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中國在中亞的能源外交戰略及政策行為

The Strategy & Policy Behavior of China's Energy
Diplomacy in Central Asia

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Diplomacy in Central Asia

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ABSTRACT

As China shifted to being a net energy importer in 1993, petroleum and natural gas became an issue of the greatest importance to China in order to prevent any energy shortage. Sea-borne energy imports are open to threats from piracy or conflicts with great powers, especially in the Straits of Hormuz, and the Straits of Malacca. The Central Asian nations possess abundant energy resources, especially Kazakhstan and Turkmenistan, and are geographically much closer to China, which easily allows these sources to supply energy to China via overland routes, and offer far reduced risks to delivery of imported petroleum and gas. In this study, China's energy security and how China can avoid energy shortage crises are the focus while discussing the role Central Asia plays in China's oil strategies within its SCO's framework. Also an analysis of political and economic features of the competition within the region by powerful oil-consuming countries is offered.

Key Words: Central Asia, New Great Game, Shanghai Cooperation Organization, China's Strategic Petroleum Reserve, Collective Security Treaty Organization

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1. Introduction

1.1 Motivation

As China shifted to being a net energy importer in 1993, petroleum and natural gas became an issue of the greatest importance to China in order to prevent an energy shortage which almost certainly would have a very significant negative impact on China's economic development and national security. Sea-borne energy imports are open to threats from piracy or conflicts with great powers, especially in the Suez Canal, the Straits of Hormuz, and the Straits of Malacca. The Central Asian nations, geographically much closer to China, which can supply energy via overland routes, not only offer far reduced risks to delivery of imported petroleum and gas products but other potential benefits to China as well.

1.1.1 China started to diversify energy route to prevent energy shortage since 1993

China's economy has experienced tremendous expansion over the past decades, beginning with the economic reforms of the late 1970's, resulting in a dramatic increase in the demand for energy by which to fuel that growth.

Though China, in its current geographical delineations, is well endowed with natural resources to such a degree that prior to 1993, when last being an exporter of energy, it used to be self-sufficient in regard to its use of energy resources for economic development. However, after 1993, China's role shifted from that of supplier to one as an ever growing consumer and importer of energy resources. As such China now faces the necessity of securing those energy resources from current and future markets simply to maintain its current levels of economic growth, and this search for stable supplies of energy resources has become essential not only for China's economic development but also for its national security.

When China assumed the role of a net energy importer in 1993, petroleum and natural

gas became an issue of the greatest importance to China in order to prevent an energy shortage which might have a huge impact on China's economic development and national security. By far the majority of these two resources that are imported to China come from the Middle East and North Africa. However, this gives rise to concerns regarding the security -- as well as additional costs -- of such imports due to ongoing and potential future conflicts that impinge upon the successful delivery of such imports. Hot spots and disruptions to export and even production exist currently in Libya, Egypt, Yemen, Iraq, Iran, Bahrain, the eastern oil-producing provinces of Saudi Arabia and by extension the entire littoral of the Persian Gulf. Moreover, piracy concerns are particularly an issue in the Red and Arabian Seas and Northern Indian Ocean as the range of Somali pirates extends further. From a strategic perspective Chinese oil imports face potential throttle points at the Suez Canal, the Straits of Hormuz, and the Straits of Malacca, even prior to reaching potential zones of conflict in the Taiwan Strait and East China Sea. The Persian Gulf, and especially the Strait of Hormuz, is quite narrow so it can easily be blocked (Please see Chart 1-1 below).

Chart 1-1: World Oil Transit Chokepoints



Source: U.S. Energy Information Administration (EIA)

<http://www.eia.gov/countries/regions-topics.cfm?fips=wotc&trk=p3>.

It is therefore in the security interests of China to alter its sole dependence on sea-borne energy imports particularly those which originate or must traverse these areas of current and possible conflict. Particularly, should a conflict arise, either regionally in the Middle East or one that might involve China directly, China's energy supply chain could be, for the most part, cut off and China's economy would suffer enormous loss. Thus, finding stable sources of energy for import is of crucial importance to China.

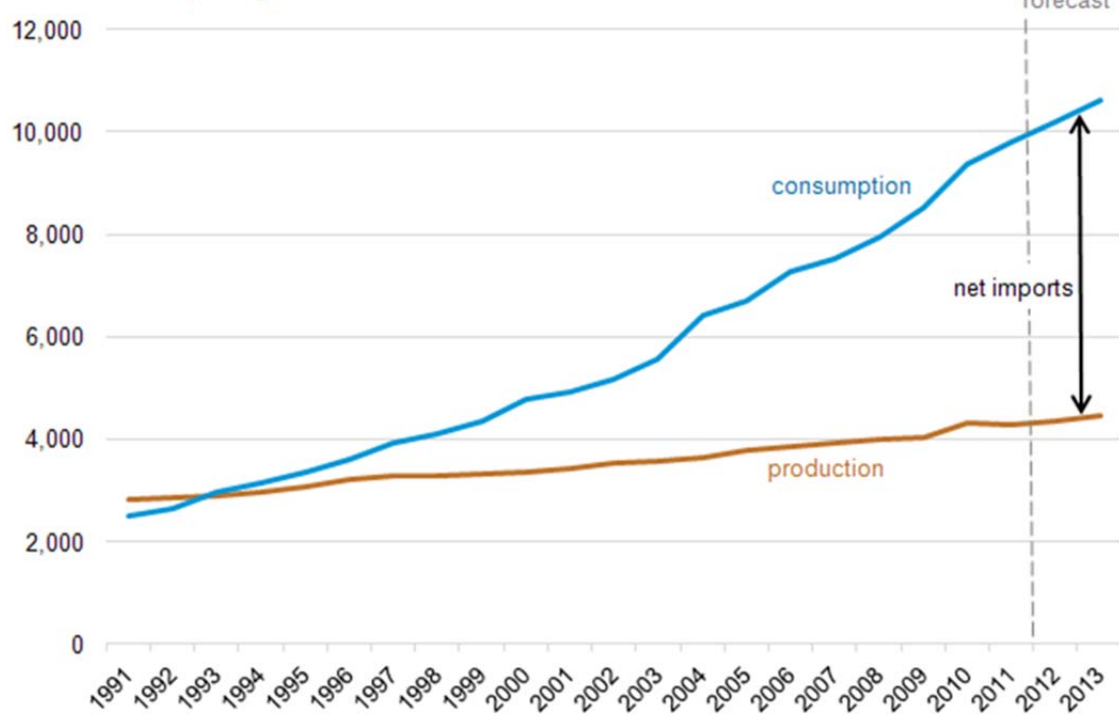
The Central Asian nations and overland imports through Eurasia, hence offer a far better strategic scenario for China's energy security as well as being geographically much closer than the Middle East or sources. Such Central Asian sources not only offer far reduced risks to petroleum and gas delivery but other potential benefits to China as well. Recent events have highlighted both the potential risks to China's imports and offered newly gained advantages for China not only through direct imports of energy from Russia but from closer cooperation with Russia and the nations of Central Asia, thus significantly changing the balance of interests in the region in China's favor. These events will be briefly summarized hereafter.

As can be seen from the data depicted hereon, China's oil production is not increasing; however its consumption is increasing sharply. The net difference between China's oil consumption and production has increased dramatically since 1993 (Please see the Chart 1-2 below).

Chart 1-2: China's Oil Production and Consumption Diagram (1990-2013)

China's oil production and consumption, 1990-2013

thousand barrels per day



Source: U.S Energy Information Administration International Energy Statistics and Short-Term Energy Outlook (August, 2012)

1.1.2 The 2014 Ukrainian Crisis

1.1.2.1 The 2014 Ukrainian Revolution

In the Ukraine, burdened by various problems such as bureaucratic corruption, economic recession, ineffective governance and other factors, the people who were dissatisfied with the situation started a protest movement culminating in the overthrow of the elected government in February 2014. In the capital of Kiev, a series of violent clashes caused casualties and led the then President Viktor Yanukovich to step down and to flee abroad. Arseniy Yatsenyuk currently leads Ukraine's interim government, which is slated to rule until a transfer of power after presidential elections that were held on May 25th, 2014. However, given the deteriorating security situation in the country and lack of full participation, it is uncertain if the validity of such elections can be widely accepted. The new government is recognized by the United States and the European Union and other Western countries,¹ but Russia refuses to recognize the legitimacy of the provisional government, and asserts that that government is a proxy of the United States and other Western countries who were behind the planning of the coup, and particularly objects to the participation of Fascist far-right, ultranationalist parties in Ukraine's current government.²

1.1.2.2 The Crimea holds a Referendum to rejoin Russia

Beginning on February 26th, as the security situation began to deteriorate and in response to measures against ethnic Russians by the Kiev government, local self-defense units formed and, along with Russian troops already stationed in the peninsula, assumed control of security functions and supported the authorities of the then semi-autonomous Republic of Crimea of Ukraine taking control of Crimea's parliament building. (This gave the Russian majority the opportunity to return to Russia, a simmering issue since the dissolution of the USSR, only previously avoided due to diplomatic accords forming the CIS and frozen by the vow to

¹ "Yatsenyuk visits Washington: Ukraine will 'never surrender,'" Deutsche Welle, Mar 12, 2014, available at: <http://www.dw.de/yatsenyuk-visits-washington-ukraine-will-never-surrender/a-17493270>, (accessed: 20140510).

² "Russian official accuses US of fueling Ukraine crisis," Press TV, Feb 6, 2014, available at: <http://www.presstv.com/detail/2014/02/06/349524/us-accused-of-funding-ukraine-rioters>, (accessed: 20140321).

territorial integrity by signatory countries of the 1994 Alma-Ata Accords.) The Crimean parliament voted to join the Russian Federation and to hold a popular referendum to poll citizens' sentiment. The measure to rejoin Russia was approved with an overwhelming 97% of the vote in March 2014.³ Crimea's parliament declared the region's independence from the Ukraine and formally applied to join Russia.⁴ This event caused strong opposition to be voiced from powers such as the United States and the European Union. Many Western governments believe that the referendum violated the Ukrainian constitution and international law, so that they do not recognize the legitimacy of the Crimean referendum, claiming that Russia should not intervene in the internal affairs of the Ukraine. The situation is ongoing with sanctions now placed on Russia and this has consequences for its energy cooperation with the West.⁵

Moreover the Ukraine has defaulted on payments to its natural gas suppliers in Russia, currently owing US \$3.5 billion. And sitting astride one of the main pathways for delivery of Russian natural gas and oil to the rest of Europe this aspect of the crisis has an impact upon Russia's marketing disposition of its energy resources.⁶

1.1.2.3 China may enhance mutual Trust and Cooperation with Russia in Central Asia

Crimea's accession to Russia is an event that deepens antagonisms between some Western governments and Russia, particularly in regard to energy security as the EU may even see fit to significantly reduce its dependence on Russian natural gas. If that proves to be the case, Russia's gas export earnings from Europe may be greatly reduced and therefore they must

³ "RPT-INSIGHT-How the separatists delivered Crimea to Moscow," Reuters News Service, Mar 13, 2014, available at: <http://in.reuters.com/article/2014/03/13/ukraine-crisis-russia-aksyonov-idINL6N0M93AH20140313>, (accessed: 20140518).

⁴ "Crimea Applies to Join Russia," VOA, March 17, 2014, available at: <http://www.voanews.com/content/voting-under-way-in-crimea-referendum-to-join-russia/1872380.html>, (accessed: 20140503).

⁵ "U.S., EU to work together on tougher Russia sanctions," Reuters News Service, Mar 26, 2014, available at: <http://www.reuters.com/article/2014/03/26/us-ukraine-crisis-idUSBREA2P0VB20140326>, (accessed: 20140503).

⁶ "Russia Says Ukraine Must Pay In Advance For Gas As Kiev's Natural Gas Bill Stands At \$3.51B," International Business Times, May 9, 2014, available at: <http://www.ibtimes.com/russia-says-ukraine-must-pay-advance-gas-kievs-natural-gas-bill-stands-351b-1582219>, (accessed: 20140510).

look for an alternative potential market. Previously deadlocked negotiations between Russia and China on the issue of natural gas from Siberia had been ongoing for over 20 years and the two nations could not reach a consensus on the price of the natural gas. Facing a heightened risk from European countries possible reduction of their reliance on Russia for energy has increased the importance of exporting its energy products to China instead. In response to the act of China's goodwill (their passive support for Russia in regard to the events of the 2014 Crimean crisis) Russia has reacted by immediately expressing willingness to reduce the price of natural gas in the near future, and to sign a crucial trade agreement with China in this regard.⁷

Moreover, while Western countries keep applying pressure on Russia through sanctions and other measures, Russia, from a geopolitical point of view, needs to seek strong allied support for its position in Eurasia. Though China naturally has been favoring a policy of non-interference in affairs of sovereignty, in order to avoid giving any precedent for minorities' (such as Tibet or Xinjiang) independence from its territory for any reason, it has implicitly supported Russia in this crisis. In response to the events, China hopes to maintain good relations with Russia and even looks forward to future deepening of mutual trust and cooperation between the two nations. China has been reluctant to weigh in on the question of the Crimean referendum but says that the countries should resolve the dispute through international negotiation mechanisms, and believes that Russia has the ability to successfully deal with the issues. Purportedly, the Chinese leader Xi Jinping made a call to Russian President Vladimir Putin expressing his concern and respect.⁸

1.1.2.4 Results and possible implications of the CICA in May of 2014

On May 21st, 2014 Russia and China signed the aforementioned agreement along with numerous other agreements greatly expanding their trade and cooperation.⁹ In addition,

⁷ Lelyveld, Michael. "Crimea crisis may cut China gas price," Asia Times Online, Apr 8, 2014, available at: http://www.atimes.com/atimes/Central_Asia/CEN-01-080414.html, (accessed: 20140523).

⁸ "Xi, Putin discuss China-Russia ties, Ukraine crisis on phone," Xinhua News Agency, Mar 5, 2014, available at: http://news.xinhuanet.com/english/china/2014-03/05/c_133160618.htm, (accessed: 20140523).

⁹ "Russia and China seal historic \$400bn gas deal," RT (Russia Today), May 22, 2014, available at: <http://rt.com/business/160068-china-russia-gas-deal/>, (accessed: 20140526).

China also signed further trade and cooperative agreements with Kazakhstan, and indirectly proposed the creation of a new security structure to participants of the Conference on Interaction and Confidence Building Measures in Asia (CICA) in Shanghai, China on May 20th. From such agreements and discussions among Eurasian leaders we can anticipate a new level of cooperation that may even come to extend to security issues or possibly a fully mature Eurasian alliance at some point in the future. Such recent events must be taken into account tempering the findings of this research made prior to these momentous events.¹⁰

1.1.3 China's "Go West" Policy

According to the review, "Marching Westwards: The Rebalancing of China's Geostrategy" in the Global Times, written by Dr. Wang, Jisi, Dean of the School of International Studies, Peking University, if China wants to go west, it should first rebalance its internal economy, and help to develop its neighboring western countries. As a first step, China should develop its western regions and sell goods to the Central Asian countries nearby. Xinjiang Province is adjacent those Central Asia nations, so its goods can be sold to Central or even to Turkey or to the Mediterranean region, for example. China can sell merchandise to its customers in Europe, and even to the global market, by establishing a New Silk Road. However, through the opening of cultural and economic links with the adjacent Central Asian states there is so risk that Xinjiang, which is culturally, ethnically and religiously similar to those states, can become even further alienated to Chinese rule. It is of high importance for China to maintain stability in its western regions and prevent any threats to its territorial integrity from spreading into its own territory.¹¹

¹⁰ "Nazarbayev Visits China as Countries Sign Investment Deals and Bolster Political Ties," The Astana Times, May 20, 2014, available at: <http://www.astanatimes.com/2014/05/nazarbayev-visits-china-countries-sign-investment-deals-bolster-political-ties>, (accessed: 20140526).

¹¹ Wang, Jisi, "'Marching Westwards': The Rebalancing of China's Geostrategy," Center for International and Strategic Studies, Peking University, Oct 7, 2012, available at: www.ciss.pku.edu.cn/Code/AccessoriesMaker.aspx?id=2270, (accessed: 20140416).

1.2 Methodology

Research methods are the means and procedures of data gathering and processing. This study engages document analysis and historical method as research methods. They can be defined as follows:

- Document Analysis

A method purely based on review of research literature, through which the research is conducted, and thus indirect in nature. Document analysis, to some extent, involves sorting, classifying, comparing, summarizing, and analyzing aggregated data from research literature. The sources of research literature may well be reports from government agencies, research reports from businesses, corporate organizational data, library collections, dissertations, journals, and/or news articles. Analyses are then carried out regarding the statements of scholars made in these documents to meet the research purpose of this study.

- Historical Method

This method adopts a scientific approach to examine history. A brief overview of the five Central Asian countries recent post-Soviet history helps to examine China and Central Asia's geo-development as well as their cooperation.

1.2.1 Thesis Questions

- 1) Given the abundance of energy resources to be found within the five Central Asian states, what are the overall energy development strategies of Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyzstan, and Tajikistan?
- 2) What is China's overall diplomatic strategy in regard to energy exploration and the establishment of pipelines in Central Asia?
- 3) What are the energy strategies among powerful nations in regard to the Central Asian Region and how are the international energy corporations exploring and exploiting the energy resources of the region?

4) What is the role of the SCO's development in economic cooperation among member states? How does China use the SCO to develop its energy strategy and current development to cooperate with SCO member states?

In this study, we will focus on the role Central Asia plays in China's oil strategies. Also we will analyze the political and economic features that arise therefrom, and the competition by powerful oil-consuming countries in the region as well as looking at the feasibility and reality of Central Asia being an important source of oil and natural gas for China. Moreover we will explore issues of national energy security, transportation, and utilization of those oil and natural gas resources.

1.3 Defining Concepts

1.3.1 The Definition of "Energy"

Upon the invention of steam engines in the 18th century, humanity had stepped into the "era of coal" in regard to energy consumption. By the end of the 19th century, petroleum had eclipsed coal entirely as recorded in 1965. During the 12th World Energy Council in 1986, energy was given the definition as "the capability of a system generating external activity," which refers to all energy resources that may be converted into mechanical, thermal, electric, chemical energy and the like.¹² Taiwan's Bureau of Energy under the Ministry of Economic Affairs also defines the term "energy" in its Energy Control Act. Energy includes petroleum, coal, natural gas, nuclear fuel, electricity, and other resources determined by the central competent authorities.¹³ Energy in this thesis, however, mainly refers to petroleum (oil) and natural gas.

¹² 龔祥生,「中共能源外交戰略之日本因素研究」,國立政治大學碩士論文(台北:2006年),頁3-19。
[Kung, Shian-Son. *Zhonggong Nengyuanwaijiao Zhanlue Zhi Riben Yinsu Yanjiu* (Factoring in Japan in regard to CPC's energy diplomacy strategy), unpublished thesis, National Chengchi University (Taipei: 2006), p. 3-19.]

¹³ Energy Administration Act, Ch.1, Art.1, amended on July 8, 2009, available at:
<http://law.moj.gov.tw/Eng/LawClass/LawAll.aspx?PCode=J0130002>, (accessed: 20101201).

1.3.2 The Definition of “Central Asia”

Russian scholars generally regard Central Asia as the area of the Hari River and the Murghab River systems, namely the four nations Uzbekistan, Turkmenistan, Kyrgyzstan, Tajikistan plus Kazakhstan. For this reason, the five states of Central Asia are often called in Russian sources 'Central Asia and Kazakhstan.' The international community has generally accepted the geographical term “Central Asia” as referring to the five Central Asian republics of Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan after the heads of state of these countries proclaimed their countries to be so in a resolution made at a summit in January 1993, and likewise “Central Asia” and likewise “Central Asia” refers to these five nations in conformity with current international standards within this thesis.¹⁴

1.3.3 The Definitions of “Strategy” and “Energy Strategy”

“Strategies” help actors wield power, and serve as the foundation for developments and the deployment of national power so that particular ultimate goals can be achieved. Due to limited resources, choosing what strength to develop constitutes an integral part of a nation's strategies. Only by making the correct decision can the state then maximize its influence in the international community.¹⁵

“Energy strategies,” on the other hand, signify the related policies a nation drafts to protect national energy security, regulate domestic supply and demand for energy, balance national energy structures, and avoid energy shortages and their potential damage to the national economic well-being. Essential measures include developing energy conservation techniques, exploring for oil reservoirs, and collaborating on external investment projects. The wide array of aspects involved all belong to the arena of national policies. Were there to be energy shortages, not only would citizens' well-being and the economy be subject to direct

¹⁴ , 三文印書館：台北）發現中亞，傅仁坤2005 頁，（年 4。[Fu, Jenkun. *Faxian Zhongya (Discovering Central Asia)* (Taipei: Sanwen Publishing, 2005), p. 4.]

