikely that they will come out of Russian perigee soon for their trade with Europe. Russia's energy relations with the Caspian states are different from Chinese energy relations due to their eastern and western orientations.

It is a fact their western challenges are pushing them more eastward and the role of China is getting stronger in the energy sector, some other factors still provide stability to Russia's position in the region. Russia's role in military and security matters is still far ahead of China. It has not yet outplayed Russia in the military matters of the region. This divides the interests of the regional states between the two great powers of the region and thus managing a balance. This military cooperation has already been institutionalized in the form of CSTO under Russia. Despite its inability to convert it into a formal alliance, Russia's military presence in the CSTO states still makes its position strong. China has gradually evolved itself as another contender for military cooperation in the region under the auspices of SCO. Anti-terrorism cooperation between member states and regular military drills is promising but still has to prove its durability in the face of mounting security challenges in the region. The regional states are facing security issues and they are the biggest obstacle in the economic development of the region. Therefore, their geography and security problems make them see towards both powers for a particular reason. This is perhaps the biggest motivation for them to keep a balance between them. One is a source of financial assistance and the second is a source of security cooperation. This fact is so crucial for maintaining a balance at bilateral and multilateral levels.

Despite growing trade links between Kazakhstan and China, Kazakhstan remained a relentless ally of Russia, perhaps the closest one in post-Soviet states. Even Kazakh President has announced a crude alliance with Russia and his intentions to integrate its energy market with both Russia and China (Miller & Yenikeyeff, 2015). This clearly manifests that the oil-producing state is trying to manage a strategic balance between the two giant neighbors.

7.9.4 SCO and Caspian Energy Security: An Institutional Aspect

Taking this multilateral analysis to the next important step, it is important to look at the energy cooperation between the regional states in a multilateral forum like SCO. The most important aspect of China's emergence in the region was that it institutionalized the multilateral engagements in the region quite early with the establishment of the Shanghai Five. Tackling the menace of extremism and separatism in its western region adjacent to Kazakhstan and other regional states was its initial motivation. Russia was quick to respond and within a few years, Shanghai Five emerged as the Shanghai Cooperation Organization. China, Russia, and Kazakhstan become permanent members. While Turkmenistan acquires the status of a guest member and Azerbaijan has the status of the dialogue partner. India, Pakistan, Iran, and Turkey are other members. This shows that SCO comprises of both big energy producers and consumers. A huge interdependency emerges out of this situation providing good opportunities for the energy trade among the member states. The SCO member states have established a framework for energy interaction between the member states called SCO Energy Charter. Albeit, the idea was initially forwarded by Russia in 2006 after seeing rapid development between China and its former republics in the energy sphere. At that time, China and Russia's energy relations were limited. Thus, it raised suspicions in Russia about China's energy objectives in the region. However, rapid growth in China-Russia energy relations and the

establishment of the SCO energy charter, has evaded the chances of further divergence in this area.

The SCO energy club, according to its initial assessments and objectives has declared to develop a comprehensive policy for the joint energy security of the member states, addressing the issues of both producing and consuming nations (Infoshos Russia, 2015). Therefore, it is likely to be a strong forum for creating an inter-regional energy market within the SCO member states, enhancing cooperation at bilateral and multilateral levels. SCO is comprised of states heterogeneous in nature and with extremely divergent geo-strategic objectives. Yet, Energy security is a common problem for all. The SCO energy club provides another good platform for the member states to establish a forum for cooperation. At the moment, this club is in its initial stages. So, let the time decide how it works and fulfill its objectives.

7.9.5 The US Factor in Multilateral Energy Setting

Another very important factor that brings Russia and China closer to each other and equivocates any serious confrontation in the energy sector of the Caspian region is the US involvement in the region (Li Lifan, personal communication, February 15, 2019). Although, the US is not directly interested in controlling and using the oil and gas of the region as a consumer nation. It maintains some other important geopolitical objectives, which might be served by its interference in the energy game of the region. The US involvement in the region originated with financial and technical assistance. With the arrival of major US and European petroleum companies in the region, it successfully assumed a greater role in the major energy projects of the region. Exxon Mobil and Chevron emerged as the major shareholders in the major projects in Kazakhstan and Azerbaijan, causing a threat to the Russian energy monopoly in the region as well as its geostrategic position (Aydin, 2011). The US does not enjoy any geographic