¹⁵ Goldstein, Joshua S. *International Relations* (New York: Longman Publishers, 2008), p71-74.

effects, the survival and security of the nation would also be threatened.¹⁶

1.3.4 The Definitions of “Energy Diplomacy” and “Policy Behavior”

Foreign policies are the policy guidelines governments rely on when envisioning international interactions. They not only proclaim the goals that governments intend to pursue, but also represent the tactics governments are prepared to use. Factors influencing the determination of foreign policies originate from a variety of analytical levels and they exert their influence simultaneously. Among others, individual decision-makers are considered a key factor. These policies are often under the influence of regimes and social forms, the global environment, and constraints from the international community.¹⁷

Energy diplomacy can be regarded as any diplomatic activities carried out between energy exporting or consuming states, transnational oil companies, or international organizations. The purposes of such diplomacy are to maintain and strengthen the nation's security of energy import and export, pursue geopolitical economic advantages, and maximize national interests.¹⁸

1.4 Research Literature Review

1.4.1 Geopolitics

Scholars from around the world have considered the region of Central Asia and its geopolitical circumstances from a variety of perspectives. Western scholar, Lutz Kleveman, in his book *The New Great Game: Blood and Oil in Central Asia* expresses that countries such

¹⁶ 龔祥生,「中共能源外交戰略之日本因素研究」,國立政治大學碩士論文(台北:2006年),頁3-19。

[Kung, Shian-Son. *Zhonggong Nengyuanwaijiao Zhanlue Zhi Riben Yinsu Yanjiu* (Factoring in Japan in regard to CPC's energy diplomacy strategy), unpublished thesis, NCCU (Taipei: 2006), p. 3-19.]

¹⁷ Goldstein, Joshua S. *International Relations* (New York: Longman Publisher, 2008), p.122-147.

¹⁸ 龔祥生,「中共能源外交戰略之日本因素研究」,國立政治大學碩士論文(台北:2006年),頁3-19。

[Kung, ShianSon. *Zhonggong Nengyuanwaijiao Zhanlue Zhi Riben Yinsu Yanjiu* (Factoring in Japan in regard to

as Azerbaijan, Georgia, Kazakhstan, Iran, Iraq, Turkmenistan, and Kyrgyzstan, which are situated in Spykman's "heartland" have already become the focal point of the power struggle between the US, Russia, and other nations primarily due to their abundant oil and natural gas reserves. Chinese scholar, Xu Tao (許濤), asserts that Central Asian countries implement a balanced foreign policy. When the great powers involve themselves in Central Asia, these countries mediate between them so as to gain opportunities and space for self-development, and to obtain assistance and economic security. Taiwanese scholar Dr. Jen-Kun Fu also formulates a "New Geopolitical Theory" in regard to the policy behavior of these countries. This theory considers that the countries of Central Asia can obtain a balance among politics, geography, economy, and ideology (per their function in society), like John F. Nash's Equilibrium theory, to rationalize the best responses.

These varying perspectives in consideration of the geopolitical circumstances in Central Asia are reviewed in greater detail in the subsections found hereafter.

1.4.1.1 Perspectives of Western Scholars

Historically, geopolitical studies can be traced back to 1897 to the German scholar, Friedrich Ratzel, who published a book, *Politiche Geographic*, providing a basic framework that viewed nations as organic entities. Four years later, a Swedish scholar, Rudolf Kjellen first created the term "Geopolitics" in his work *Staten Som Lifsforn* (or 'The State as a Living Form'). This book had a strong influence on later geographic studies. During World War II and the late 19th century, works such as Halford J. Mackinder's *Heartland Theory*, Alfred T. Mahan's *Sea Power Theory*, and Nicholas J. Spykman's *Rimland Theory* were all affected by Kjellen's work.

However, due to changes in international relations, regional integration, and globalization, classical geopolitical theories could not meet the needs of fully informing scholars regarding evolving international conflicts after World War II. In 1960s, many scholars analyzed international political structure from multiple viewpoints and

considerations including geographic factors to produce strategies for national security and development. In recent years, Samuel Huntington's *The Clash of Civilizations and the Remaking of World Order* (1996) and Zbigniew Brzezinski's *The Grand Chessboard: American Primacy and Its Geostrategic Imperatives* (1998) have become most notable. In Brzezinski's work, he provides his own insight on the importance of Central Asia. He dedicates an entire chapter (Chapter 5) to introduce Central Asia, discussing its importance, reviewing the strategic implications of its energy resources. Brzezinski focuses his argument mainly on the competition among ethnic groups in the region and powerful nations in Central Asia. He refers to the region as "Asia's Balkans Peninsula." However, Brzezinski's theory is not without its flaws. He somewhat oversimplifies the strategies China had implemented to date in Central Asia in his book.¹⁹

Nonetheless, we still can focus on the more important point. In Makinder's point of view, his basic doctrine indicates that those who rule the "Heartland" or the pivot land can control the world. While Spykman had a different claim, he claims that: "Who controls the rim land rules Eurasia; who rules Eurasia controls the destinies of the world."

If we think deeply in regard to these two theories, we can see the importance of Central Asia and China. Central Asia could be said to be located in the "Heartland" whereas China could easily be considered the "Rim Land." Hence, both regions are in extensively vital strategic locations. If Central Asian countries and China make great efforts to facilitate their cooperation, China will experience enormous economic development if one gives credence to the views of Makinder or Spykman or both given this interpretation.

Another German scholar, Lutz Kleveman, used simple language in *The New Great Game: Blood and Oil in Central Asia* to express that countries such as Azerbaijan, Georgia, Kazakhstan, Iran, Iraq, Turkmenistan, and Kyrgyzstan, which are situated in Spykman's "heartland" have already become the focal point of the power struggle between the US, Russia, and other nations primarily due to their abundant oil and natural gas reserves. This

¹⁹ Brzezinski, Zbigniew, *The Grand Chessboard: American Primacy and Its Geostrategic Imperatives* (New York: Basic Books, 1997), p.123-150.

indicates that Central Asian states are of vital importance in today's world where demand for energy is enormous and competition among great powers is intense.²⁰

In addition, this fact has been commented on, by Joseph Nye and other Western scholars, in regard to Central Asia's role in the energy domain, and regarding the implementation of China's foreign policies in the region. As opposed to Western studies, Russian and Central Asian scholars set out from different points of view. They emphasize the status quo and then follow along the same lines as their Western counterparts have taken in regard to the region.

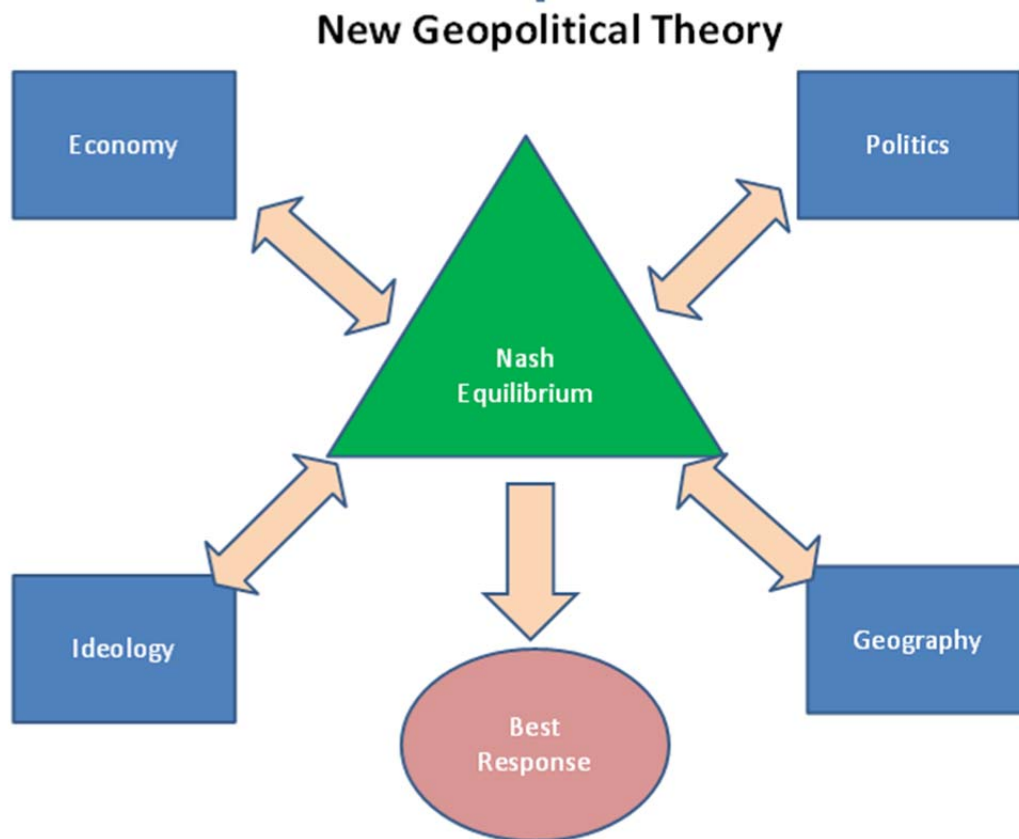
1.4.1.2 Perspectives of Taiwanese scholars

As Taiwanese scholar Dr. Jen-Kun Fu(傅仁坤) asserts, "Geopolitics emphasizes the functional behavior of a nation. That is, how a nation maneuvers its visible resources and invisible potential, such as politics, geography, economy, and military, in compound with powerful space-time factors, to realize social prospects and visions." Elaborating upon the aforementioned concept, he formulates the "New Geopolitical Theory," which applies a structural-functional theory to geopolitics. Aiming to obtain the balance among politics, geography, economy, and ideology (per their function in society), one must combine the structural behavioral science derived from the interaction of these four actors and John F. Nash's Equilibrium theory, which rationalizes how best responses can be prompted in various game situations.²¹

²⁰ Kleveman, Lutz, *The New Great Game: Blood and Oil in Central Asia* (New York: Atlantic Books, 2003), p. 1-10.

²¹ 陳章華,「中國與中亞能源合作之探究- 以地緣政治觀點為中心」,清雲科技大學碩士論文(桃園:2011年12月),頁3-4。[Chen, Changhua. *Zhongguo Yu Zhongya Nengyuan Hezuo Zhi Tanjiu - Yi Diyuanzhengzhi Guandian Wei Zhongxin* (The research on the energy cooperation between Central Asia and China from the

Chart 1-3: New Geopolitical Theory



Source: Fu, Jenkun. "New Thinking: geopolitics, stability and the development of society," 彦山學堂 yanshanxuetang, <http://www.yscollege.com/news/html/?729.html>.

geopolitics viewpoint), unpublished thesis, Ching Yun University (Taoyuan: December 2011), pp. 3-4.]

1.4.1.3 Perspectives of Chinese Scholars

As mentioned briefly prior, the Chinese scholar, Xu Tao(許濤), asserts in his writing 'Central Asia's Geopolitical Changes and Regional Security Trends'²² that Central Asia, facing the upheaval and a complex regional situation, after the Cold War found themselves confined to weak positions. Feeling frustrated at the influence of external powers, they initiated a "balanced foreign policy" which has become a basic method by which the Central Asian countries interact with the rest of the world. This so-called "balanced foreign policy" means that the Central Asian countries utilize the assistance and influence of various strong nations involving themselves in Central Asian affairs to mediate between those powers to gain self-development opportunities and space to maintain stability and security in the region, while gaining directly security and economic assistance. The crucial impact of this policy mode has significantly changed the geopolitical situation in Central Asia.

Regarding the strategies employed by the Central Asian countries who found themselves suddenly on center stage in the realm of international geo-politics, however, the Chinese scholar, Zhang Lei (張磊), in his writing 'Foreign Strategies of the Five Central Asian Countries and their Geopolitical Causes' asserts that under these new international and regional circumstances, the five Central Asian countries which share great similarity in history, culture, religion and ethnic identity have rationally selected four different external strategies, which he characterizes as: neutrality, alliance, balance of powers and equilibrium. Moreover, these different strategies focus on different priorities per varying diplomatic strategies, as described by country of utilization hereafter:

Turkmenistan

Turkmenistan borders the countries of Afghanistan and Iran, is land-locked geographically, making its exports of resources problematic. In order to avoid the ire of its

²² 許濤，「中亞地緣政治變化與地區安全趨勢」，*現代國際關係* 1 (北京: 2012): 29。[Xu, Tao. *Zhongya Diyuazhengzhi Bianhua Yu Diqianquan Qushi* (Central Asia's geopolitical changes and regional security trend) *Xiandai Guoji Guanxi* (Contemporary International Relation) 1 (Beijing: 2012): 29.]

neighbors if it were to side with other major powers the Turkmen have chosen a neutral strategy.

Kyrgyzstan

Though, Kyrgyzstan said it would follow the example of Switzerland in rigorously pursuing a policy of neutrality, it is also willing to take a pragmatic position in its bilateral and multilateral ties and cooperative relations.

Tajikistan

Tajikistan is a small, mountainous country, small size. It experienced civil war and continuing unrest and factional rivalries while surrounded by neighboring powers. The presence of Russian and other large-scale military deployment has been causing a geopolitical dilemma. Before “911” it had adopted the policy of strategic alliances, yet after the events of 911 it has tended to utilize a balancing strategy.

Uzbekistan

Uzbekistan is located in the center of Central Asia, having a large population while its military enjoys a relatively strong industrial base comparative to others in the region, so that it has played a swing role between Russia and the U.S.

Kazakhstan

Acting as Eurasia’s center, Kazakhstan is close to its neighbors, Russia and China, two great powers. Kazakhstan wants to play the role of a “regional great power” acting as a balance; hence it has selected a balanced strategy at multiple levels.

1.4.2 The Perspective of New Realism

The common convention of both Realism and Neo-realism is that the international realm is in a state of “anarchy” without central government, and that states act as rational actors. While Realism defines the state as the main actor, which will pursue maximum benefit for its survival when considering its national interests, on the contrary, Neo-realism analyzes from

the system level (three levels) including individual, the state and the international system. Neo-realism proposes pursuit of power as just a means to safeguard national security. It also points out capabilities of each state which result in distribution of power (ordering principles) in the international system.

1.4.2.1 The Perspective of Realism

Wilson and fellow Idealists proposed after the First World War that the establishment of international organizations through international cooperation would resolve discord and conflicts and eradicate wars. Therefore the League of Nations was advocated as an attempt to preserve peace. The outbreak of the Second World War nevertheless proved that the ideal of maintaining international order by establishing international organizations was intangible. The international community continued to be, again per the view of the theory of Realism, in a state of anarchy, and nation states still went on prioritizing their national interest of ensuring survival by securing power and dominance.

Such a phenomenon led to the prominence of postwar realism. Some significant figures that may be included in this school of thought are Max Weber, Hans J. Morgenthau, George F. Kennan, and Henry Kissinger. Hans J. Morgenthau is by all means the most representative of this school of thought in his views in comparison with others. His *Politics among Nations* has also become a masterpiece of classical realism.²³

Morgenthau's views of classical realism stem from the premise that human nature is evil. Under such an assumption, pursuing power becomes a necessary means and objective. National interests can only be defended when power is in the possession of the state, and the best method in power politics is the balance of power. Concepts such as “evil human nature,” “power politics,” “national interests,” and “balance of power” are all core principles of realism.

²³ Morgenthau, Hans J. *Politics among Nations: The Struggle for Power and Peace* (New York: Alfred A. Knopf, 1967), p.4-11.

1.4.2.2 The Perspective of Neorealism

Classical realism became the mainstream of international relations after the Second World War. The surge of “behaviorism” in the 1960s, along with its viewpoints explaining the new phenomena being experienced by the international community, challenged the fundamental principles of classical realism and evoked fierce debates in academic circle. Realists hence have adopted the structural system and other new methods from behaviorism yet these are still based on classical realism, while offering corrections and amendments to classical realism. Concepts of systemic structure, power distribution, security awareness, and national interest were then developed into a sound and integrated theoretical framework as a re-interpretation of realism, which is generally called “neorealism” or “structural realism.” Kenneth Waltz is the most prominent scholar of the school of neorealism.

In Waltz's book *Man, the State, and War* published in 1959, he first introduces the three levels employed in analyzing international political phenomena, which are respectively the individual, the state, and the international system. The individual level emphasizes human nature and behavior and claims that wars can only be avoided by correcting the individual's mentality or moral values. The state level places the focus on a nation's domestic factors. A country's politics, economics, and social structure are deemed to determine the pattern and nature of its participation in international politics. The level of international system in turn screens out individual or national domestic factors, and purely analyzes international phenomena from international perspectives. Its basic hypothesis is that the international community is in an “anarchic state.” It means that there is no sovereign body that governs the interactions between autonomous nation-states. Waltz in his *Theory of International Politics* articulates the theory of international system, which has contributed to the foundational framework of the theory of neorealism. ²⁴

Neorealism, as well as classical realism, reckons that the international community is in “a state of anarchy,” also that states are the main actors in the international community. States will pursue their interests through rational actions. The pursuit of power is consequently a

nation's means to ensure its survival and development. Neorealism nonetheless asserts that power is a means rather than the objective, which is done to safeguard national security. Neorealism further asserts that when explaining international political phenomena, one should observe the overall distribution of power instead of evaluating it from a few, limited isolated events that occur under the influence of that power. Two of Waltz's critical factors for consideration are:

1) The system interacts with its units (components)

Neorealism proposes that the relative positions, capabilities, and power distribution of units (sovereign states) that exists in an “anarchic” international political structure are extremely crucial. Waltz even affirms that the “ordering or positioning arrangement of units” is in fact the definition of a structure. Only when relative positions change will the structure alter. A sovereign state's capabilities dictate its influence in international politics and its impact on the overall structure. If a state's capability and ordering arrangement undergo changes, so will the international political structure. The change of power distribution among sovereign states changes the systemic structure; structural changes will equally lead to shifts in states' behavior.

2) The balance of power is an inevitable state

Waltz is convinced that the balance of power is a norm among the international community; as long as two or more states are still striving for survival in the so-called “anarchic environment,” then the balance of power will occur. Regardless of the willingness of those states to do so, they all the same sustain the balance of power. Whether a state has any motive to maintain the balance of power is irrelevant, as states are likely to take actions which do so. As a result, the systemic structure is also strongly inclined to be influenced to act towards the same direction. This balance-of-power theory addresses not how long the balance may be maintained, but rather argues that the balance of power would certainly surge in another manner if the previous balance were in any way impaired.

²⁴ Waltz, Kenneth N. *Theory of International Politics* (Boston: Addison-Wesley, 1979), p.79-101.

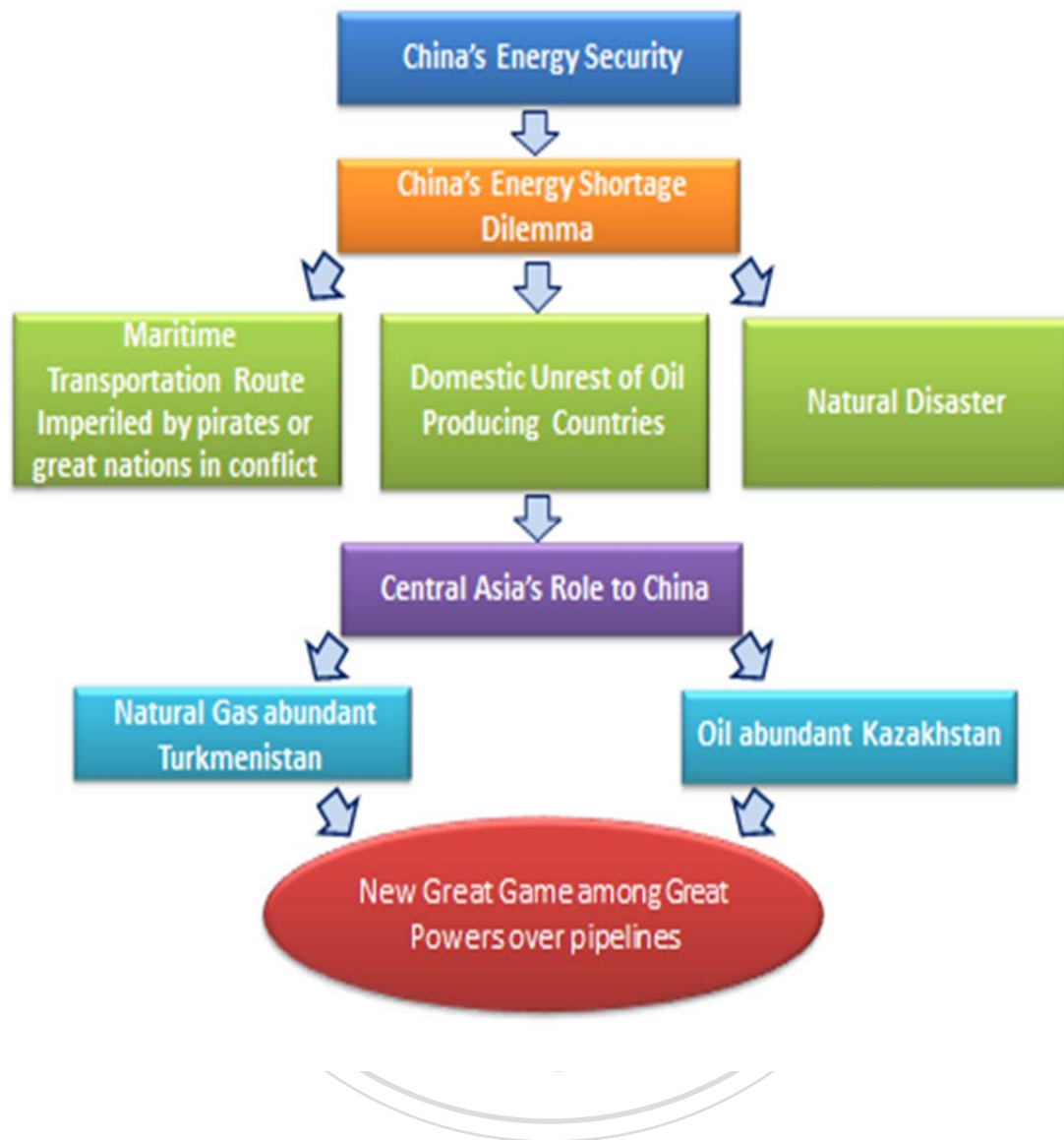
Table 1-1: Comparison of Realism and Neo-realism

Comparison between Realism and Neo-Realism		
	Realism	Neo-Realism
Analysis Level	State as main actor (unit actor level): human nature is evil hence the state will pursue maximum benefit	The system level (three levels) including individual, the state and the international system: 1. The individual level: emphasizes human nature 2. The state level: focuses on state's domestic factors such as politics, economics and social structure. 3. International system level: purely analyzes international phenomena from international perspectives
International Status	Anarchy	Anarchy
State	Rational actor	Rational actor
Power	State's final goal: pursuing maximum power for survival	Pursuit of power is just a means to safeguard national security
Balance of Power	State decision maker's design: alliances against external threats	Capabilities of each state results in distribution of power (ordering principles) in the international system

Source: Zhang, Yazhong. (張亞中), International Relations, p. 48, Yangzhi Publishing Company

1.4.3 Diagram of Research Framework

This thesis aims to explore China's energy security issues. Due to the fact that China has become an energy-importing country since 1993 and its demand for energy has surged, issues such as how to avoid energy shortages, evaluating maritime transport risks, unrest in oil-producing countries and consequences of natural disasters on infrastructure necessary to the nation's energy security, among others, must be addressed. The Central Asian region is geographically close to China, especially those energy-rich countries such as Kazakhstan and Turkmenistan, if a more secure way to transport energy to China overland is adopted it will ensure China's energy security. However it is because the Central Asian region is rich in energy resources that there are great powers choosing to become involved in the region's affairs and to compete for energy exploitation opportunities and the building of strategic pipelines therein, which is a key focus of the research presented in this thesis as well. (Please see the Diagram of Research Framework that follows immediately hereafter).

Chart 1-4: Diagram of Research Framework

1.5 Research Limitations

In some general contexts, the best approach to study a country is by exploring its official documents. However, due to the fact that the general topic of this study is the issue of energy and concerns national security greatly, acquiring first hand official data or materials has been a difficult task. The research subjects of this research are China and the five nations of Central Asia. Language barriers have posed additional difficulties in obtaining data from the five states. It was mainly through official websites, namely that of the People's Republic of China's, Ministry of Foreign Affairs, National Energy Administration, and the energy news portal (nengyuan.net), that the preliminary data on energy reserve evaluation publicized by various organizations and production capacity estimates by energy companies could be obtained.

Furthermore, the numbers for production capacity and consumption of oil and natural gas vary among different sources. To approximate more accurate numbers, this study incorporates in part materials from all channels including research by scholars in the field and materials obtained from the Internet for further analysis.

Owing to geographic constraints, fieldwork in China and Central Asia could not be conducted. First hand observation of the production sites of oil and natural gas, transport pipelines, refineries, perspectives of local governments and inhabitants were therefore not possible. The objectivity and completeness of research materials and resources used are therefore somewhat compromised.

2. Overview of the Current Circumstances of Energy Exploitation and Strategies of Development Planned for Central Asia

2.1 Current Circumstances of Energy Exploitation in Central Asian Countries

Central Asia is composed of five nations: the republics of Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan and Kyrgyzstan. After the collapse of the USSR in 1991, the Central Asian states' (formerly domestic) economic ties with Russia were cut. The development of energy resources requires capital and technology. Western companies became involved in the race to exploit energy in Central Asia immediately after the fall of the Soviet Union in early 1990's. Russia, Central Asia's former dominant player, is less capable in bringing capital and technology to bear upon energy exploitation. According to the BP Statistical Review of World Energy 2013, the reserves amount of oil and natural gas in Central Asia are estimated to be well in excess of 33.3 billion barrels and 20.2 trillion cubic meters respectively.

Central Asia is composed of five nations: the republics of Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan and Kyrgyzstan. They all were formerly member states of the USSR. However, their energy reserves still remained largely underdeveloped. After the collapse of the USSR in 1991, the Central Asian states former domestic economic ties with Russia were initially cut or impeded. In addition, the threat of regional conflict resulted in an economic downturn within the newly independent republics. Later, the economies in Central Asian countries began to recover. This was due in part to the fact that they managed to take advantage of their rich energy resources, as these states came up with practical strategies to adjust aspects of their economies by establishing rules on their resources of energy exports.²⁵

The development of energy resources requires capital and technology. Western

²⁵ 劉磊,「淺論中國與中亞的能源合作」,中國社會科學院碩士學位論文(北京:2010年5月),頁7。[Liu, Lei. *Qianlun Zhongguo Yu Zhongya De Nengyuanhezuo* (Discussions on energy cooperation between China and Central Asia), unpublished thesis, GSCASS (Beijing: May 2010), pp. 7.]

companies got involved in the race to exploit energy in Central Asia immediately after the fall of the Soviet Union in early 1990's. These companies have the capability to intensively focus their capital and technology upon development of the oil and natural gas fields efficiently. Russia, Central Asia's former dominant player, is less capable in bringing capital and technology to bear upon energy exploitation.

2.1.1 Energy Reserves in Central Asian Countries

Currently, according to the BP Statistical Review of World Energy 2013, the reserve amounts of oil and natural gas in Central Asia are estimated to be well in excess of 33.3 billion barrels and 20.2 trillion cubic meters respectively. Among all these states the Republic of Kazakhstan has the greatest potential. Its prospective oil reserves are estimated at 30 billion barrels and 1.3 trillion cubic meters of natural gas, followed by Turkmenistan with 600 million barrels of crude oil and 17.5 trillion cubic meters of natural gas.²⁶

Additionally, it is worth noting that the Caspian Sea region is able to contribute to oil production. Although the statistics on the amount of estimated oil and natural gas reserves under that sea are varied, but with planned exploration and consecutive development, the final figure for these reserves of both oil and natural gas in this region will undoubtedly rise.

The bountiful resources in Central Asia draw not only the attention of the Caspian's littoral countries but also international powers as well. Thus, Russia, China, the U.S., Europe, Iran, and Japan among others are all competing to exploit the Caspian's resources. It may easily be predicted that the cooperation between China and Kazakhstan in regard to pipeline construction, competition will only intensify for the energy resources in the region.

¹⁸ "BP Statistical Review of World Energy June 2013," BP Global, available at: http://www.bp.com/content/dam/bp/pdf/statistical-review/statistical_review_of_world_energy_2013.pdf, (accessed: 20121201).

Kazakhstan has the largest proportion of oil reserves in Central Asia, at nearly 30 billion barrels, followed by Turkmenistan and Uzbekistan at 0.6 billion barrels respectively. (Please see Table 2-1 below).

Table 2-1: The Proven Reserves of Crude Oil in Barrels (Billion Barrels), at end of 2012

Country	Crude Oil Reserves (Billion Barrels)
Republic of Kazakhstan	30.0
Turkmenistan	0.6
Uzbekistan	0.6
Other Eurasia	2.1
Total	33.3

Source: BP Statistical Review of World Energy 2013

Turkmenistan has the largest proportion of natural gas reserves in Central Asia, at nearly 17.5 trillion cubic meters; followed by Kazakhstan at 1.3 trillion cubic meters and Uzbekistan at 1.1 trillion cubic meters (please see Table 2-2 below).

Table 2-2: The Stock of Proven Reserves of Natural Gas in Central Asia (Trillion Cubic Meters)

Country	Natural Gas Reserves (Trillion Cubic Meters) ¹
Republic of Kazakhstan	1.3
Turkmenistan	17.5
Uzbekistan	1.1
Other Eurasia	0.3
Total	20.2

Source: BP Statistical Review of World Energy 2013

2.1.2 Current Circumstances of Energy Exploitation in Kazakhstan

Kazakhstan is the only country bordering Russia among the five Central Asian countries, and can act as an intermediary. According to the BP Statistical Review of World Energy 2013, the proven oil reserves in Kazakhstan are around 30 billion barrels. Kazakhstan's main oil and natural gas fields are Tengiz, Karachaganak, and Kashagan.

2.1.2.1 Kazakhstan's Geopolitical Circumstances

Kazakhstan borders China to the east, the Caspian Sea to the west, Uzbekistan, Turkmenistan and Kyrgyzstan to the south, and Russia to the north. It is the only country bordering Russia among the five Central Asian countries, and can act as an intermediary between other Central Asian countries and Russia. Kazakhstan is the ninth biggest oil-and-natural gas-rich country, with 2.7% of total reserves in the entire world, and the third biggest oil-and-natural gas-rich country in the Caspian Sea region. Its oil and natural gas reserves cover an area of about 1.7 million square kilometers and are distributed in the Mangyshlak Peninsula in the west and the Caspian Depression, while its main oil and natural gas fields are the Tengiz, Karachaganak, and Kashagan fields. Gross domestic product (GDP) was U.S. 235.6 billion in 2012, while its GDP growth rate was 5%.

According to the BP Statistical Review of World Energy 2013²⁷, the proven oil reserves in Kazakhstan are around 30 billion barrels. These proven reserves are predominantly located in Atyrau province (40%), Mangystau province (35.3%), West Kazakhstan province (9%), and Kyzylorda province.

2.1.2.2 Kazakhstan's Oil Fields ²⁸

²⁷ "BP Statistical Review of World Energy June 2013," BP Global, available at: http://www.bp.com/content/dam/bp/pdf/statistical-review/statistical_review_of_world_energy_2013.pdf, (accessed: 20131201).

²⁸ "Kazakhstan," U.S. Energy Information Administration (EIA), available at: <http://www.eia.gov/countries/cab.cfm?fips=KZ>, (accessed: 20121201).

2.1.2.2.1 Tengiz

Tengiz is Kazakhstan's largest oil field which accounts for almost a third of total production in Kazakhstan. Starting from 1993, this field, situated onshore in northwestern Kazakhstan, has been operated by the Tengizchevroil joint venture, which is comprised of Chevron (50 percent), ExxonMobil (25 percent), KazMunayGas (KMG) (20 percent), and LukArco (5 percent). Its oil is exported through the Caspian Pipeline Consortium (CPC) oil pipeline from Tengiz to Novorossiysk, Russia, with estimated recoverable reserves of about 0.8 to 1.2 billion tons. Wood Mackenzie consultancy estimates that oil output at Tengiz will reach 844,000 bbl/day by 2020 from 520,000 bbl/day through June 2012.

2.1.2.2.2 Karachaganak

Located onshore in northwestern Kazakhstan, Karachaganak produces almost 15% of the total oil production of Kazakhstan. The field is operated by the *Karachaganak Petroleum Operating* (KPO) consortium under a production sharing agreement (PSA). The KPO consortium is constituted by BG and Eni, (each with 32.5 percent ownership), Chevron (having 20 percent), and Lukoil (with 15 percent). With the completion of the Atyrau pipeline segment in April 2004, built by the Caspian Pipeline Consortium (CPC), the CPC pipeline has become the main export portal for Kazakhstan's Karachaganak oil field.

Dependency on Russia's transportation infrastructure was therefore reduced. Wood Mackenzie consultancy states that its output would rise from 244,000 bbl/day as of June 2012 to 340,000 bbl/day by 2020. It has oil reserves of about 9 billion barrels of oil and gas condensate, as well as 1.33 trillion cubic meters of natural gas.

2.1.2.2.3 Kashagan

The Kashagan oil field, discovered in 2000, is the largest oil field outside the Middle East, ranking fifth in the world in terms of its reserves. Kashagan and the nearby Tenghiz oil field together comprise the largest oil field to be found in the last thirty years. The field is being developed by Agip KCO Company, a consortium consisting of ConocoPhillips, Eni,

ExxonMobil, Inpex Holding Inc., Kazakhstan's state-owned KazMunayGas, Royal Dutch Shell, and Total SA, and operated by Eni. In 2007, Eni projected that the oil field may reach a production capacity of 300,000 barrels per day by 2011. In an agreement announced by Eni on January 14th, 2008, KazMunayGas' share ownership went up from 8.33% to 16.81% after long negotiations. Other shareholders such as ExxonMobil, Eni, Total SA and Royal Dutch

Shell also lowered their respective ownerships from 18.5% to 16.81%. The remaining two shareholders, ConocoPhillips and Inpex Holding Inc. were to decrease their share as well. Investments in this oil field are estimated to be 136 billion US dollars.²⁹

On 7th Sep 2013, Chinese President Xi Jinping signed a deal with the Kazakhstan government involving the Kashagan Oil Field. According to that agreement, China will pay \$5 billion in exchange for 8.33 percent of the offshore oilfield in the Caspian Sea.³⁰

2.1.2.2.4 Uzen

Situated in the Magnistau area of southwestern Kazakhstan, this field has been run by KMG since 1961, having an output of around 100,000 bbl/day in the early 2012.

2.1.2.2.5 Mangistau

Situated in the Magnistau area of southwestern Kazakhstan, it is being utilized by both KazMunayGas (KMG) and the China National Petroleum Corporation (CNPC) since 1995. It was producing 117,000 bbl/day in early 2012.

²⁹ 吳賢煜，「中國與俄羅斯在哈薩克斯坦之能源競逐」，清雲科技大學碩士論文（桃園：2010年6月），頁38-67。[Wu, Hsienyu. *Zhongguo Yu Eluosi Zai Hasakesitan Zhi Nengyuan Jingzhu* (China and Russia compete for energy in Kazakhstan), unpublished thesis, Ching Yun University (Taoyuan: June 2010), pp. 38-67.]

³⁰ Gordeyeva, Mariya. "China buys into giant Kazakh oilfield for \$5 billion," Reuters News Service, Sep 7, 2013, available at: <http://www.reuters.com/article/2013/09/07/us-oil-kashagan-china-idUSBRE98606620130907>,

2.1.2.3 A Brief Review of Kazakhstan's Post-Soviet History and its Relations among International Companies

Kazakhstan declared its independence in 1991. Nursultan Nazarbayev, served as Kazakhstan's first president. Nazarbayev won the presidential election in 2005 and 2011 and has been the president of Kazakhstan till now. Kazakhstan under his leadership has adopted a balanced foreign policy, by which to promote Kazakhstan's economy, particularly its energy industries. In Kazakhstan the major financially and technically intensive projects of joint venture partnership are with Western companies, particularly from the United States. The three major Kazakh oil field development projects, Tengiz, Karachaganak and Kashagan, all are led by Western companies. After March 2000 when Vladimir Putin was elected president of Russia, the energy resources in Kazakhstan became more important to Russia. Russia would like to re-establish an export route monopoly (the 'Atyrau-Samara' oil pipeline and the 'Tengiz-Novorossiysk' oil pipeline') in Kazakhstan. The more alternatives for export routes that Kazakhstan can choose from, the less profit Russia could gain from Western Europe and East Asia's regional markets. As a late comer to Central Asia, at first China could only choose from relatively less abundant and more isolated oil fields in Kazakhstan. To solve this problem, there were only two options: the acquisition of the properties of Kazakh oil fields owned by Western oil companies (such as the 2005 Canadian oil company PetroKazakhstan merger), or construction of its own oil pipelines through which China could gradually turn the tide (such as the completion of the China-Kazakhstan oil pipeline).

2.1.2.3.1 A Brief Overview of Kazakhstan's Post-Soviet History

On December 16th, 1991 Kazakhstan declared its independence after the collapse of the Soviet Union. The leader of the Kazakh S.S.R. during the Communist era, Nursultan Nazarbayev, served as Kazakhstan's first president. In 1998 the capital of Kazakhstan was moved from Almaty, the country's largest city, to Astana. On December 4, 2005, Nursultan Nazarbayev was re-elected as the President of Kazakhstan. In 2010, President Nazarbayev

rejected a call from constituents to hold a referendum to keep him in office (until 2020) and instead insisted on presidential elections (for another five-year term.) In a vote held on 3 April 2011, President Nazarbayev received 95.54% of the vote and was again elected President of Kazakhstan.³¹

Nazarbayev has maintained strong political control of the country, characterized as a monopoly. Kazakhstan under his leadership has adopted a balanced foreign policy, by which to promote Kazakhstan's economy, particularly in the field of its energy industries.³²

Since the reign of Joseph Stalin, the Soviet Union was subject to the implementation of a "mass deportation" strategy in which it served as a destination. Consequently, Kazakhstan possesses great ethnic and cultural differences. Kazakhstan's population is about 16.6 million and includes Kazakhs, Russians, Ukrainians, Germans, Uzbeks, Tatars, and Uyghurs. Approximately 63% of the population is Kazakh. The proportion of people who believe in Islam is about 70% while Christians comprise about 26%.³³

2.1.2.3.2 Kazakhstan's Relations with Western Companies

Kazakhstan has abundant natural resources, attracting Western companies to invest primarily in the energy section, including iron, food processing and tobacco industry. The major capital intensive projects of joint venture partnerships are with Western companies, particularly from the United States.³⁴

The technology and equipment used in the energy industry are left over from the Soviet Era, and considering that relatively old equipment, development cannot proceed at a pace to

³¹ "Nursultan Nazarbayev," The Moscow Times, Mar 28, 2011, available at:

<http://www.themoscowtimes.com/people/article/nursultan-nazarbayev/433930.html>, (accessed: 20140513).