proximity and historical connections with the region. However, the fear of Russia's ability to maneuver and lobbying with the regional states and chances of creating a monopolistic attitude in the region through the energy sector might create problems for the US and its ally EU will be faced with a troublesome situation. Therefore, the strategy, implied by the US was to support new pipeline routes out of the region to reduce Russian monopoly in trade infrastructure. Both eastern and western options were considered in this regard, creating grueling challenges for Russia. The construction of the BTC pipeline was the first blow to Russia (Rovshan Ibrahimov, personal communication, March 8, 2019). This was the time when China set the foot in the Caspian energy sector. Although it was a latecomer in the region but set very impressive imprints within a few years. China's emergence as an economic giant in the east presents the regional player with yet another option to expand its energy market. Albeit, Russian's concerns on the growing Chinese role in their energy sector, some very important factors converge Russian and Chinese position in the region. By far the most significant factor is the desire of both regional powers to keep the US presence in the region at bay. Both oppose the US role in the most important sector of energy in the region. Secondly, both states are faced with some compelling challenges from the US in their immediate backyard. The US involvement in the Asia Pacific affairs, the South China Sea issue, and the politics of the Indian Ocean on the one side, and its like-mindedness with EU on issues concerning NATO and Eastern Partnership program, on the other hand, create consensus between Russia and China.

The Chinese involvement in the regional energy project met with severe opposition from the US and European companies. In fact, it was the western strategy, which played a more important role in bringing the two regional powers closer to each other in the region.

Among other regional players, Turkey remained active with the regional energy sector with the help of the EU. Iran, despite its important role, could not fully realize its Caspian potential due to economic sanctions. The role of the South Asian market largely depends on the Afghan security situation. This whole scenario leaves Russia and China the most important player in the regional energy enigma. It is evident that the convergence of interests is more explicit than divergence making more space available for cooperation and evading conflict at multilateral levels.

Finally, the last aspect, which makes regional powers Russia and China more attractive an option for them, is the conditions accompanied by the aid and investment for human rights and democracy. This rhetoric presented in the US and EU strategy often creates disillusionment in the recipient states. Russia enjoys a good amount of support and historical affiliation with the political leadership of the Caspian states. While the Chinese policy has been of strict noninterference in domestic matters.

7.10 Conclusion

The contemporary China-Russia relations are of great concern for many scholars. The rapid growth in energy trade relations has given an impetus to this debate. It primarily revolves around two overarching themes. A typical cold war-like approach found in western policymakers and experts who term it as an emerging threat or alliance against the west. Second, there is a prevalent view that their relationship is shallow and temporary and they cannot form a strong long-term relations ship. Albeit, many scholars concede that both states are showing pragmatism in their relationship because of their shared geopolitical objectives and complementary economic interests. However, there is less discussion beyond this rhetoric. There is a great disagreement that both states have developed long-term strategic relations.

This chapter analyzes their relationship focusing on the energy sector. It contends that the energy sector has given a huge push forward to their bilateral ties and it has crossed the strategic threshold, lacking in their relations since the mid-1990s. The most important aspect missing in contemporary China-Russian relations in the energy sector is that there is a need to understand the difference between pragmatic relationship and strategic maneuvering in current China-Russia relations. They have crossed the stage of pragmatism and now entered the stage of strategic maneuvering. The recent growth in bilateral energy cooperation is a manifestation of this development in their relations. This is the interplay of both political and economic necessities and will, and both states crossed this threshold between pragmatism and strategic maneuvering when their focus shifted from narrow geopolitical interests to advanced economic motivations and objectives. The commonality of geopolitical views and vulnerabilities along with economic and energy potential both holds for one another is primarily the most important aspect of this relationship resulting in great cooperation in the energy sector. It is usually transcribed in more negative rhetoric. Their growing role in each other's energy sector as both buyer and seller indicates the long-term commitment of both states with one another.

The reorientation of China-Russia relations suggests some serious lessons both states have learned from the past. If this trend continues to grow and both states keep consolidating their energy sector relations, this will strengthen the interdependence between them. As energy security is vital for the economic strength of both states. It might result in long-term relations contrary to the expectations of the west. The multilateral forum will continue to give impetus to their cooperation efforts. Their indirect interaction in the Caspian energy sector presents more opportunities than challenges. China presents an eastward trend in the regional energy trade while the Caspian state's energy relations with Russia are more west oriented. This is a

geographic compulsion for them. They cannot trade with the European states without transiting Russia and using its pipeline infrastructure. Therefore, they have been struggling for the construction of diversified energy trade routes bypassing Russia. China's emergence as a major investment source not only provides them a good opportunity. But Russia's western challenges make China a balancing force in the region too. Moreover, the institutionalization of energy sector cooperation through SCO has brightened the prospects of some positive development in the energy sector at the multilateral level and expediting the chances of more cooperation and less conflict in the energy sector of the region.