³² Voloshin, Georgiy, "Domestic Stability to Remain Kazakhstan's Main Priority in 2013," The Jamestown Foundation, Jan 16, 2013, available at:

http://www.jamestown.org/programs/edm/single/?tx_ttnews%5Btt_news%5D=40311&cHash=83858f319a98de23a6bef2ff54b33e82, (accessed: 20140513).

³³ Joanna Lillis, "Kazakhstan: Museum Recalls Stalin's Devastating Legacy," EurasiaNet.org, Jul 25, 2013, available at: <http://www.eurasianet.org/node/67300>, (accessed: 20140513).

³⁴ International Monetary Fund. *Kazakhstan - Recent Economic Developments (EPub)* (Washington, DC:

be compared with Western countries which possess advanced technology. Since there are technical problems that cannot be solved regarding development and a lack of funds and other issues, hence the country needs considerable foreign investment of both capital and technology, whether via getting funds from the Western capital markets, making strategic alliances with Western energy companies, or through production sharing agreement (PSA) projects.³⁵

Due to the influence of the events of the 1990s regarding Kazakhstan's policies, Western investors had doubts about the business investment environment in Kazakhstan as well as its stability and attractiveness, particularly in regard to transparency and the rule of law and other factors making it even more complicated. But with the change of Kazakhstan's policies, gradually these intractable issues have been solved for the most part. With the establishment of the Caspian Pipeline Consortium (CPC) and the Baku-Tbilisi-Ceyhan (BTC) pipeline, Kazakhstan's oil resources are able to be exported to world markets.³⁶

In the late 1990s, through a dialogue mechanism, Chevron became the first Western company to enter the country, and they established the Tengizchevroil (TCO) venture. The three major Kazakh oil field development projects, Tengiz, Karachaganak and Kashagan, all are led by Western companies. Due to the fact that Kazakhstan is highly dependent on Western investment, Kazakhstan needs to be able to attract foreign investment in the long run and put effort into further development of their business environment. Consequently, the Kazakh government continues its economic reform, including viable monetary policy, banking reforms, and the establishment of an efficient tax system.³⁷

International Monetary Fund, September 23, 1998).

³⁵ Feathers, Lori Ann. "Western Opportunities for Investment in the Oil Industry of the Former Soviet Union," American University College of Law Digital Commons, 1992, available at: <http://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1546&context=auilr>, (accessed:20140520)

³⁶ Kalicki, Jan H. and Eugene K. Lawson. ed., *Russian-Eurasian Renaissance? U.S. Trade and Investment in Russia and Eurasia* (California: Stanford University Press, 2003), p. 174-175,185-189.

³⁷ Kalicki, Jan H. and Eugene K. Lawson. ed., *Russian-Eurasian Renaissance? U.S. Trade and Investment in*

2.1.2.3.3 Kazakhstan's Relations with Russian Companies

In the 1990's Russian energy companies invested to some degree in Kazakhstan, mainly in the 'Karachaganak' gas condensate field and 'Tengiz-Novorossiysk' oil pipeline. But after March 2000 when Vladimir Putin was elected president of Russia, and with hydrocarbons prices continuing to rise, for Russia, the energy resources in Central Asia became more important, especially those in Kazakhstan. Thus, Russian energy companies such as Lukoil, Gazprom and Rosneft increased considerably their investment in Kazakhstan, including in oil and gas field development and the pipeline system in the nation and including upgrading the 'Atyrau-Samara' oil pipeline and the 'Tengiz-Novorossiysk' oil pipeline's capacity.³⁸

During the Soviet Era, Moscow authorities avoided the development of oil fields in Kazakhstan when possible; instead, they concentrated on exploiting Western Siberia's oil fields. However, the pipelines built during the Soviet era allow transit of Kazakhstan's oil across Russia. Now Russia would like to re-establish an export route monopoly in Kazakhstan, with Russia's state-owned Transneft Company expanding its control of the Kazakh oil fields. The reason why Russia wants to control Kazakhstan's oil exports is very simple; through Russia's control of pipelines they can market Kazakhstan's oil first. To enter the export market, the more alternatives in export routes that Kazakhstan can choose from, the less profitable the extent of Russian control in regard to marketing Kazakhstan's oil. For Russia, the control of Kazakhstan's oil exports will assist Russia to become the exclusive supplier of oil to Western Europe and East Asia's regional markets.³⁹

2.1.2.3.4 Kazakhstan's Relations with Chinese Companies

As a late comer to Central Asia, at first China could only choose from relatively less abundant and more isolated oil fields in this nation since the market had been developed by Western

Russia and Eurasia (California: Stanford University Press, 2003), p. 189.

³⁸ Paramonov, Vladimir and Aleksey Stokov. *Russian Oil and Gas Projects and Investments in Central Asia* (Defense Academy of the United Kingdom, May 2008), pp. 2.

³⁹ Marten, Kimberly. "Disrupting the Balance, Russian Efforts to Control Kazakhstan's Oil, Ponars Policy Memo No.428," *Columbia University* (New York: December 2006), pp.1-2.

interests during the 1990s and those interests had already occupied oil fields with a high yield. The major three Kazakhstan oilfields, Tengiz, Karachaganak and Kashagan, all were being exploited by Western companies. To solve this problem, there were only two options: the acquisition of the properties of Kazakh oil fields owned by Western oil companies (such as the 2005 Canadian oil company PetroKazakhstan merger), or the construction of its own oil pipelines through which China could gradually turn the tide. With the completion of the China-Kazakhstan oil pipeline (from Atyrau to Alashankou), the quantity Kazakhstan's oil supply to China has greatly improved.⁴⁰

However, Kazakhstan has been becoming wary as China is expanding their grasp of oil resources. They reconsidered the existing oil arrangements and also forced a Chinese oil company's joint venture in the oil field to transfer certain of its shares to KazMunayGas.⁴¹

2.1.2.4 Kazakhstan Oil Export Routes

Kazakhstan's exports were generally still dependent upon Russia in the wake of the dissolution of the Soviet Union in 1993. Now, it has reduced Russia's influence with the aid of Trans-Caspian tankers and rail links to other nations, as well as the utilization of new pipelines to the Black Sea, China and the Mediterranean.

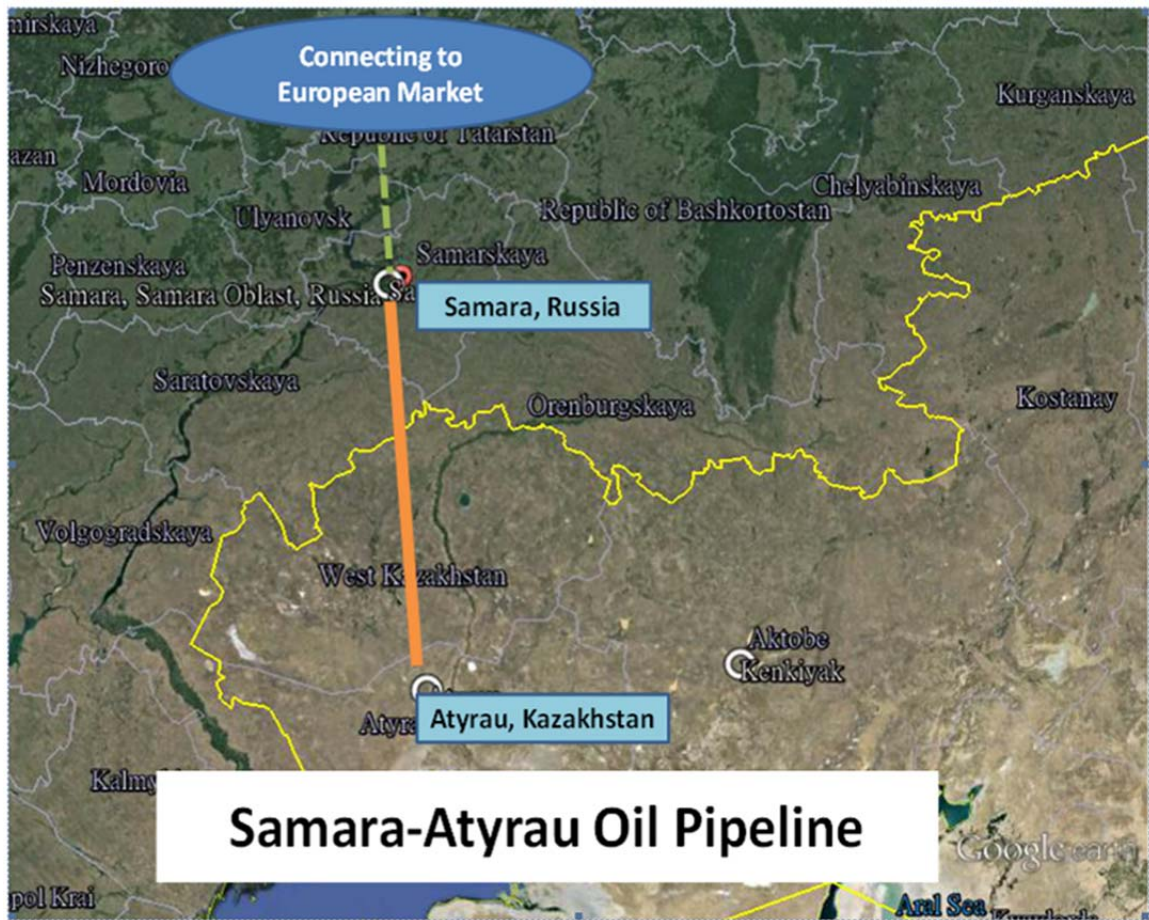
Kazakhstan exports oil to various markets through the following pipelines:

- 1) Through the pipeline from Atyrau to Samara, connecting to Russia's oil transportation system, reaching the European market (Please see Chart 2-1 below).
- 2) Through the CPC's (Caspian Pipeline Consortium) pipeline from Tengiz to Novorossiysk (Please see Chart 2-2 below).
- 3) Through Kenkiyak, Atasu, and the Alashankou, finally reaching China (Please see Chart 2-3 below).

⁴⁰ Dellecker, Adrian and Thomas Gomart. ed., *Russian Energy Security and Foreign Policy* (London: Routledge, 2011), p. 30.

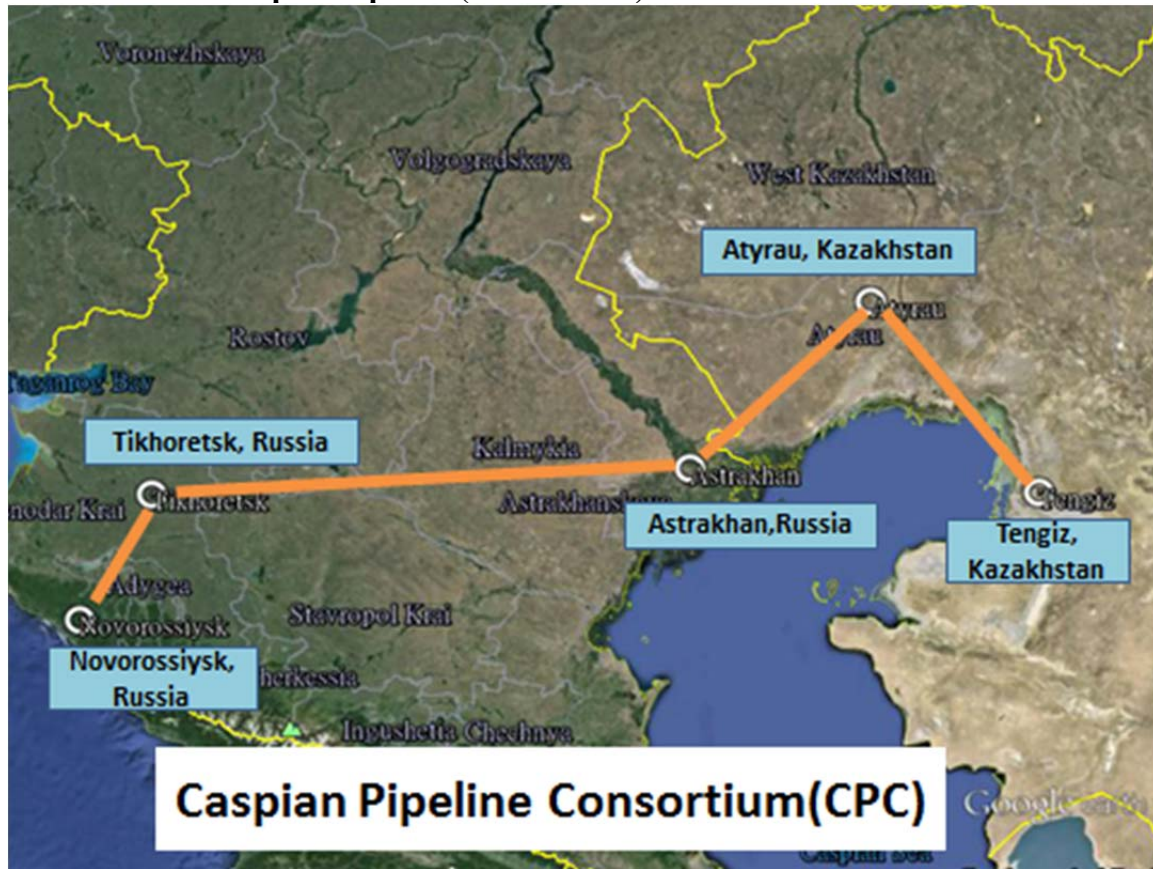
⁴¹ Popovic, Milos. *Keeping Friends Close, and Their Oil Closer: Rethinking the Role of the Shanghai Cooperation Organization on China's Strive for Energy Security in Kazakhstan* (Budapest: Central European University, 2010), p. 22.

Chart 2-1: Samara-Atyrau Oil Pipeline (North Bound)



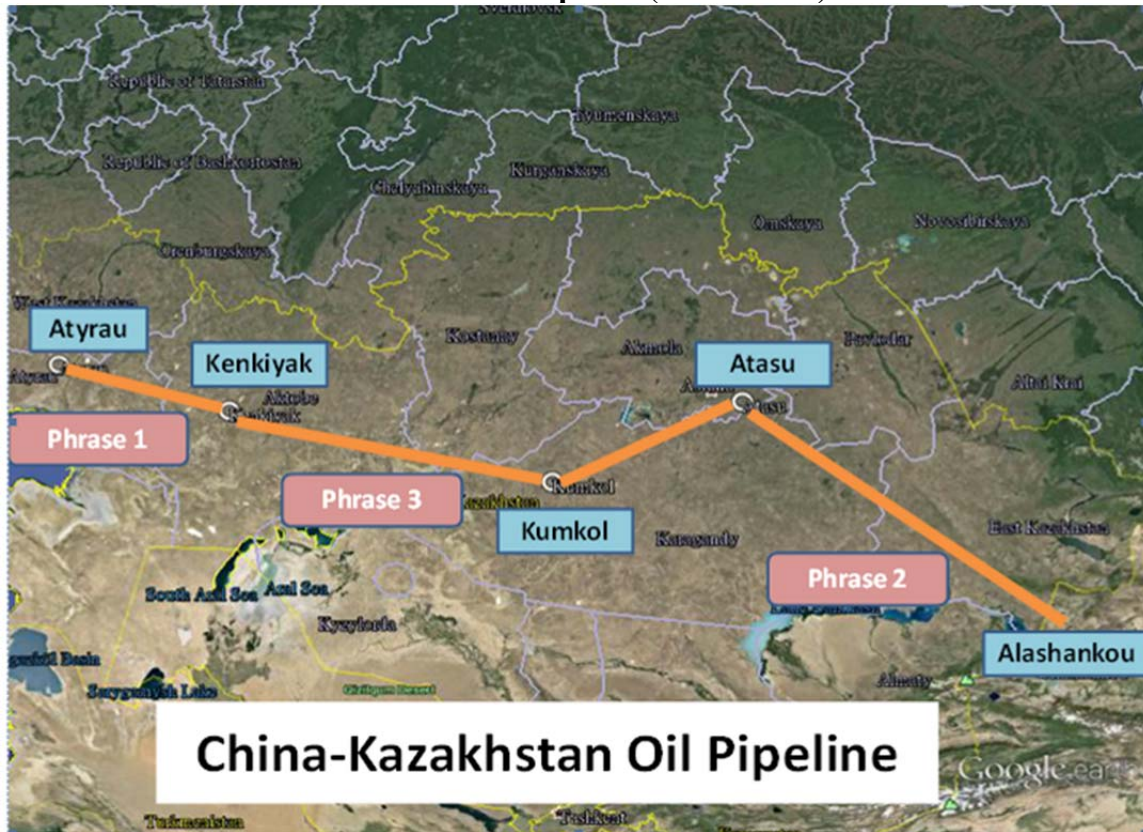
Source: Compiled by author

Chart 2-2: The Caspian Pipeline (West Bound)



Source: Compiled by author

Chart 2-3: The China-Kazakhstan Oil Pipeline (East Bound)



Source: Compiled by author

2.1.2.5 Kazakhstan's Oil Exports

The oil and natural gas industry is the main pillar of the national economy of Kazakhstan, with oil and natural gas exports accounting for 70% for total export.⁴² As of May 2012, the remaining demonstrated reserves in petroleum are 5.3 billion tons, ranking 9th in the world. Kazakhstan's oil production has increased from 1111(thousand barrels daily) to 1728 (thousand barrels daily) from 2003 to 2012, while Kazakhstan's oil consumption is remained within the range of 183 to 265 (thousand barrels daily). This data indicates Kazakhstan's

⁴² Cai, Mingfeng, "Political and economic status of Kazakhstan," The Export – Import Bank of China (EXIM Bank), Trading Club Website, May 3, 2012, available at: <http://www.eximclub.com.tw/countries/information-02c.asp?idno=2250&continen=1&country=%AB%A2%C2>

strong capability to export its oil (please see Table 2-3 below).

Table 2-3: Statistics for oil & natural gas production and consumption in Kazakhstan				
year	Oil production (Thousand barrels daily)	Oil consumption (Thousand barrels daily)	Gas production (BCM, Billion Cubic Meters)	Gas consumption (BCM, Billion Cubic Meters)
2003	1111	183	11.9	9.6
2005	1330	204	13.5	9.3
2006	1403	210	13.9	9.9
2007	1453	233	16.7	8.4
2008	1526	229	18.7	8.1
2009	1664	188	17.8	7.8
2010	1740	196	17.6	8.2
2011	1758	242	19.3	9.2
2012	1728	265	19.7	9.5

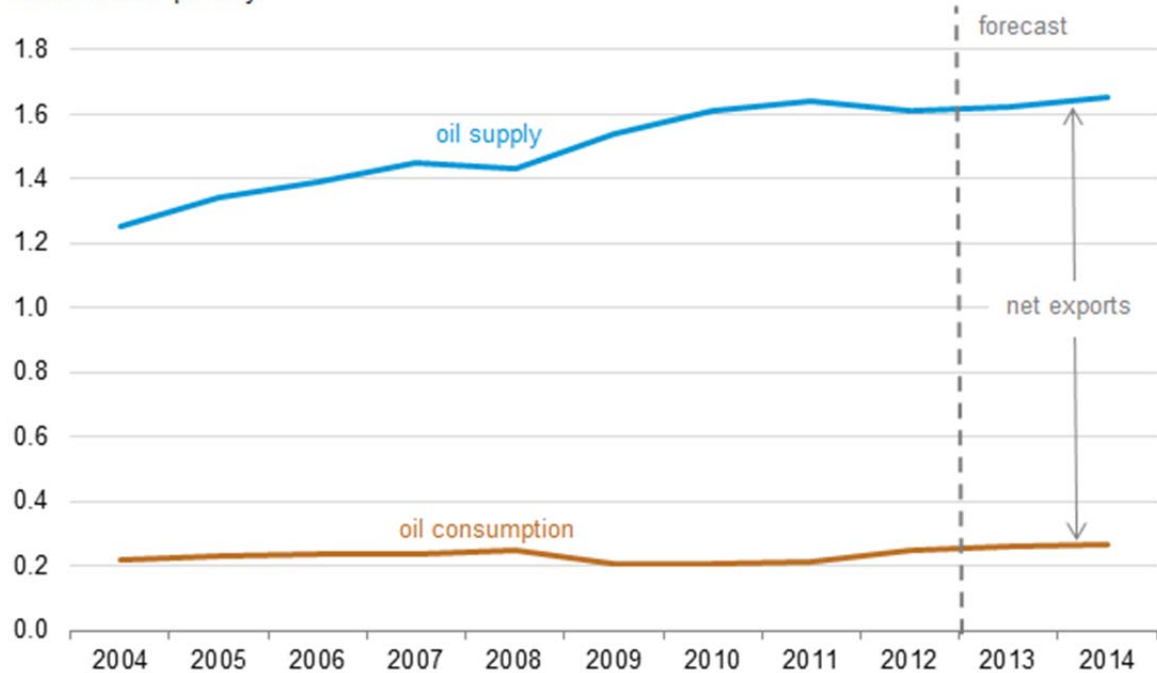
Source: BP Statistical Review of World Energy 2013

[%C4%A7J](#), (accessed: 20110227).

Chart 2-4: Kazakhstan's oil production and consumption, 2004-2014

Kazakhstan's oil production and consumption, 2004-2014

million barrels per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, September 2013
Note: 2013-2014 are EIA forecasts

Source: "Kazakhstan," EIA, Oct 28, 2013, available at:

<http://www.eia.gov/countries/cab.cfm?fips=kz>

Kazakhstan mainly exports energy products, with oil and natural gas accounting for the bulk of these. Kazakhstan's Ministry of Oil and Gas announced exports of oil amounting to 68.616 million tons in 2012, a 3.6% increase compared to 2011. Natural gas exports amounted to 8.8 billion cubic meters, a 3.7% increase against 2011. The total value of oil exported was US\$56.442 billion.⁴³

Kazakhstan's Customs Control Committee, within the Ministry of Finance, indicated in 2011 that Italy, its biggest importer, imported around 346,000 bbl/day while the US imported

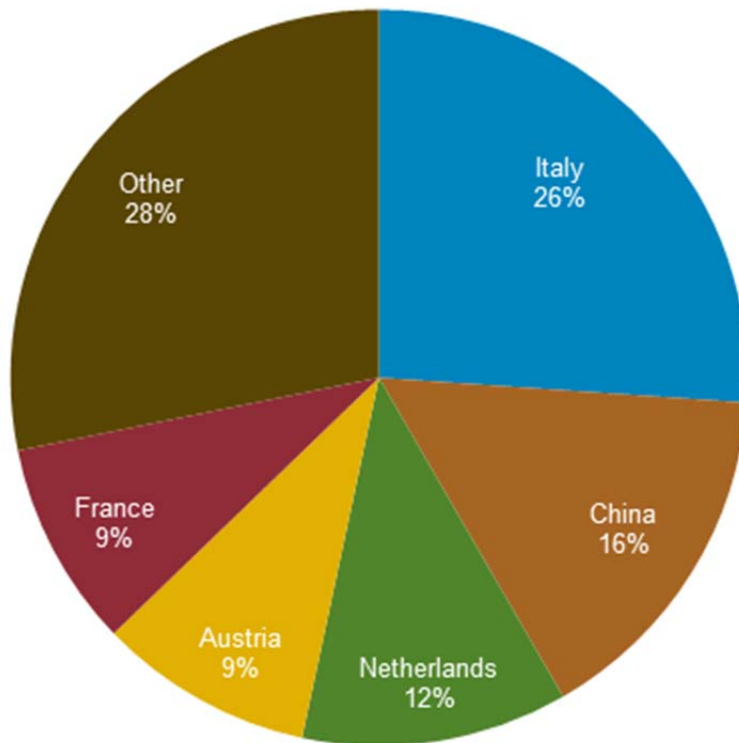
⁴³ "Kazakhstan's energy exports declined in the first 11 months of last year," Xinhua News Agency, Jan 15, 2013, available at: http://news.xinhuanet.com/energy/2013-01/15/c_124232836.htm, (accessed: 20121201).

around 14,000 bbl/day, accounting for approximately 1% of Kazakhstan's total exports. China, Holland and France also imported a considerable amount of its liquid fuels.⁴⁴

The most significant recipient of Kazakhstan's exported liquid fuels is Italy at 26% of total exports, followed by China at 16%, then is the Netherlands at 12% (please see Chart 2-5 below).

Chart 2-5: Kazakhstan's Liquid Fuels Exports by Destination, 2012

Kazakhstan's liquid fuels exports by destination, 2012



Source: Kazakhstan's Customs Control Committee of the Ministry of Finance, reported by Global Trade Information Service

Source: "Kazakhstan," EIA, Oct 28, 2013, available at:

<http://www.eia.gov/countries/cab.cfm?fips=kz>

⁴⁴ "Kazakhstan," U.S. Energy Information Administration (EIA), available at: <http://www.eia.gov/countries/cab.cfm?fips=KZ>, (accessed: 20121201).

Oil exports from Kazakhstan have increased from 890,000 bbl/day in 2003 to 1,390,000bbl/day in 2011(please see Table 2-4 below).

Table 2-4: Statistics for oil exports from Kazakhstan	
Year	(bbl/day, barrels per day)
2003	890,000
2005	1,236,000
2009	1,345,000
2011	1,390,000

Source: “Kazakhstan Oil Export Volume,” Historical Data Graphs per Year, Index Mundi

<http://www.indexmundi.com/g/g.aspx?c=kz&v=95>

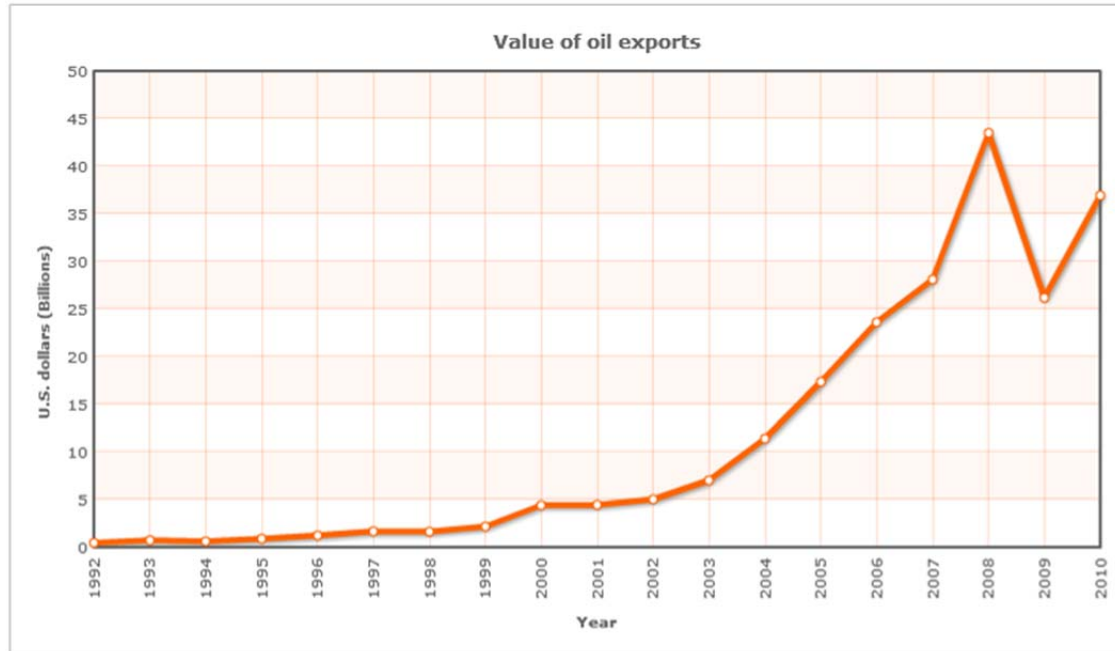
The value of oil exports from Kazakhstan has increased from 7.023 billion U.S. dollars in 2003 to 36.955 billion U.S. dollars in 2011(please see Table 2-5).

Table 2-5: Value of oil exports from Kazakhstan	
Year	U.S. dollars (Billions)
2003	7.023
2004	11.417
2005	17.395
2006	23.612
2007	28.216
2008	43.508
2009	26.207
2010	36.955

Source: “Kazakhstan Oil Export Volume,” Historical Data Graphs per Year, Index Mundi

http://www.indexmundi.com/kazakhstan/oil_exports.html

Chart 2-6: The Value of Oil Exports from Kazakhstan



Source: International Monetary Fund-2011 World Economic Outlook

2.1.3 Current Circumstances of Energy Exploitation in Turkmenistan

2.1.3.1 Turkmenistan's Geopolitical Circumstances

Turkmenistan is located in southwest Central Asia, bordering the Caspian Sea to the west. According to the BP Statistical Review of World Energy 2013, the natural gas reserves of Turkmenistan are about 17.5 trillion cubic meters. Turkmenistan has a large amount of natural gas reserves, but due to a lack of proper pipelines and insufficient foreign investment its export of natural gas to international markets is restricted. Turkmenistan's main gas fields are Bagtyýarlyk , Achak, Saman-Depe, Naipu, Galkynysh and Dauletabad.

Turkmenistan covers an area of 488.1 thousand square kilometers, the second biggest Central Asian country after Kazakhstan. Isolated from the world's oceans and sea-borne

commerce, this nation is located in southwest Central Asia, bordering the Caspian Sea to the west, Kazakhstan to the north, Uzbekistan to the northeast, Afghanistan to the east, and Iran to the south. Most of its territory is low-lying lands, with 80% of territory being covered by the Karakum Desert. Turkmenistan has a large amount of natural gas reserves, but due to a lack of proper pipeline system, technical support and insufficient foreign investment its export of its natural gas to international markets is restricted.⁴⁵

Turkmenistan's oil and natural gas reserves are concentrated in two basins: the Amu Darya basin, a large gas field in the east of the country; and in the west, the West Turkmen Basin oil reserves. The main gas fields are: Bagtyýarlyk, Achak, Saman-Depe, Naipu, Galkynysh, Dauletabad, Ozark, Sateleike, Yashenlaer, Samantebei, etc. In recent years the Gunorta Eloten Turkmen gas field was found. Such is the abundance of resources in this field, it is considered to be the country's largest gas field.⁴⁶

2.1.3.2 Turkmenistan's Natural Gas Reserves

Turkmenistan ranks within the top six countries for natural gas reserves. Its gas fields are mainly located in the Amu Darya basin in the southeast, the Murgab Basin, and the South Caspian basin in the west.⁴⁷ According to the "BP Statistical Review of World Energy 2013," the natural gas reserves of Turkmenistan are about 17.5 trillion cubic meters.⁴⁸

Turkmenistan's gas production suffered serious declines after an explosion occurred along the Central Asian Center pipeline to Russia in April 2009. Gas production fell almost 50 percent from a high of 66.1 Bcm/year in 2008 to 36.4 Bcm/year in 2009, almost a

⁴⁵ "Turkmenistan," U.S. Energy Information Administration (EIA) Official Website, available at: <http://www.eia.gov/countries/cab.cfm?fips=TX>, (accessed: 20131201).

⁴⁶ 國立政治大學碩士論文，「從地緣戰略論中國對中亞能源外交」，張鴻俊（：台北2010年6月）頁，33。[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy to Central Asian countries by geostrategic study), unpublished thesis, NCCU, (Taipei: June 2010), pp. 33.]

⁴⁷ "Turkmenistan," U.S. Energy Information Administration (EIA) Official Website, available at: <http://www.eia.gov/countries/cab.cfm?fips=TX>, (accessed: 20131201).

⁴⁸ "BP Statistical Review of World Energy June 2013," BP Global, available at: http://www.bp.com/content/dam/bp/pdf/statistical-review/statistical_review_of_world_energy_2013.pdf,

year-on-year 45% decrease. However, after the repair of the pipeline and a new contract between Russia and Turkmenistan in January of 2010, Turkmenistan's gas production increased to 59.5 Bcm/year in 2010, nearly a 38% increase when compared with 2009; however it has yet to reach pre-April 2009 levels. ⁴⁹

2.1.3.2.1 Turkmenistan's Natural Gas Fields

The Bagtyýarlyk gas field is located in Lebap Province of Turkmenistan. A 30-year exploration contract was signed between CNPC and the Turkmen Presidential State Agency. The gas reserves in Bagtyýarlyk are estimated at 1.7 trillion cubic meters (cm) of natural gas. ⁵⁰

The Dauletabad gas field is located in the Amu-Darya Basin, Ahal province, Turkmenistan. Its gas reserves are estimated at 1.4 trillion cubic meters (cm) of natural gas. ⁵¹

The Saman-Depe Gas Field is a large natural gas field located in Lebap Province of Turkmenistan, one of several fields on the right bank of Amu Darya River. ⁵²

The Galkynysh gas field (formerly known as Iolotan gas field or South Yolotan field) is a large natural gas field near Ýolöten in Mary Province of Turkmenistan. It has an estimated gas reserve of more than 14 trillion cubic meters. ⁵³

(accessed: 20140308).

⁴⁹ "Turkmenistan," U.S. Energy Information Administration (EIA) Official Website, available at: <http://www.eia.gov/countries/cab.cfm?fips=TX>, (accessed: 20101201).

⁵⁰ "Turkmenistan allows China to develop gas field near Uzbekistan," oilandgaseurasia.com, Jul 20, 2007, available at: <http://www.oilandgaseurasia.com/en/news/turkmenistan-allow-china-develop-gas-field-near-uzbekistan>, (accessed: 20140513).

⁵¹ Pannier, Bruce. "Independent Audit Shows Turkmen Gas Field 'World-Class'," Radio Free Europe/Radio Liberty, Oct 14, 2008, available at: http://www.rferl.org/content/Independent_Audit_Shows_Turkmen_Gas_Field_WorldClass_/1329822.html, (accessed: 20140513).

⁵² "Turkmenistan faces challenges in developing reserves," HighBeam Research, Jul 1, 2004, available at: <http://www.highbeam.com/doc/1G1-119905324.html>, (accessed: 20140513)

⁵³ "Galkynysh Gas Field, Turkmenistan," Hydrocarbons Technology, available at: <http://www.hydrocarbons-technology.com/projects/-galkynysh-gas-field-turkmenistan>, (accessed: 20140513).

Turkmenistan's gas production has increased from 57.0 billion cubic meters in 2005 to 64.4 billion cubic meters in 2012. The gas consumption of Turkmenistan also increased to 23.3 billion cubic meters in 2012 however there is still a very substantial surplus for Turkmenistan to export (please see Table 2-6 below).

Table 2-6: Statistics for Oil & Gas Production and Consumption in Turkmenistan				
year	Oil production (Thousand barrels daily)	Oil consumption (Thousand barrels daily)	Gas production (BCM, Billion Cubic Meters)	Gas consumption (BCM, Billion Cubic Meters)
2005	193	90	57.0	16.1
2008	208	104	66.1	20.5
2009	211	96	36.4	19.9
2010	217	93	42.4	22.6
2011	217	97	59.5	25.0
2012	222	100	64.4	23.3

Source: BP Statistical Review of World Energy 2013

2.1.3.3 Turkmenistan's Oil Reserves

Oil output in Turkmenistan has nearly doubled from 110,000 bbl/day in 1992 to about 202,000 barrels per day (bbl/day) in 2010. Half of its output, over 100,000 bbl/day, is for national use. However, this level of output is predicted to remain unchanged through 2013.⁵⁴

Now, Seidi (Chardzhou) and Turkmenbashi are the two main refineries in Turkmenistan producing 237,000 bbl/day in total. By 2030, not only will the capacity for the existing refineries be increased but also three more refineries are set to be established, after which the total output is expected to increase to 600,000 bbl/day if this upgrade of facilities is carried out on schedule.

According to *Oil and Gas Journal* (OGJ) in January 2012, around 600 million barrels of oil reserves, most of which are located in the South Caspian Basin and the Garashyzlyk region, were discovered. Turkmenistan's Caspian Sea area boasts 80.6 billion barrels of oil, but much more is expected to still be discovered.

Though exploration for oil fields in Turkmenistan has increased since 2007, new investment and technology are the keys to finding new oilfields and a resolution is need for the Caspian Sea maritime border issue. That's why it still exports only a small amount of its net oil production.⁵⁵

2.1.3.4 A Brief Review of Turkmenistan's Post-Soviet History and its relations with international companies

When Turkmenistan became independent in 1991, Saparmurat Niyazov became Turkmenistan's president. Niyazov conducted dictatorial oppressive rule and avoided his

⁵⁴ "Turkmenistan," U.S. Energy Information Administration (EIA), available at: <http://www.eia.gov/countries/cab.cfm?fips=TX>, (accessed: 20101201).

⁵⁵ "Turkmenistan," U.S. Energy Information Administration (EIA), available at: <http://www.eia.gov/countries/cab.cfm?fips=TX>, (accessed: 20101201).

country's participation in all regional organizations. Niyazov adopted a conservative policy of isolationism. Saparmurat Niyazov died on the 21st of December, 2006. In 2007 the succeeding President Gurbanguly Berdymukhammedov said that Turkmenistan would shift to an open door policy and enhance Turkmenistan's relationship with Western countries. While the Turkmenistan government insists that the country owns the majority of shares thus maintain very strict control on energy projects. Whether Turkmenistan allows foreign companies to invest is the subject of ever-changing policies. Therefore, Western investors are reluctant to invest in these Turkmenistan government-sponsored joint venture projects. For long, Russia had been using the Central Asia-Center Pipeline to maintain that natural gas monopoly. Russia's expected goal is to use Turkmenistan's gas to reach their export targets effectively, and to gain the maximum benefits. However when in 2009 the China - Central Asia gas pipeline's construction was completed, the Turkmen have a new alternative export route, and the situation has changed finally. For China, imports of natural gas from the Turkmen side, has created one more stable source of natural gas to import via land, and enhanced its energy security. China can also bargain with Russia the reduction in the price of imported Russia's Siberian gas. Turkmenistan Natural Gas Export Routes including Central Asia-Center natural gas pipeline and China-Central Asia natural gas pipeline.

2.1.3.4.1 A Brief Overview of Turkmenistan's Post-Soviet History

In 1991 Turkmenistan became independent at the dissolution of the Soviet Union, while the leader of the Turkmen S.S.R. during the Communist era, Saparmurat Niyazov became Turkmenistan's president, later becoming "President-for-Life" and receiving the honorific title "Turkmenbashi." He was widely seen in the West as presiding over a well-developed cult of personality. During his tenure, Niyazov conducted dictatorial oppressive rule with frequent purges of public officials and abolished organizations deemed threatening. Moreover, he steered a course avoiding his country's participation in all regional organizations such as the SCO.⁵⁶

⁵⁶ Szczepanski, Kallie. "Saparmurat Niyazov," About.com, available at: <http://asianhistory.about.com/od/turkmenistan/p/Saparmurat-Niyazov-Biography.htm>, (accessed: 20140513).

In 2002 an attempted assassination of Niyazov took place and in response a large number of officials were dismissed by Niyazov who put great effort into strengthening restrictions in terms of security issues. During 2002 to 2004, bilateral disputes between Turkmenistan and Uzbekistan existed. Niyazov believed that Uzbekistan had been involved in an attempt to assassinate him in 2002, and hence serious tensions arose. Not until 2004 after a bilateral treaty was signed did this situation abate.⁵⁷

Saparmurat Niyazov died on the 21st of December, 2006, resulting in a complete vacuum of power until the 11th of February, 2007 when Gurbanguly Berdimuhamedow was elected as the new president. In the 2012 presidential election, Gurbanguly Berdimuhamedow was elected again with 97 percent of the vote. Since Turkmenistan is quite a closed country to the world, China is one of an extremely small number of countries which has been able to establish cooperative initiatives making significant overtures.⁵⁸

2.1.3.4.2 Turkmenistan's Relations with Western Companies

The former President of Turkmenistan Saparmurat Niyazov adopted a conservative policy of isolationism. Hence, Western oil companies rarely had the opportunity to make investments or engage in significant progress in energy cooperation in Turkmenistan. Saparmurat Niyazov died in December 2006. On September 26th, 2007, the succeeding President Gurbanguly Berdimukhammedov said that Turkmenistan would shift to an open door policy and enhance Turkmenistan's relationship with Western countries.⁵⁹

Nevertheless, after Gurbanguly Berdimukhammedov came to power despite having encouraged Western interests to invest, the state-control mechanisms and strict

⁵⁷ Hanks, Reuel R. *Global Security Watch Central Asia* (California: Greenwood Publishing Group, 2010), p. 28.