Conclusion

The developments in China-Russia relations are of the utmost importance for international geopolitics. It is their geopolitical juxtaposition that makes their relationship an interesting case to study. The geopolitical developments of the 21st century have made the China-Russia strategic partnership a strong reality. Even though there is a lack of consensus over the nature of their relationship. This study tries to do an in-depth analysis of the relations of both states in one sector of energy, which seems to be the determining factor in their current relationship. As discussed in earlier chapters that different factors determined their relationship in different phases of history. Both states declared their relations as strategic in 1996. Nevertheless, it lacked the essence of strategic partnership, which is the main reason behind the widely prevailing belief that their relations are shallow and they cannot maintain a strong long-term relationship. However, the development in the energy sector has shown some tangible results in developing a strong long-term relationship. The analysis of the energy sector relationship requires a broad spectrum. It includes a look into bilateral and multilateral levels.

8.1 Changing Geopolitical Scenario in the Twenty-First Century

Different factors shaped their relationship historically at different times of history. Interestingly, they have been interacting with each other at both ends of Eurasia. Since the seventeenth century, they developed a conflict of interests in the eastern Siberia region and eastern Turkestan region (present-day western China & Central Asia) (Chen, 1966).

Many geopolitical and geo-economic factors like trade, resources, and territorial interests defined the contours of their relationship during the last three hundred years. Likewise, the ideological factor remained dominant throughout the twentieth century (Ballacqua, 2010). However, the previous century witnessed some great shifts in their bilateral relations. As far as the relativity of status is concerned, they have never enjoyed equal status since the seventeenth century. China remained the largest world economy from the twelfth to the eighteenth century. China's economic strength as the biggest economy of the world at the end of the eighteenth and early nineteenth century (Dahlman & Aubert, 2001) provided leverage to its position while Russia remained a stronger state than China during the nineteenth and twentieth century.

The foundation of their modern bilateral relation was laid down in the twentieth century. The dynamics of twentieth-century politics and ideological affinity reshaped their bilateral relations multiple times during the previous century. The end of the cold war was such a dramatic turn for their bilateral relationship that they could not have expected a hundred years ago. Some interesting scenarios emerged in their relationship in the twenty-first century. First, the maturation of China's economy as the engine of the world economy, which depends greatly on the secure supply of oil and gas resources. Russia's rise as the "Petro Power", the biggest oil and gas producer in the world, created a complementarity in the development of their ties (Goldman, 2008). In this way, the energy sector emerges as the most vital sector in strengthening their relations. Secondly, as the history revisits, both states are again interacting at both ends of Eurasia. Russia's resources-rich far-east and former-Soviet States of the Caspian Sea region.

8.2 Dynamics of Oil and Gas Trade Diversification

China's economic rise is one of the most important developments in the new century. The Chinese economy has been showing some promising trends since its opening in the last quarter

of the twentieth century. This rapid economic growth has its own dynamics. Such a remarkable industrial development is not possible with securing an adequate supply of fuel. China has been a coal-based economy since the twentieth century (Thomson, 2003). The policy of shift from coal to oil and gas presented many challenges for its economic development. The rapid industrialization made it a net oil importer in 1993 (Jeffries, 2011). Since then, China's oil consumption is constantly rising. The growing dependence on oil has made China the biggest importer of oil and gas in the world (EIA, 2018). The Middle East region is China's biggest oil provider followed by Africa. China's oil import from these two regions requires a safe passage from Malacca Strait. The security vulnerability of Malacca and ongoing conflicts in the Middle East made the Chinese realize the importance of energy trade diversification. Among the available options, Russia and its former republics located around the Caspian region emerges as the most attractive options. China shares a long border with Russia as well as with Kazakhstan. Turkmenistan's gas reserves showed some bright prospects for land-based trade.

Energy trade diversification emerges out as the biggest necessity of Russia and the Caspian states too. Russia is the largest producer of oil and gas and an energy superpower. Its vast natural resources lay down in Eastern and Western Siberia, Volga, Arctic, and north Caspian regions. Europe is Russia's biggest trading partner in oil and gas. Over 40% of Europe's gas requirement and more than 25% oil is supplied by Russia only (The Economist, 2019). Though Russia and Europe are interdependent in this scenario, Russia feels a constant threat to its energy security. First, the EU's efforts to build alternate pipeline routes is regarded as a threat to Russia's hegemony in the regional energy politics. Their disagreement on oil and gas price, and EU's advancement in Russia's sphere of influence through the Eastern Partnership

Program. It has caused a lot of resentment in Russia and led it to find opportunities in eastward direction for diversified energy trade.