⁵⁸ Nichol, Jim. "Turkmenistan: Recent Developments and U.S. Interests," Federation of American Scientists, Dec 12, 2013, available at: <http://www.fas.org/sgp/crs/row/97-1055.pdf>, (accessed: 20140513).

⁵⁹ Gorst, Isabel, Daniel Dombey, and Harvey Morris. "Turkmenistan opens up its gas and oil fields to west," Financial Times, Sep 27, 2007, available at: <http://www.ft.com/cms/s/0/326f8fd0-6c95-11dc-a0cf-0000779fd2ac.html#axzz2vFRS9gjx>, (accessed: 20130803).

currency-exchange system remain in place, creating obstacles for Western companies to invest. Areas suitable for investment in this country include the oil and gas, agriculture and construction sectors. But due to the lack of prudent investment standards, inconsistent regulatory practices and being not familiar with international business norms, those factors have caused considerable constraints (disincentives) for Western companies.⁶⁰

Whether Turkmenistan allows foreign companies to invest is the subject of ever-changing policies. If a company is from a friendly country, they often have a greater chance to get an opportunity to successfully apply for a contract. In such an atmosphere, if a Western company intends to invest in Turkmenistan, it is crucial to maintain good relations with the Turkmenistan government. Turkmenistan officials often take advantage of Western companies when helping them enter the country's market, by getting an unfair advantage in any subsequent deal.

Some signs suggest that to establish good personal relations with the President of Turkmenistan is the most direct and only certain way to enter Turkmenistan's market. On joint ventures in energy projects, the government insists that the country owns the majority of shares and interests. Therefore, Western investors are reluctant to invest in these Turkmenistan government-sponsored joint venture projects. Turkmenistan maintains very strict control on energy projects, although Turkmenistan has no specific laws stating that it's forbidden to resale on equity, Western companies still cannot be free to sell their stakes unless the government allows it. Outdated technology, poor business structure and investment barriers (governmental obstacles) have caused Western companies to reduce their willingness to invest in this country.⁶¹

⁶⁰ Ibpus.com. *Turkmenistan-Company Laws and Regulation Handbook* (Washington, DC: International Business Publications, 2012), p. 29.

⁶¹ Ibpus.com. *Turkmenistan-Company Laws and Regulation Handbook* (Washington, DC: International Business Publications, 2012), p. 29-30.

2.1.3.4.3 Turkmenistan's Relations with Russian Companies ⁶²

In April 2003, the Russian company, Gazexport, and Turkmenneftegaz signed a 25-year energy export contract. The contract specified that the nation will transport natural gas to Russia. Russia can buy and sell Turkmenistan's natural gas. For Russia's interests, it is more profitable and efficient for them to buy gas from Turkmenistan at a lower price and sell it at a higher price on the European market than developing a new gas source (such as on the Yamal Peninsula, or on the shelves of the Barents or Kara Seas) since that would require intensive capital investment. Russia's expected goal is to use Turkmenistan's gas to reach their export targets effectively, and to gain the maximum benefits. Another reason why Russia and Turkmenistan signed a contract and established grounds for energy partnership is to reduce or eliminate competition between the two countries on the world's markets.

If Turkmenistan has other export routes, and sells its resources at lower prices on world markets, Russia's gas will be less competitively priced. Moreover, from a strategic point of view, as far as Russia's concerned, they have to prevent this from occurring and through signing a contract regarding Turkmen natural gas, Russia will be able to control the procurement, processing, transportation and to ensure its export route and marketing, etc. via Russia in order to monopolize and maintain that monopoly on the natural gas resources exported from Central Asia.

For long, Russia had been using the Central Asia-Center Pipeline to maintain that natural gas monopoly. However, in 2009, when the China - Central Asia gas pipeline's construction was completed, the Turkmen have a new alternative export route, and the situation has changed finally. ⁶³

⁶² Wenger, Andreas, Robert W. Orttung, and Jeronim Perovic, ed., *Russian Business Power: The Role of Russian Business in Foreign and Security Relations* (London: Routledge, 2006), p. 99-100.

⁶³ Wenger, Andreas, Robert W. Orttung, and Jeronim Perovic, ed., *Russian Business Power: The Role of Russian Business in Foreign and Security Relations* (London: Routledge, 2006), p. 99-100.

2.1.3.4.4 Turkmenistan's Relations with Chinese Companies ⁶⁴

When the China - Central Asian gas pipeline was completed in 2009, natural gas from Turkmenistan began shipping its supplies in part through that pipeline system, which goes through Uzbekistan and Kazakhstan, and eventually connects to China's West-East Pipeline phase, providing supplies for China's domestic demand in natural gas. For China, imports of natural gas from Turkmenistan has created one more stable source of natural gas to import via land, and enhanced its energy security. Also since 2004 Russia has been engaged in discussions with China in regard to Siberian gas for China's imports. Russia hopes to charge gas supplies to China at European prices which are more expensive.

China, as a country with a high demand for energy, needs to increase alternatives for energy transportation via overland pipeline from Turkmenistan. By doing so, China can also increase the strength of its bargaining position on issues of Russia's Siberian gas, so as to negotiate a reduction in the price of imported Russian gas. In accordance with the economics of supply and demand theory, when supply exceeds demand on the market, prices fall.

In September of 2013, Chinese President Xi Jinping visited five Central Asian countries, meeting with high-level leaders from all of the five Central Asian countries, and participated in the G20 meeting and SCO Summits. In these he signed 83 trade agreements with the five Central Asian countries, which aim to expand economic and trade cooperation, and build a "New Silk Road." Xi Jinping stated that relations based on the principles of mutual respect, mutual understanding, and mutual trust, will deepen the friendship and strategic partnership between Turkmenistan and China and strengthen economic and trade cooperation projects, which will also be helpful in stabilizing the region.

2.1.3.5 Turkmenistan Natural Gas Export Routes

⁶⁴ "China-Turkmenistan ties becoming strategic," China Daily, Sep 2, 2013, available at: http://www.chinadaily.com.cn/china/2013xivisitcenterasia/2013-09/02/content_16936006.htm, (accessed:

2.1.3.5.1 The Central Asia-Center Natural Gas Pipeline

Prior to 2009, Turkmenistan exported natural gas to Russia, Ukraine, and Iran mainly through the Central Asia-Center pipeline. Gazprom, a Russian natural gas company, signed a contract with Turkmenistan in 2009, stating that it is to purchase 30 bcm of natural gas prior to 2028. That contract has however yet to be fully complied with.

2.1.3.5.2 The China-Central Asia Natural Gas Pipeline

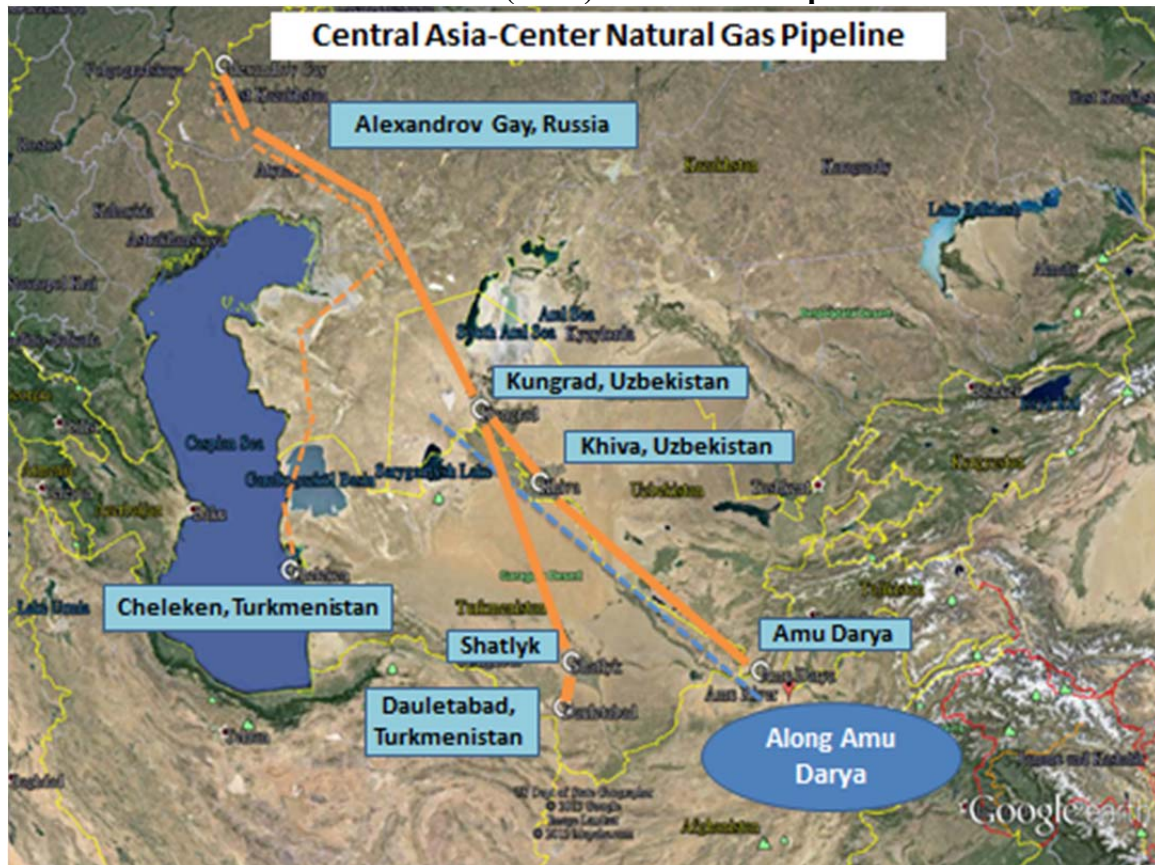
With the completion of the China-Central Asia natural gas pipeline at the end of 2009, Turkmenistan's natural gas exports to China began to increase significantly. According to agreements between the two countries, Turkmenistan is to pump 30 bcm of natural gas through the China-Central Asia pipeline for 30 years starting from 2009, amounting to half of Turkmenistan's total natural gas production.⁶⁵

Starting from Turkmenistan's natural gas fields in the Amu Darya, Dauletabad and Cheleken regions, extracted natural gas is pumped north via pipelines overland, ending at Alexandrov Gay in Russia (please see Chart 2-7 below).

20140201).

⁶⁵ "Analysis of gas export routes in Central Asian countries," Xinjiang's philosophy and social sciences network, May 14, 2013, available at: http://big5.xjass.com/zy/content/2013-05/14/content_281686.htm, (accessed: 20140508).

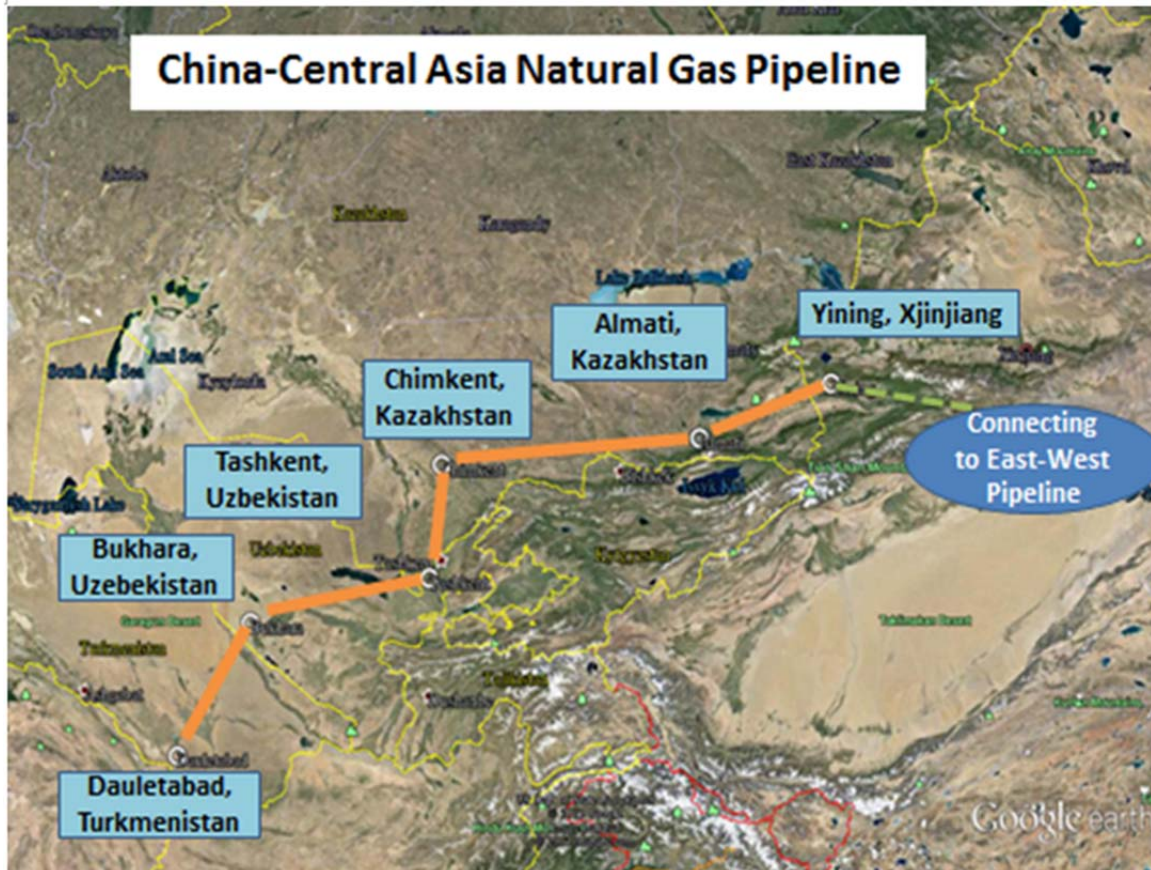
Chart 2-7: The Central Asia-Center (CAC) Natural Gas Pipeline



Source: Compiled by author

Starting from Turkmenistan's Dauletabad gas field, this pipeline carries extracted natural gas eastward overland via a pipeline to Xinjiang Province of China (please see Chart2-8 below).

Chart 2-8: The China-Central Asia Natural Gas Pipeline



Source: Compiled by author

2.1.4 Current Circumstances of Energy Exploitation in Other Central Asian Countries

2.1.4.1 Energy Exploitation Circumstances of Other Central Asian Countries

Uzbekistan has a large amount of oil and natural gas reserves. According to the “BP Statistical Review of World Energy 2013,” its proven reserves are 0.6 billion barrels of crude oil, and 1.1 trillion cubic meters of natural gas. Uzbekistan does assist in the transfer of natural gas from Turkmenistan to Russia and China, charging some transfer fees for this assistance. Formerly Uzbekistan's lack of proper gas pipelines limits its ability to export freely. However, with the completion of the Central Asia-China gas pipeline in December of 2009, Uzbekistan diversified its gas export routes and began to supply its natural gas to China. Unlike the other Central Asian countries, Tajikistan and Kyrgyzstan are largely destitute in regard to oil and natural gas.

2.1.4.1.1 Energy Exploitation in Uzbekistan

Uzbekistan is located in the center of Central Asia, covering an area of 448.9 thousand square kilometers, with deserts and mountains accounting for over 60% of it. It shares a short stretch of border with Afghanistan to the south, while its neighbors are Kazakhstan to the north and west, Kyrgyzstan and Tajikistan to the east and southeast respectively, and Turkmenistan to the south and west. Its neighboring countries are all essentially landlocked. It doesn't have any direct outlet to the world's oceans, and neither do its neighboring countries. Uzbekistan is the only country of the five Central Asian countries bordering all the other four Central Asian states.

Uzbekistan's oil-producing regions are mainly in the North Ustyurt and Mangyshlak basins, of which about 70% of oil production is from the Kokedumalak oilfield of West Kashkadarya. Uzbekistan's national oil and gas resources are divided into five regions of origin: namely, the Ustyurt oil and gas region, the Bukhara-Khiva oil and gas area, the Gissar

oil and gas area, the Surkhandarya oil and gas area, and the Fergana oil and gas area.⁶⁶

Uzbekistan has a large amount of oil and natural gas reserves. According to the “BP Statistical Review of World Energy 2013,” its proven reserves are 0.6 billion barrels of crude oil, and 1.1 trillion cubic meters of natural gas. But a lack of foreign investment and inadequate transportation facilities impedes the export of its energy. However, Uzbekistan does assist in the transfer of natural gas from Turkmenistan to Russia and China, charging some transfer fees for this assistance.

After Uzbekistan became self-sufficient in oil production in 1996, its oil output has increased steadily. However, due to a lack of foreign investment, its oil production decreased after 2003. As of 2012, Uzbekistan was producing 68,000 barrels of oil per day (bbl/d), a 41 percent decline from 2005 levels. Currently, demand for oil surpasses its oil production causing Uzbekistan to be once again a net oil importer.

Uzbekistan is the second largest natural gas producer in Central Asia. Yet, Uzbekistan consumes nearly 84 percent of its gas production or about 47.9 bcm (billion Cubic Meters) in 2012. Uzbekistan's lack of proper gas pipelines limits its ability to export its surplus production freely. In 2008 roughly 90% of the natural gas exported from Uzbekistan was exported to Russia.⁶⁷ However, with the completion of the Central Asia-China gas pipeline in December of 2009, Uzbekistan began to provide China with 2 billion cubic meters of natural gas per year. This also resulted in some decrease in its gas exports to Russia. In 2013, Uzbekistan reached a bilateral agreement with Russia to export 7.5 bcm (billion cubic meters) of natural gas.⁶⁸

⁶⁶ 國立政治大學碩士論文，「從地緣戰略論中國對中亞能源外交」，張鴻俊（：台北2010年6月）頁，33。[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy to Central Asian countries by geostrategic study), unpublished thesis, National Chengchi University, (Taipei: June 2010), pp. 33.]

⁶⁷ Paramonov, V., A. Stokov, and O. Stolpovskij. “Russian Participation Within Uzbekistani Oil And Gas Industry: Main Problems, Forecasts and Risks,” European Dialogue, available at: <http://eurodialogue.org/eu-central-asia/Russian-Participation-Within-Uzbekistani-Oil-And-Gas-Industry-Main-Problems-Forecasts-And-Risks>, (accessed: 20131208).

⁶⁸ “Central Asian gas export routes,” Ministry Of Commerce of the People's Republic of China, May 8, 2013, available at: <http://big5.mofcom.gov.cn/gate/big5/ccn.mofcom.gov.cn/spbg/show.php?id=14112>, (accessed: 20140112).

Table 2-7: Statistics for Oil & Gas Production and Consumption in Uzbekistan

year	Oil production (Thousand barrels daily)	Oil consumption (Thousand barrels daily)	Gas production (BCM, Billion Cubic Meters)	Gas consumption (BCM, Billion Cubic Meters)
2005	115	100	54.0	42.7
2008	102	91	62.2	48.7
2009	95	88	60.0	43.5
2010	78	75	59.6	45.5
2011	77	80	57.0	49.1
2012	68	82	56.9	47.9

Source: BP Statistical Review of World Energy 2013

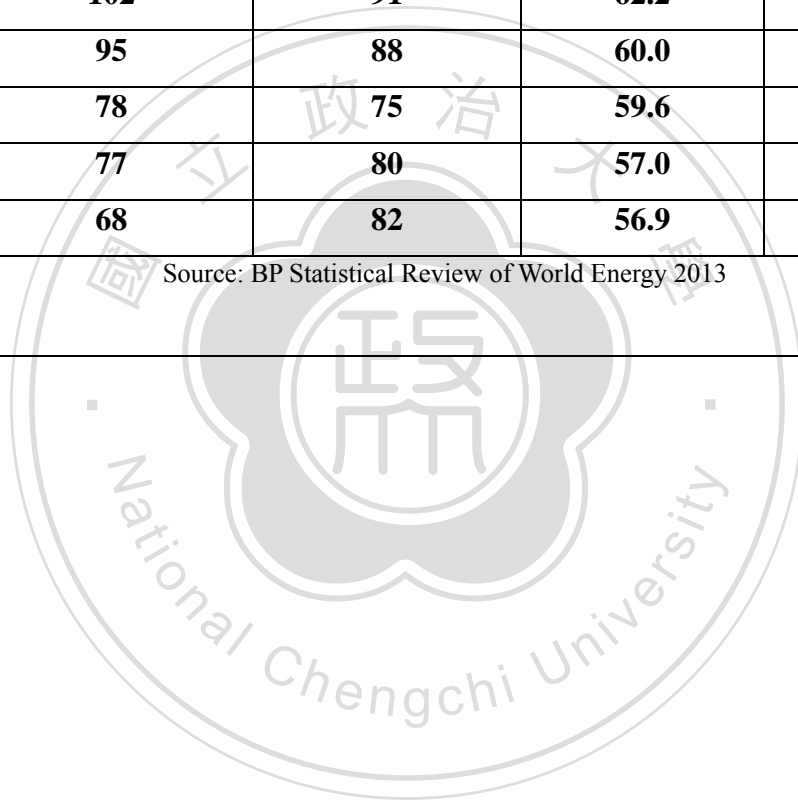
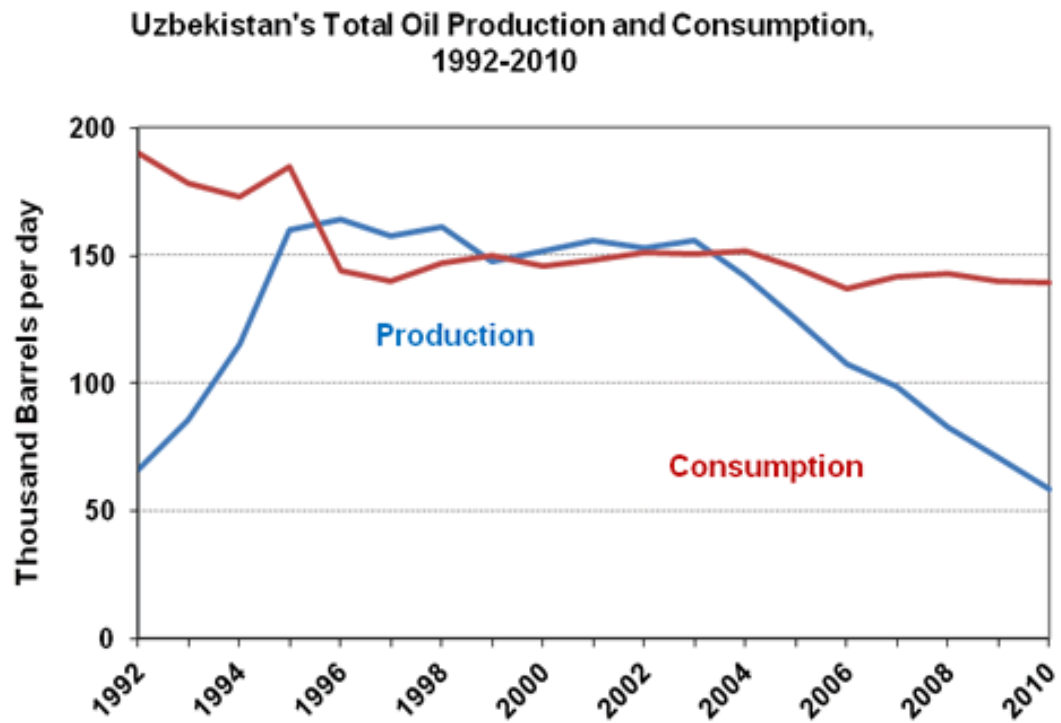


Chart 2-9: Uzbekistan's Total Oil Production and Consumption 1992-2010



Source: EIA International Energy Statistics

Source: U.S. Energy Information Administration (EIA), <http://www.eia.gov/countries/cab.cfm?fips=UZ>.

2.1.4.1.2 Energy Exploitation in Tajikistan and Kyrgyzstan

Unlike the other Central Asian countries, Tajikistan and Kyrgyzstan are largely destitute in regard to oil and natural gas. Especially this is true for Tajikistan, while both countries depend upon Turkmenistan for oil and natural gas supplies to invigorate their economies as they step on to the world stage once again. After local exploration for ten years in search of oil and natural gas resources to exploit only not very significant resources have been found, falling far short of their demand for domestic consumption. These countries both have introduced some energy policies for national development without much success. Nonetheless, other infrastructure projects such as hydropower stations in Tajikistan and developments which tie into our research focus do exist however they do not fall within the domain of this current study.

2.1.4.2 A Brief Overview of Uzbekistan, Tajikistan and Kyrgyzstan's Post-Soviet History

Since Uzbekistan became independent in 1991, Islam Karimov has basically favored a dictatorship during his tenure. Uzbekistan joined the Commonwealth of Independent States in 1991. While it withdrew from the CIS in 1999. After the color revolutions (2003 Georgia's "Rose Revolution," 2004 the Ukraine's "Orange Revolution" and 2005 the Kyrgyz's "Tulip Revolution") and in the aftermath of the Andijan Massacre in 2005, in July of 2005 Uzbekistan reversed its position of close ties with America and established closer ties with the PRC which supported the regime's response to the events in Andijan.

After independence in 1991, Tajikistan was plunged into a civil war from 1992-1997. In 1997 the opposition party in the Tajik Civil War signed a ceasefire agreement. After the civil war ended, Tajikistan restored its political stability and accepted extensive foreign aid.

Since Kyrgyzstan became independent in 1991, Askar Akayev remained president until the March 2005 Tulip Revolution occurred in which he was overthrown and Kurmanbek Bakiyev took over as president. In April 2010 a revolution occurred again in Kyrgyzstan, the former president Kurmanbek Bakiyev was overthrown and Roza Otunbayeva served as transitional government leader. This incident can be said to be the reversal of the Color

revolutions. Regarding to Manas Air Base, Kyrgyzstan parliament on June 2013 decided that U.S. troops must withdraw from Manas Air Base before July 2014.

2.1.4.2.1 Uzbekistan's Post-Soviet History

In 1991 Uzbekistan declared independence after the collapse of the USSR. On the 29th of December, 1991 Islam Karimov won Uzbekistan's presidential election for the first time. In 1995 through a controversial referendum, Islam Karimov's term was extended to 2000, and in the presidential election of 2000, he was re-elected. On January 27th, 2002 Islam Karimov proposed a referendum, so that the constitutional presidential term was extended from five years to seven years. On 23th Dec 2007 Islam Karimov was re-elected again in the presidential election.⁶⁹

According to a recent review, the government now led by Islam Karimov supports joining the CIS (Commonwealth of Independent States) after the Andijan Massacre in 2005 which causing hundreds of people to be killed, and this event is regarded as a symbol of the human rights abuses ongoing in Uzbekistan.⁷⁰

Uzbekistan joined the Commonwealth of Independent States in 1991, later withdrawing in 1999. After the "Color Revolutions" (referring to Georgia's 2003 "Rose Revolution," the Ukraine's 2004 "Orange Revolution" and Kyrgyzstan's 2005 "Tulip Revolution") and in the aftermath of the Andijan Massacre in 2005, with harsh criticism of Uzbekistan's repressive regime and calls for an impartial investigation coming from the West, in July of 2005 Uzbekistan reversed its position of maintaining close ties with America and established closer ties with the PRC which supported the regime's actions at Andijan. Uzbekistan, under SCO auspices, invoked a provision within its agreements with the U.S. asking the U.S. to withdrawal

⁶⁹ Novostei, Vremya. "President Islam Karimov's legal position becomes questionable as of tomorrow," Ferghana Information agency, Jan 22, 2007, available at: <http://enews.ferghananews.com/article.php?id=1807>, (accessed: 20140515).

⁷⁰ "Islam Karimov—One of the Principle Obstacles To Anybody's Eurasian Union Plans," ThereAreNoSunglasses: American Resistance To Empire blog site, Jul 1, 2012, available at: <http://therearenosunglasses.wordpress.com/2012/07/01/islam-karimov-one-of-the-principle-obstacles-to-anybodys-eurasian-union-plans>, (accessed: 20140515).

its troops from military bases in Uzbekistan.⁷¹

It should be noted that for several years Uzbekistan enjoyed something of a client status with the U.S. which allowed Karimov even to make a personal visit to the Pentagon during the later Bush Administration -- an event which is usually reserved for close U.S. allies only.

2.1.4.2.2 Tajikistan's Post-Soviet History

Almost immediately after independence, Tajikistan was plunged into a civil war that saw various factions vying for power, some allegedly backed by Russia and/or Iran. The occurrence of this extremely tragic civil war in 1992-1997 led to increasing poverty and the flight of much of the non-Tajik or non-Muslim ethnicities that had resided in Tajikistan including much needed technical expertise for Tajik industries. The territories of the former Soviet Union and states of the West became home to these émigrés seeking better economic opportunities abroad. Today most of Tajikistan's male population regularly migrates to Russia and other nations in search of employment, making Tajikistan one of the poorest countries in Asia.⁷²

In 1994 Emomali Rahmon was elected as president of Tajikistan, and since then Tajikistan has in effect been a one-party state, and subject to much outside scrutiny. In 1997 the opposition party in the Tajik Civil War (the United Tajik Opposition) signed a ceasefire agreement. In 1999's presidential election Emomali Rahmon was re-elected. After the civil war ended, Tajikistan restored its political stability and accepted extensive foreign aid.⁷³ Russian border troops remained deployed along the Tajik-Afghan border until after the summer of 2005. After the 2001 "9/11" terrorist attacks in the U.S., French troops were stationed in the Tajik capital of Dushanbe, at its airport. Moreover, the U.S. military regularly

⁷¹ "Q&A: U.S. Military Bases in Central Asia," The New York Times, Jul 26, 2005, available at: http://www.nytimes.com/cfr/international/slot2_072605.html?pagewanted=print&r=0, (accessed: 20140515).

⁷² "Tajikistan Well Placed to Exploit Russo-Iranian Competition," History's Shadow: Exploring the link between history and today blog site, Feb 6, 2014, available at: <http://historyshadow.wordpress.com/tag/tajik-civil-war>, (accessed: 20140516).

⁷³ "Tajikistan Civil War," GlobalSecurity.org, available at: <http://www.globalsecurity.org/military/world/war/tajikistan.htm>, (accessed: 20140516).

conducts joint training missions in the country as well. ⁷⁴

2.1.4.2.3 Kyrgyzstan's Post-Soviet History

In October 1990 Askar Akayev was elected president of Kyrgyzstan, and he remained president until the March 2005 Tulip Revolution occurred in which he was overthrown and Kurmanbek Bakiyev took over as president. In April 2010 a revolution occurred again in Kyrgyzstan, the former president Kurmanbek Bakiyev was overthrown and a new constitutional system was established during which time Roza Otunbayeva served as the transitional government leader. These events caused at least 75 people to be killed and 458 wounded. On the 15th of April, 2010, Kurmanbek Bakiyev fled to Kazakhstan. ⁷⁵

Because of the fact that the former Kyrgyz president Kurmanbek Bakiyev was supported by the United States, presumably the incident may have been directed by Russia, so that the pro-US President Kurmanbek Bakiyev was replaced by the transitional government under Roza Otunbayeva's leadership to reduce the US military presence in Central Asia, in line with the strategic interests of Russia, and this incident can be said to be a reversal of one of the "Color Revolutions" (as aforementioned). ⁷⁶

Another issue relates to the Manas Air Base that is the only US military base currently left in Central Asia. On the 3rd of February, 2009, under considerable pressure President Kurmanbek Bakiyev had announced plans to shut down the Manas Air Base immediately, which was approved by Kyrgyzstan's Parliament on the 19th of February 2009. But after further diplomatic negotiations the base was allowed to remain open. In January 2013, the U.S. Assistant Secretary of State Robert Blake announced that Washington was holding

⁷⁴ "French forces withdraw from Tajikistan while Russian troops get comfortable," Journal of Turkish Weekly, May 6, 2013, available at: <http://www.turkishweekly.net/news/149970/french-forces-withdraw-from-tajikistan-while-russian-troops-get-comfortable.html>, (accessed: 20140516).

⁷⁵ Hiro, Dilip. "Kyrgyzstan's second tulip revolution," The Guardian, Apr 8, 2010, available at: <http://www.theguardian.com/commentisfree/2010/apr/08/kyrgyzstan-second-tulip-revolution>, (accessed: 20140516).

⁷⁶ Engdahl, F. William. "Kyrgyzstan's 'Roza Revolution' — *Cui Bono?*" Washington, Moscow, Beijing and the Geopolitics of Central Asia," F W Engdahl, available at:

preliminary discussions with Kyrgyzstan over continuing to have access to Manas after 2014. Kyrgyzstan parliament on June 2013 however decided that U.S. troops must withdraw from Manas Air Base before July 2014.⁷⁷

2.2 Development Strategies of Central Asian Countries

2.2.1 The Development Strategy of Kazakhstan

After the independence of Kazakhstan in 1991, its economy has been on the rise. The first challenge was to stabilize the economy and to promote the reform of economic liberalization. In 1997 Kazakhstan adopted Kazakhstan's 2030 Development Strategy and completed privatization of its economy and constructed a banking system in international standards. Therefore, the goals of the Kazakhstani policies transited from that of economic stability to promotion of economic growth, and further to promotion of social welfare, transportation, education and healthcare, as well as including other points of reform. On the 15th of December, 2012, the Kazakh President Nursultan Nazarbayev proposed the Kazakhstan 2050 Strategy which focuses on reform at both economic and political level.

Kazakhstan is the most natural gas-and-oil-rich country among the Central Asian countries, and it is also a country that has adopted a "Resource-Based Nation Founding Strategy." According to the U.S. Energy Information Administration, it is estimated that Kazakhstan's oil reserves could reach 13 billion tons, and its natural gas reserves could well equal 6 trillion cubic meters.

2.2.1.1 Kazakhstan's Economic Development Strategy

Since the independence of Kazakhstan, its economy has been on the rise, and from 2000, the

<http://www.engdahl.oilgeopolitics.net/print/Kyrgyzstan%20Part%20I.pdf>, (accessed: 20140516).

⁷⁷ "Manas International Airport Ganci Air Base / Manas Air Base Bishkek, Kyrgyzstan," GlobalSecurity.org, available at: <http://www.globalsecurity.org/military/world/centralasia/manas.htm>, (accessed: 20140420).

economic growth of Kazakhstan achieved 10% each year, improving the living standards of its citizens momentarily. Yet due to the global financial crisis that occurred in 2008, Kazakhstan suffered the most among the five nations in Central Asia due to its higher level of internationalization. Bank assets decreased and unemployment surged as a result. Its GDP growth rate in 2008 plunged to only 2.4%, and sank further to 1.2% in 2009.⁷⁸ The Kazakh government therefore proposed a series of countermeasures, including the injection of funds into its domestic financial market by a total of 18 billion US dollars through government investment, the central bank, major state own enterprises, and financial institutions, to stabilize its financial market.⁷⁹

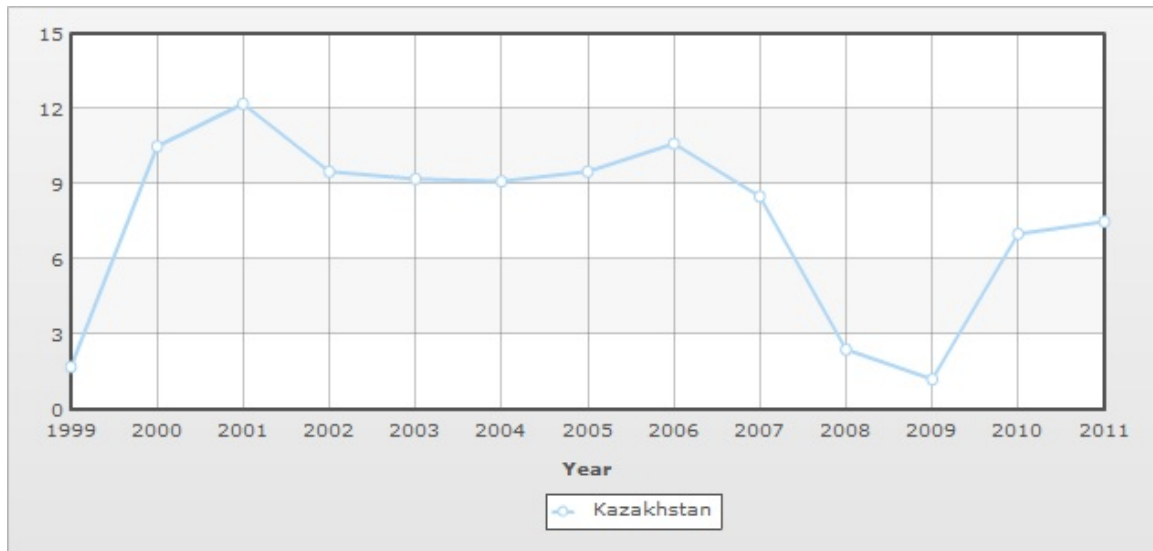
⁷⁸ "Kazakhstan GDP real growth rate," Index Mundi, available at: <http://www.indexmundi.com/g/g.aspx?c=kz&v=66>, (accessed: 20120830).

⁷⁹ 新大賽局」，蔡振雄-大學碩士論文清雲科技，「印三國在中亞地區的競逐、中、俄 (桃園：2010 年 7 月)頁， 27。[Tsai, Chenshiung. *Xin Dasaiju E、Zhong、Yin Sanguo Zai Zhongyadiqu De Jingzhu* (The New Great Game: The Rivalry between Sino-Russia and India in Central Asia), unpublished thesis, Ching Yun University, (Taoyuan: July 2010), pp. 27.]

Table 2-8: Kazakhstan's GDP Growth Rate	
Year	GDP Growth Rate
1999	1.7
2000	10.5
2001	12.2
2002	9.5
2003	9.2
2004	9.1
2005	9.5
2006	10.6
2007	8.5
2008	2.4
2009	1.2
2010	7
2011	7.5

Source: "Kazakhstan GDP-real growth rate," Historical Data Graphs per Year, Index Mundi
<http://www.indexmundi.com/g/g.aspx?c=kz&v=66>

Chart 2-10: Kazakhstan's GDP Growth Rate



Source: "Kazakhstan GDP-real growth rate," Historical Data Graphs per Year, Index, available at:
<http://www.indexmundi.com/g/g.aspx?c=kz&v=66>

2.2.1.1.1 Kazakhstan's Development Strategy for 2030

"Kazakhstan 2030: Prosperity, Security and Ever Growing Welfare of All the Kazakhstanis" was proposed in 1997 by President Nursultan Nazarbayev. In it Nazarbayev highlights economic priorities first, and then considers issues at the political level. The "Kazakhstan-2030" Strategy provides a direction for the long-term development of Kazakhstan, according to seven principles, namely: ⁸⁰

- 1) National security.
- 2) Domestic political stability and consolidation of society
- 3) Economic growth based on an open market economy with a high level of foreign investments and internal savings
- 4) Health, education and the well-being of Kazakhstani citizens
- 5) Power resources
- 6) Infrastructure, more particularly transport and communication.
- 7) Professionalism at the state level

After the independence of Kazakhstan in 1991, the first challenge was to stabilize the economy, first by creating an independent financial system and a national currency. Kazakhstan also needed a legal framework which standardized its market economy, promoted the reform of economic liberalization, so as to meet with the world market's standards. In 1997 Kazakhstan completed privatization of its economy and constructed a banking system in accordance with international standards. Therefore, the goals of Kazakhstani policies transited from that of economic stability to promotion of economic growth, and further to promotion of social welfare, transportation, education and healthcare, as well as including other points of reform. The 2007 global financial crisis had a huge impact on Kazakhstan, as its economy was greatly affected, especially its banking system. The Kazakh government made a series of amendments in terms of economy policy to cope with that crisis. However, the principles of the "Kazakhstan-2030" strategy did not change. ⁸¹

⁸⁰ "The Strategy for development of the Republic of Kazakhstan until the year 2030," Official Site of the President of the Republic of Kazakhstan, available at: http://www.akorda.kz/en/category/gos_programmi_razvitiya, (accessed: 20140515).