Similarly, its former Soviet states in the Caspian Sea region are rich in oil and gas reserves. The revenue generated by the oil and gas export is the backbone of their economy. Yet they are dependent on Russia's pipeline system for its energy trade with Europe. To reduce their dependence, they are participating in multiple pipeline projects sponsored and financed by Europe. However, Russia's opposition to EU backed projects and undecided status of the Caspian Sea is a big obstacle in this regard. Besides, they are exploring eastern markets like China and South Asia for the diversification of their trade.

In this scenario diversification of energy, trade comes up as the biggest necessity of all states. The commonality of necessity binds them in a relation, where they not only share common interests, which complement each other but also share common challenges and threat perception with each other. It represents the most suitable scenario to discuss the impact of the energy sector on China-Russia relations at bilateral and multilateral levels.

Chinese economic strength might provide a great opportunity for Russia and Caspian states of Kazakhstan and Turkmenistan to expand their trade in the Asian market and diversify their energy trade. For Russia, growing tension with EU in energy trade and falling demands of Russian oil and gas in Europe presented a troublesome scenario for Russian energy demand security. In the post-Ukrainian crisis years, sanctions on Russia have made the problem even worse. Therefore, Russia's Asian pivot appears to be an important strategic decision. The utmost importance of energy for all these states have made it a security issue for all of them. Perhaps, their economic survival is directly attached to the energy sector. Secondly, the sudden boost of energy trade between Russia and China, growing oil and gas trade between China and

the Caspian states, and their persistent reliance on the Russian pipeline system for trade with the west binds their energy security interest with each other and forms an energy security complex. This amalgamation of interests, advantages, and challenges in the energy sector indicates its significance for their strategic interest. In this perspective, the role of the energy sector becomes vital for the future growth of China-Russia relations.

8.3 Loopholes in the China-Russia Energy Relations Debates

A very important aspect that usually gets less consideration is that China-Russia energy sector relations cannot be analyzed without looking at all of its dimensions. Most of the writings deal with their bilateral energy trade only. Despite strong developments in recent years, they remain reluctant to adhere to the changing dynamics of their relationship. These discussions usually limit themselves to one aspect of their energy relations either bilateral or in any other region. Moreover, they reflect more the past discrepancies of their ties.

This study has tried to fill this gap in the contemporary debates on China-Russia relations in the energy sector by presenting a comprehensive analysis of bilateral and multilateral level interaction. It contends that China-Russia energy ties have both direct and indirect dimensions. Their mutual energy trade represents their direct interaction, and their overlapping energy interests in the Caspian region embodies an indirect interaction. Analyzing interaction at both levels only provides the best possible scenario to understand the developments and impact of the energy sector on their relationship.

8.4 Crossing the Strategic Threshold: Bilateral engagement among China-Russia Energy Sector

Most of the discussions tend to see this energy sector relationship in a conflict-ridden environment and present a more negative picture. However, this study concludes that the contemporary energy sector development between China and Russia has crossed the strategic threshold. They are way above that geopolitical maneuvering and shallow base. In fact, the rapid development in the energy sector has brought them to a new height, nobody could have imagined in the previous century. There is no doubt that there exists some misunderstanding about each other's intentions, and there is a historical legacy of mistrust between them. Albeit, it is a fact that the changing dynamics of geopolitics in the twenty-first century have paved the way to weed out that mistrust. Although geopolitical realities, the commonality of views on the political structure of the world, unipolarity, and opposition to the western hegemonic order brought them closer, it did not provide them a strong base for their bilateral ties. The interests in the energy sector of former-Soviet states give their ties a shallower and a colliding outlook. However, a close look at the consolidated energy relations presents some striking aspects of their relations.

As mentioned earlier, diversification has emerged as the common necessity of all states in this regional security complex. The energy sector is the best example of huge interdependence, challenges, and advantages. Here, convergence is more prominent than divergence contrary to what is usually opined.

Multiple factors have played their role in pushing them closer in the energy sector. It is not the only commonality of views that has brought them closer to each other, but the US policies have

proved counterproductive and pushed them into a greater partnership (Jeff Schubert, Personal Communication January 26, 2019). Russia's growing disillusionment with western Europe, growing differences in the energy sector, NATO's policies, and EU's Eastern Partnership Programs have paved the way for Russia's eastern pivot (Anonymous, Personal Communication, February 2, 2019). Similarly, On the eastern front, US rivalry with China in Southeast Asia, its role in the Indian ocean, the US-China trade war, and other issues has consolidated China's will to form a greater partnership with Russia. Besides, the energy sector's role is of pivotal importance in this regard. It complements each other's energy security. The huge level of investment in the Eastern Siberia energy sector exhibits that both have decided on a long-term partnership. The Eastern Siberia Pacific pipeline, which has tied the fate of Siberian energy sector development with the Chinese market, is the embodiment of this strategically driven partnership. Given the past mistrust and reluctance regarding Eastern Siberia energy cooperation, this is the biggest example that both states have solidified their relations base and crossed the strategic threshold at the bilateral level. Secondly, China is the biggest investor and consumer of the East Siberia energy project. Russia has remained perturbed about the development of the far eastern energy sector. The Financial cost, technological issues, and its distance from the major Russian consumer market Europe were its major concerns. Chinese willingness, though quite late, has brightened the prospects of the Siberian energy sector. Likewise, the Siberian energy sector provides China with a promising alternative to its energy suppliers. Moreover, it has played a big role in raising oil trade between the two states to a great height that Russia has emerged as the biggest oil supplier to China. It is evident that billions of dollars of investment could not be withdrawn easily. Nonetheless, Russia's European challenges and fluctuation of prices in the oil market and China's growing energy demand

finally compelled them to cross this threshold. It is assumed that building a pipeline is synonymous with a long-term commitment. The unprecedented level of investment and cooperation in the energy sector makes it unlikely that both states will take any such measures that could ruin this relationship.

8.5 Predominant Convergence at Multilateral Level

As far as their indirect interaction and the energy politics of the Caspian region is concerned, Caspian states have learned to bargain and they will avoid slipping under the sway of one dominant power (Andrew Korybko, personal communication, February 14, 2019). Eurasian Economic Union and BRI both will be important but the policies of regional powers seem to be avoiding these two initiatives and turning them into a power bloc type structure.

Though the US sanctions will weaken Russia's position in the region, this will facilitate further reticence over Russian concern on the Chinese role in the energy sector of the Caspian region. In fact, Chinese presence will be a balancing factor.

Prospects of further energy cooperation are bright between China and all other states in the region and so with Russia. Historical ties with Russia and current economic activity with China both are important for them. So, they will not jeopardize their relations with both powers. China is economically dominant, especially in the energy sector. Its levels of financial investment are unmatched. While Russia has more political and military influence in the region. So, it appears that spheres of the influence of both powers are different. The chance of emergence of any conflicting situation is less likely. Rather balance is maintained.

Contrary to popular perception, Russia and China have not at that level of divergence as usually portrayed (Marina Lapinko, personal communication January 30, 2019). Energy is a security

concern in purely economic and development terms. China is getting more dominated in the energy sector of the region at the multilateral level and also strengthening relations with Russia in this sector. It provides much-needed revenue as well as strategic balancing to Russia.

Russia's western challenges and the historical base of relations with the Caspian states are significant in this regard. In 2007, to confront the United States and NATO, Presidents of Russia, Kazakhstan, and Turkmenistan began to discuss the construction of the Caspian gas pipeline. It is primarily aimed at strengthening the influence of Russia in the Soviet space (Dempsey, 2007). This is because Russia has the experience, and financial and technical resources though less than China, as well as the good cooperative relations since the Soviet era. This can help the former Soviet republics such as Kazakhstan and Turkmenistan to develop their energy sector. Geographical factors will prevent them from getting complete independence in the energy trade. The new entry of China has indeed attracted the attention of Russian energy companies, and regional states. However, Russian energy companies have been vying for more funds and new markets, which requires China's support. Therefore, this scenario presents a more convergence in the energy sector and a win-win situation for all.

China and Russia's petroleum companies have equal opportunities in the Caspian energy sector. Chinese companies have advantages in corporate culture, scientific management, and abundant capital chains. Russia has its advantages in its experience of establishing and maintaining energy infrastructural control. The Caspian states have learned to reap the fruits from both powers. Kazakh has adopted a multi-vector approach and cooperates with China and Russia (The Astana Times, 2016). Its approach is very flexible and has helped a great deal in the establishment of the "Shanghai Cooperation Organization Energy Club.

8.6 Implications of Recent Caspian Agreement

The recent Caspian agreement is likely to maintain a status quo. The diversification strategy will not find any favorable terms in this agreement. It will affect Russia's influence to a great deal. The Turkmen attitude of avoiding any geopolitical risk and limiting the gas trade to its coast only makes it difficult for the EU to reach the Turkmen gas market in the absence of a trans-Caspian pipeline. It makes China the most important factor other than Russia in its energy sector. Perhaps China will be the most feasible option Turkmenistan will try to stick (Azad Garibov, personal communication, January 29, 2019).

China is definitely having an edge in the Kazakhstan energy sector over Russia. However, it seems unlikely that Kazakhstan will be able to get rid of Russian influence. It is inconceivable in at least the next 30 to 40 years for Kazakhstan. Geographical constraints and the integrated pipeline system will continue to prevent its exit from Russian influence. Secondly, the deep-rooted political, cultural, and historical ties between the two states will not see any downward turn in the near future.

Kazakhstan is successfully maintaining a balance between Russia and China. Perhaps the most successful multi-vector approach by any Caspian state. Economic, energy security, and political pursuits are divided between two powers, making it implausible to develop in open conflict.

The real conflict in the Caspian region lies between the EU and Russia. China's presence in this situation might be favorable for Russia. China's approach is more pragmatic and it comprehends very well that the historical economic roots of the region are in Russia, which is not easy to remove. Russia is a resource supplier to China, but it knows that only reliance on the oil and gas trade causes more security vulnerability. It needs to develop more sectors of its

economy in which China might be a great help. So, the energy sector is a foundation on which a whole structure is going to be built. Interests are common and real progress is insight.

China's growing role in the energy sector of the Caspian region is not as alarming for Russia as portrayed. There might be some fears in Russia, or other countries think so. Perhaps there is no such strong reason to think so (Anonymous, Personal Communication, January 28, 2019). China needs to diversify its energy supply source, so do Russia and other suppliers for their demand security. Russia is the supplier of not only China but also other Asian countries, such as Japan, South Korea, and India. Only China shares its border with Russia. If Russia and its post-Soviet states want to supply oil to other big Asian countries by land, they have to go cross China. Therefore, the best way for all sides is to invest and build more pipelines to transport Kazak, Turkmen, and Russia's oil and gas to East Asia and South Asia. Of course, there is a conflict of interests between Russia and Kazakhstan and Turkmenistan, because they all want to get the advantage of Asia's energy market. The intense interdependence created in the pursuit of energy security compels them to find an amicable solution and cooperate with each other.

The China-US trade row will have implications for the energy security of these states. If the global economy is dragged slowly, the energy trade between China and Russia and Central Asia will surely be reduced dramatically. At the same time, the price of oil will be lower; no matter what reduction measures would they take between OPEC and Russia. These will be having gross implications for Russia's economy. Because most of its income comes from oil export. The same will happen to Caspian states. In this scenario, Russia and Caspian states will unlikely to lose one of their major consumers like China.

8.7 The Relativity of Status Between an Economic Giant and Resource Supplier

It is assumed that China and Russia do not enjoy equal bilateral status between them. Many Chinese experts deny this assumption that there is an unequal relationship between Russia and China, and it is Russia who enjoys more privileges in this relationship (Sun Xia, personal communication, January 27, 2019). China's policy in Kazakhstan and Turkmenistan is more economically driven, and less geopolitical. First, China wants energy resources. Second, China needs to stabilize the border area by developing the economic conditions of its frontier regions. Third, China needs to find more markets and more investment partners. Therefore, geo-economic factors are more dominant than geopolitical in the relations between China, Russia, and the former-Soviet states. China is developing economic relations with Russia, and it's not symbolic. For geopolitical cooperation, China's policy is not to interfere in other countries' domestic affairs. It keeps silent on the dispute between Russia and Ukraine on Crimea, and the dispute between Russia and Japan on the islands, and so on. A struggle for hegemony in the region cannot be completely ruled out. However, this scenario presents opportunities too. These opportunities lie for the regional actors more specifically for the emerging economies of Asia. Therefore, prospects for the development of the energy sector are open. Finally, this study concludes that the energy sector provides great opportunities to strengthen their ties and there is more convergence in this sector than divergence.

8.8 Findings of The Study

The major findings of this study are;

8.8.1 China-Russia Relations Crossing the Strategic Threshold

Contrary to general perception, China-Russia relations have crossed a strategic threshold and reached far ahead. The foundation of their relations is not as shallow as it used to be. The role of the energy sector is most important in this regard. In fact, the unprecedented cooperation in the energy sector has brought them to a stage where it is appropriate to go forward and hard to step back. The role of the energy sector in their economic survival is pivotal. It is the energy security of each country under discussion, which provides more opportunities for cooperation and reduces the chances of a conflict. Russia's western challenges are so great and complex that it will hardly aggravate its relations with China.

8.8.2 Dominating Convergence

Different dynamics of their relations with the Caspian states show less divergence and more convergence at multilateral levels. As far as their indirect energy interaction in the Caspian region is concerned. There are challenges and overlapping interests of both states. Apparently and according to general belief, there is a severe conflict of interests between them. However, this study finds that the dynamics of energy trade relations of the Caspian states of Kazakhstan, and Turkmenistan with both regional powers are completely different. Trade with China is aimed at exploring the eastern market. In this trade, there is no transit through Russian territory. While their energy relations with Russia are aimed at reaching Europe presents a completely different scenario. In this eastward and westward trade, China and Russia stand in a different perspective and with different energy-related objectives. Moreover, they have learned that the presence of both powers in their energy sector increases their bargaining position.

8.8.3 Different Sphere of Influence

China's growing role does not pose a big threat to Russia's position in the region. Because Russia is still the beholder of major pipeline infrastructure of the region and major shareholder in all projects. It is unlikely for at least in the near future that the Caspian states will completely annihilate their dependence on Russia. This is a geographic compulsion too for reaching Europe. Russia will continue to play a strong role. It presents more convergence of interests than divergence. In fact, China's presence will complement its efforts to keep an eye on the EU and the US ambition. Finally, the energy sector will keep strengthening China and Russia's relations. Thus, it is expected that the shadow of past grievances will not affect them anymore at least in the near future.

8.9 Recommendations

The utmost importance of the energy sector for the survival of China as the economic superpower is beyond any doubt. Its role in Russia's emergence is also undeniable. Considering the role of the energy sector, both states must take more measures to consolidate their relations.

8.9.1 To Reduce Reliance on Vulnerable Sources and Create Interdependence

China must accelerate its efforts to reduce reliance on vulnerable sources of oil and gas supply. The more both states will trade in the energy sector, the more interdependence will develop and this interdependence will be vital for accelerating the cooperation.

8.9.2 To Acknowledge the Complementarity of the Energy Sector for Each Other's Energy Security

As far as the energy politics of the Caspian region is concerned, Russia must take China's presence as a complementary factor to balance the role of the US and EU in the region. The

role of the SCO energy club could take the issues in a positive direction. Both states must work to strengthen the energy club's role. The Caspian state must devise a balanced strategy between China and Russia. So far, Kazakhstan is more successful in this regard. They must understand that these two powers will play a major role in their energy sector in the coming decades.

8.9.3 Recognize the Potential of Asian Market for Energy Trade

The Eastern market presents bright prospects for diversification. The recent Caspian Sea legal status agreement has failed to address the key issues and unless the legal status issue is completely resolved, there are difficulties in the realization of the west oriented diversification policy. Thus, they must explore the potential of the Asian market. This will better serve their requirements for diversification.

8.9.4 The Formation of a Regional Energy Market

China, Russia, Caspian states, and the other member state of the Shanghai Cooperation Organization present a good scenario for the creation of a regional energy market. As it consists of major energy consumers and suppliers. The platform of SCO and its energy club might establish a regional energy market, which will not only create more intra-regional energy trade but also help in reducing the conflict and promote cooperation.

Finally, the way energy security has become the survival issue for resource-based and import-dependent economies, in the same way, energy security might create strong interdependence and cooperation between nations. The development in China-Russia relations proves that creating a strong interdependence in the energy sector opens new avenues of cooperation and help in leaving the past mistrust and history of conflict and collision way behind.

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Annexure: Complete List of Interviewees

List of Russian Experts

S/N	Name	Post & Affiliation	Email
1	Jeff Schubert	Visiting professor, Russian Foreign Policy, Higher School of Economics (HSE), Moscow	schubert@jeffschubert.com
2	Anonymous	senior fellow Carnegie Moscow Center	
3	Anonymous	Professor, Chinese Academy of Social Sciences, expertise on Russia	
4	Anonymous	Professor, Chinese Academy of Social Sciences, expertise on Russia	Through CASS website
5	Anonymous	European Council on Foreign Relations	
6	Andrew Korybko	Expert on Russia, Journalist Sputnik, Eurasia Future	korybko.1@gmail.com

China Experts

7	Sun Xuefeng (China foreign policy China and East Asia)	Resident Scholar Carnegie-Tsinghua Center For Global Policy	sunxuefeng@mail.tsinghua.edu.cn
8	Sun Xia	Associate Researcher, Chinese Academy of Social Sciences	linkedin.com/in/sun-xia-72034671

9	Li Lifan	Associate Research Professor at The Shanghai Academy of Social Sciences (SASS)	llf888@sass.org.cn
10	Marina Lapenko	Associate Professor in Saratov State University of	lapenkomv@mail.ru

Caspian Expert & Energy Expert

11	Anonymous	Associate Research professor Chinese Academy of Social Sciences, Dept of IR	Through CASS website
13		Oxford Institute for Energy Studies	
14	Akbota Zholdasbekova	Associate professor B L.N.Gumilyov Eurasian National University Kazakhstan	avcuseyit@hotmail.com
15	Anonymous	“History of International Relations and Foreign Policy” specialty, Al-Farabi Kazakh National University, International Relations Faculty	
16	Anonymous	senior research fellow at the Center for Strategic Studies (SAM) under the President of the Republic of Azerbaijan, Research	

		Associate at the Oxford Institute for Energy Studies (OIES),	
17	Azad Gabirov	Editor In chief Caucasus International	azad.garibov@gmail.com
18	Rovshan Ibrahimov	From Azerbaijan, Currently Working as Associate Professor, Hankuk University of Foreign Studies, Turkish Azerbaijani Studies	rovshanibrahimov@gmail.com Online Interview
18	Irfan Shahzad	Independent analyst expert on Central Asia and Post Soviet region	Face to face interview
19	Anonymous	Senior research fellow at Warsaw-based Centre for Eastern Studies (OSW). Area of expertise oil and gas sector and energy policy in Russia, Caspian, CIS transit countries, Central and Southern Europe,	

Appendix: Questionnaire

China-Russia Energy Relations: Geo-Politics of Energy Security in Caspian Sea Region

Open-Ended Questionnaire

I am Uzma Siraj, a Ph.D. candidate, International Relations at the Department of Politics and International Relations of International Islamic University Islamabad. I humbly request you to provide your expert opinion by responding to this questionnaire. The objective of this questionnaire is to explore the implications of the energy sector on the bilateral relations of China and Russia. Furthermore, it aims at examining the impacts of energy politics of post-Soviet states of the Caspian Sea region on overall regional energy security. This questionnaire specifically deals with China, Russia, and their interests in three post-Soviet states around the Caspian Sea. It is hoped, that respective respondents will express their opinion freely to help the researcher to test the hypothesis.

- 1- What measures will you recommend for energy trade diversification for Post-Soviet states of the Caspian region especially Azerbaijan and Kazakhstan?
- 2- It is assumed that in the Post-Soviet states of the Caspian Sea region, China has become more dominant economically, while Russian influence is getting limited to political and security issues only. Central Asian states are divided between two power blocks both for a specific reason. In your opinion, what impact will this division have over multilateral and bilateral relations in the region?
- 3- Do you think China's growing role in the energy sector of Kazakhstan and Turkmenistan is alarming for Russian interests? How their conflict of interests would affect their bilateral relationship?

- 4- How recent China-US trade war will affect China's energy trade with Russia and the Post-Soviet states of Central Asia?
- 5- It is assumed that contemporary China Russian relations are not based on equal status which Russian has always been striving for? Don't you think Chinese policy seems to be more symbolic and driven by geopolitical factors?
- 6- Russia has a significant role in the Kazakhstan energy sector with four major Russian energy companies: Gazprom, Lukoil, Transneft, and Rosneft involvement, and an integrated pipeline system. On the other hand, China through Belt & Road initiative is expanding its outbound investment in Kazakhstan. As a supplier of raw materials, how in your opinion Kazakhstan could maintain balance in its relations with the two neighboring powers?
- 7- In your opinion does the recent agreement over Caspian legal status would strengthen the Russian control over the Caspian region or further weaken it?
- 8- In this recent agreement, Russia has shown its consent for the undersea pipeline. What do you think will it facilitate in the construction of the Nabucco pipeline a project long supported by Azerbaijan and Turkmenistan and opposed by Russia?
- 9- How in your opinion this agreement would prevent EU's further involvement in the region?

Though the recent agreement has envisaged that non-Caspian states would be prevented from any military presence in the Caspian Sea. This agreement would not prevent them from economic involvement. In your opinion how it will impact the EU's interests in the region?

10- EU has supported the diversification of energy trade from the post-Soviet states of the Caspian Sea region. What implications the recent agreement about Caspian delimitation would have on the policy of the EU in your opinion?

11- Although the prospects of the Caspian under Sea pipeline seem to be possible after Russian consent to allow the construction of the pipeline. But the financial cost of the project seems to be making it quite expensive. In this scenario what are the prospects of Turkmen energy trade diversification in your opinion?

12- Among the three post-Soviet states under discussion, Azerbaijan is exercising considerable independent foreign energy policy especially, after the BTC pipeline. However, Kazakhstan and Turkmenistan are still dependent on Russia for their energy trade to Europe. What prospects do you see for their energy trade after this agreement?

Thanks for your valuable opinion and cooperation

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