⁸¹ Utegenova, Ailuna R. "Kazakhstan's 2030 Development Strategy: Significance and Results," *Institute for*

2.2.1.1.2 Kazakhstan's Development Strategy for 2050

On the 15th of December, 2012, the Kazakh President Nursultan Nazarbayev proposed the Kazakhstan 2050 Strategy which focuses on reform at both economic and political level, so that by 2050 Kazakhstan could become one of the top 30 global economies. This strategy also forwards seven principles as follows: ⁸²

- 1) Economic policy of the new course – all around economic pragmatism based on the principles of profitability, return on investment and competitiveness
- 2) Comprehensive support of entrepreneurship – leading force in the national economy
- 3) New principles of social policy – social guarantees and personal responsibility
- 4) Knowledge and professional skills are key landmarks of the modern education, training and retraining system
- 5) Further strengthening of the statehood and development of the Kazakhstan democracy
- 6) Consistent and predictable foreign policy is promotion of national interests and strengthening of regional and global security
- 7) New Kazakhstan patriotism is basis for success of our multiethnic and multi-confessional society

In his presentation of this strategy President Nazarbayev outlined two stages with the first stage covering the period up to 2030, during which time Kazakhstan is slated to make a leap to complete modernization, similar to that of South Korea or Singapore in the last fifty years. It points the direction for the development of Kazakhstan's traditional industries and the creation of a processing industrial sector. The second stage is designed to outline the period of 2030 to 2050. This stage is meant to ensure sustainable development by emphasizing the "knowledge economy," with high value added goods and a foundation of

Peace Research and Security Policy at the University of Hamburg (IFSH) (Hamburg: 2011): 133-134.

⁸² "Kazakhstan 2050 Strategy: a new political course of successful country," kazakhstanlive.com, available at: <http://www.kazakhstanlive.com/Documents/Kazakhstan%202050%20Strategy%20summary.pdf>, (accessed: 20140516).

engineering services.⁸³

2.2.1.2 Kazakhstan's Energy Policy

The Republic of Kazakhstan Law on Subsurface and Subsurface Use was decreed on May 1995, marking the commencement of state-run petroleum production. Foreign investors may acquire rights to oil field development and operations in Kazakhstan by purchasing shares of companies. In 1997 Kazakhstan government established the Ministry of the Oil and Gas Industry. A national oil and gas company “KazMunayGas” was then created. In January 2004, Kazakhstan introduced a new tax regime including “Rent Tax” and “Excess Profit Tax”. Besides, Kazakhstan restricts foreign companies from holding more than 50% of shares in oil and gas projects, leaving the remaining shares to KazMunayGas. In 2005, the Kazakhstan government amended the Law on Subsurface and Subsurface Use, granting more power to the government itself when it comes to the acquisition and transfer of resource assets.⁸⁴ From CNPC buying PetroKazakhstan case one can see that by enforcement of more stringent environmental laws and regulations and policies Kazakhstan authority could bargain with foreign energy companies, allowing the Kazakh government lucrative ownership of some of the shares in foreign energy companies via its oil field development joint venture.

Kazakhstan is located in Central Asia, the center of Eurasia, without any outlet to the world's seas. If Kazakhstan wants to export its oil resources to the world market, it has to go through other countries. Its priority is to take full advantage of its geography and actively develop a diversified energy export strategy. Most of Kazakhstan's oil originally was exported to Europe via Russia, but now in addition to Russia, it can be exported to East Asian energy markets via the Central Asia–China gas pipeline in the east, or to the Persian Gulf via pipeline through Iran in the south. In the future, Kazakhstan will still be taking advantage of foreign

⁸³ Weitz, Richard. “Nazarbayev's State of Nation Address Reaffirms Bold Development Vision,” The Jamestown Foundation, Jan 31, 2014, available at: http://www.jamestown.org/regions/centralasia/single/?tx_ttnews%5Bpointer%5D=3&tx_ttnews%5Btt_news%5D=41903&tx_ttnews%5BbackPid%5D=53&cHash=4dc581dd99906500ff6f57b5202eac9a, (accessed: 20140516).

⁸⁴ “Kazakhstan oil and gas tax guide,” Ernst & Young, 2014, available at: [http://www.ey.com/Publication/vwLUAssets/Kazakhstan_oil_and_gas_tax_guide_2014/\\$FILE/EY-Kazakhstan](http://www.ey.com/Publication/vwLUAssets/Kazakhstan_oil_and_gas_tax_guide_2014/$FILE/EY-Kazakhstan)

investments, cutting-edge technology and workmanship to develop its national oil industry, developing gas export pipelines in different directions to prevent itself from relying on any single country, and facilitating its infrastructure development to improve its oil industry, guarantee satisfaction of its own national demands, and elevate the added value on its exported products.

The Republic of Kazakhstan Law on Subsurface and Subsurface Use was decreed on May 12th, 1995, marking the commencement of state-run petroleum production and the privatization of oil refining. Foreign investors may acquire rights to oil field development and operations in Kazakhstan by purchasing shares of companies in the petroleum industry. In 1997, hoping to facilitate swift and effective communication and cooperation between the government and foreign petroleum companies, the Kazakhstan government streamlined its own agencies by abolishing the Ministry of the Oil and Gas Industry. A national oil and gas company, “KazMunayGas,” was then created, consisting of seven limited companies: Aktyubinskneft, Embamunaygaz, Kktyubinskneft, Mangistaumunaygaz, Tengizmunaygaz, Uzenmunaygaz, and Yuzhkazneftgaz. KazMunaygas represents the Kazakhstan government in exercising its rights when signing oil contracts with foreign companies. It is also entitled to oversee actions undertaken by foreign oil companies within Kazakhstan, ensuring compliance with domestic laws and stated treaties or regulations.⁸⁵

In terms of its fiscal policy, Kazakhstan introduced a new tax regime in January 2004. Among other taxes, there is a progressive tax known as the “Rent Tax” that targets exports, with an increasing tax rate that reflects rising oil prices. This new revenue regime raised the government’s share in oil-related income to between 65% and 85%. It also implemented the Excess Profit Tax and the restriction that foreign companies may not hold more than 50% of shares in oil and gas projects, leaving the remaining shares to KazMunayGas.⁸⁶ In 2005, the

[oil_and_gas_tax_guide_2014.pdf](#), (accessed: 20140516).

⁸⁵ 吳賢煜大學碩士論文清雲科技，「競逐中國與俄羅斯在哈薩克斯坦之能源」，（桃園：2010 年 6 月）頁，40。[Wu, Hsienyu. *Zhongguo Yu Eluosi Zai Hasakesitan Zhi Nengyuan Jingzhu* (China and Russia on energy competition at Kazakhstan), unpublished thesis, Ching Yun University, (Taoyuan: June 2010), pp. 40.]

⁸⁶ “The three major oil-producing countries of Central Asia’s energy policy,” Official Site of the Ministry of Land and Resources of the People’s Republic of China, April 15, 2010, available at: http://big5.mlr.gov.cn/wskt/glxx/kcgl/201004/t20100415_715348.htm, (accessed: 20121130).

Kazakhstan government amended the Law on Subsurface and Subsurface Use, granting more power to the government itself when it comes to the acquisition and transfer of resource assets and further adding restrictions on mergers of resource assets for foreign companies.⁸⁷

2.2.1.3 The Case of CNPC buying PetroKazakhstan⁸⁸

Lukoil owns half of the North Kumkol oilfield through a joint venture, Turgai Petroleum, which was originally agreed to with the Kazakh government. Later, however, that share was sold to a Canadian private firm, Hurricane (which changed its name to PetroKazakhstan in 2002). Kazakhstan simultaneously sold the neighboring South Kumkol field to Hurricane, leaving Lukoil with what amounted to a 25 percent stake. By 2005, PetroKazakhstan (originally the Canadian private firm, Hurricane) was sold to the Chinese National Petroleum Corporation (CNPC). As a publicly traded Canadian company, PetroKazakhstan experienced difficulties with the Kazakh government. Kazakhstan accused the firm of price fixing and brought charges against its management after PetroKazakhstan bought a controlling stake in Shymkent refinery. PetroKazakhstan was also the focus of harsh enforcement of environmental regulations. At that point, PetroKazakhstan's minority shareholder, Timur Kulibayev (President Nazarbayev's son-in-law and KazKommertsbank leader) attempted a hostile takeover that failed. Eventually through relevant legal procedures and coordination channels, the state-owned oil company KazMuniGaz (KMG) won the right to buy back one-third of those shares (against the wishes of CNPC.)

Although Lukoil unsuccessfully sued in Canadian court to prevent CNPC from buying the firm, Lukoil continued to pursue legal actions in Kazakhstan's courts (against the company's new Chinese owners) and won an initial \$200 million judgment in early 2006. However, in September, 2006 Kazakh courts redistributed another \$60 million of PetroKazakhstan's South Kumkol assets to the Turgai Petroleum joint venture in the North Kumkol oil field.

⁸⁷ 大學碩士論文清雲科技，「俄中在中亞的能源競逐」，孫丕澄 (桃園：2010 年 6 月)頁，81。[Sun, Picheng. *E Zhong Zai Zhongya De Nengyuan Jingzhu* (Russia and China in Central Asia's energy to compete), unpublished thesis, Ching Yun University, (Taoyuan: June 2010), pp. 81.]

⁸⁸ Marten, Kimberly. "Disrupting the Balance, Russian Efforts to Control Kazakhstan's Oil, Ponars Policy Memo No.428," *Columbia University* (New York: December 2006), pp. 3-4.

From these events one can see that Kazakhstan has gradually realized that its policy regarding encouragement of foreign investment in the Kazakh oil industry in the early years of independence was too loose, and by enforcement of more stringent environmental laws and regulations and policies that will limit foreign energy companies it has reduced those investment losses, while making them into bargaining chips, allowing the Kazakh government lucrative ownership of some of the shares in foreign energy companies via its oil field development joint ventures.

2.2.2 The Development Strategy of Turkmenistan

Turkmenistan takes restrictive measures on the import trade, as imports of goods face high tariffs. Under the strict control of Turkmenistan's government, the country's national development can be said to have maintained economic stagnation. Turkmenistan's "President-for-Life," Saparmurat Niyazov, died on the 21th of December 2006. By February 2007 he was replaced by Gurbanguly Berdimuhamedow. Berdimuhamedow instituted a new financial policy in macroeconomic terms to attract foreign investments in the country's industrial activities through a series of measures, while the banking sector was also improved. From 2007 onward, Turkmenistan began a re-adjustment of its foreign investment regulations and renewal of its diplomatic relations with several countries including Russia, China, the U.S. and other nations of potential investors.⁸⁹

2.2.2.1 Turkmenistan's Original Isolation Policy⁹⁰

Turkmenistan is located in Central Asia between Uzbekistan, Russia and Iran, a strategic geographic location, making it a suitable transit country for export of resources. However, because of (the tendencies of) its government's policies, the country's regional economy is

⁸⁹ Pomfret, Richard. "Turkmenistan's Foreign Policy," The China and Eurasia Forum Quarterly, 2008, available at: <http://www.chinaeurasia.org/current-issue/47-2008/81-volume-6-no-4-2008.html>, (accessed: 20140516).

⁹⁰ Peyrouse, Sébastien. *Turkmenistan: Strategies of Power, Dilemmas of Development* (New York: M.E.Sharpe,

greatly restricted. Turkmenistan takes restrictive measures on import trade, as imports of goods face high tariffs, and must be state registered. Such policies have led to rampant smuggling. Moreover, due to a lack of daily necessities (i.e., a lack of domestic supply) and the severe restrictions on imports, its demand is far greater than its supply. Therefore, food and commodity prices have skyrocketed, which further promotes the black market. This country rarely adopted policies of economic liberalization during its early post-independence governments. The former president of Turkmenistan, Saparmurat Niyazov, criticized this by saying that Turkmenistan should be quickly converted into a market economy (his idea emphasizing a need to move from central planning to a market economy).

As a matter of fact, under the strict control of Turkmenistan's government, the country's national development can be said to have maintained economic stagnation. Furthermore, due to the country's isolation from international institutions, it is difficult to observe the real state of Turkmenistan's economy. Basically, Turkmenistan's post-independence economic system is still using Soviet-era models, which means focusing on the development of heavy industry, while ignoring other aspects such as services and consumer goods.

2.2.2.2 Turkmenistan's Later Development Strategy

In December of 1995 Turkmenistan's government proposed the 'Presidential Program for the Social and Economic Development of Turkmenistan,' that outlines future restructuring of the economy through privatization, and attracting foreign investment. This proposal was divided into two phases: Phase 1 covered a period up to 1996, mainly aimed at small businesses, allowed for small shops, cafe, restaurant, etc. to be opened. Phase 2 included medium-size enterprises, but the government still holds control of a large proportion of this level of participation in Turkmenistan's economy.⁹¹

In late 1999 Turkmenistan proposed 'The National Strategy of Socio-Economic Transformations of Turkmenistan for the Period until 2010' which outlines four priority

2012), p. 155-157.

⁹¹ Peyrouse, Sébastien. *Turkmenistan: Strategies of Power, Dilemmas of Development* (New York: M.E.Sharpe,

development areas that include economic independence, food security, social protection and ecological safety.⁹²

Turkmenistan's "President-for-Life," Saparmurat Niyazov, died on the 21st of December, 2006. By February 2007 he was replaced by Gurbanguly Berdimuhamedow. Berdimuhamedow instituted a new financial policy in macroeconomic terms to attract foreign investments in the country's industrial activities through a series of measures, while the banking sector was also improved. But that sector is still heavily dependent on the state, allowing small businesses to have little chance of making a real profit. In addition, small businesses must also face bureaucratic interference, a system of patronage and official corruption in the necessity of paying bribes to officials. However, bribes are cheaper than the fines.⁹³

2.2.2.3 Turkmenistan's Energy Strategy

After Turkmenistan's independence in 1991, oil and gas exploration wasn't initiated until 1997 due to the isolationist policies of Saparmurat Niyazov and the continual political purges and some level of animosity towards certain neighboring nations, while foreign companies encountered investment difficulties prior to his death in 2006. The National Assembly of Turkmenistan passed the Hydrocarbon Resources Law in 1996. Turkmenistan's deceased former President Niyazov approved further amendments of that law on August 22nd, 2005, fortifying the president's and the nation's absolute control over resource development. The dominant role of the Ministry of Oil and Gas Industry and Mineral Resources in external economic cooperation was also enhanced. In addition to formulating policies, the Ministry is also in charge of attracting foreign capital and signing agreements concerning the development of oil and gas fields.⁹⁴

2012), p. 157-158.

⁹² "Country Development Strategy: Turkmenistan," Regional Resource Centre for Asia and the Pacific, available at: <http://www.rrcap.ait.asia/nsds/brief/Turkmenistan%20brief.pdf>, (accessed: 20121201).

⁹³ Peyrouse, Sébastien. *Turkmenistan: Strategies of Power, Dilemmas of Development* (New York: M.E.Sharpe, 2012), p. 158.

⁹⁴ 大學碩士論文清雲科技, 「俄中在中亞的能源競逐」, 孫丕澄 (桃園: 2010 年 6 月)頁, 82。[Sun, Picheng. *E Zhong Zai Zhongya De Nengyuan Jingzhu* (Russia and China in Central Asia's energy to compete),

Under Turkmenistan's new leader, Gurbanguly Berdimuhamedow, from 2007 onward, Turkmenistan began a re-adjustment of its foreign investment regulations and renewal of its diplomatic relations with several countries including Russia, China, the U.S. and other nations of potential investors. Owing to its relatively conservative economic policies among Central Asian countries, Turkmenistan was not affected greatly by the 2008 international financial crisis. As the China-Central Asia natural gas pipeline opened up in December 2009, Turkmenistan began to provide China with 40 billion cubic meters of natural gas within a span of thirty years, which is to benefit its economy directly and diversify its energy exports.

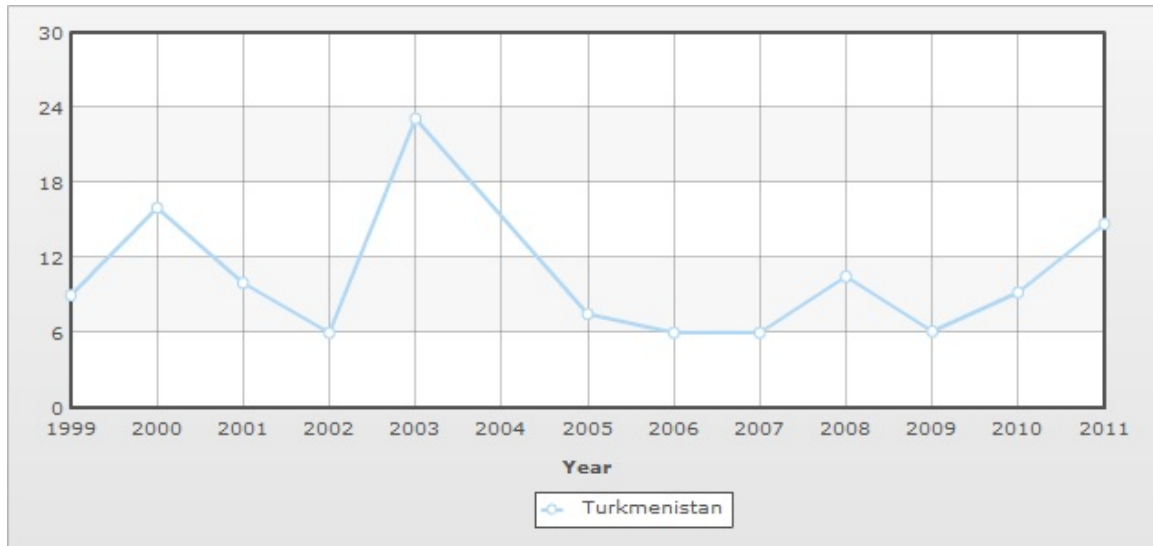
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unpublished thesis, Ching Yun University, (Taoyuan: June 2010), pp. 82.]

⁹⁵「新大寶局」，蔡振雄-大學碩士論文清雲科技，「印三國在中亞地區的競逐、中、俄 (桃園：2010 年 7 月)頁， 27。[Tsai, Chenshiung. *Xin Dasaiju -E、Zhong、Yin Sanguo Zai Zhongyadiqu De Jingzhu* (The New Great Game-The Rivalry between Sino-Russia and India in Central Asia), unpublished thesis, Ching Yun University, (Taoyuan: July 2010), pp. 27.]

Table 2-9: Turkmenistan's GDP Growth Rate	
Year	GDP Growth Rate
1999	9
2000	16
2001	10
2002	6
2003	23.1
2004	7.5
2005	6
2006	6
2007	6
2008	10.5
2009	6.1
2010	9.2
2011	14.7

Source: "Turkmenistan GDP-real growth rate," Historical Data Graphs per Year, Index Mundi
<http://www.indexmundi.com/g/g.aspx?c=tx&v=66>

Chart 2-11: Turkmenistan's GDP Growth Rate

Source: "Turkmenistan GDP-real growth rate," Historical Data Graphs Per Year, Index Mundi,
<http://www.indexmundi.com/g/g.aspx?c=tx&v=66>

2.2.3 The Energy Strategies of Uzbekistan, Kyrgyzstan and Tajikistan

Uzbekistan embraces an open-door policy, beckoning foreign capital and technology. On April 28th, 2000, Uzbekistan adopted a presidential decree “On Measures to Attract Direct Foreign Investment into Oil and Gas Surveying and Production,” stating that foreign companies are exempt from all taxes during the exploration and investment period. By the end of 2006, the government of Uzbekistan published the new “Mineral Resource Development Tax.” Usage tax on hydrocarbon resources and consumption tax on petroleum products were greatly reduced. Both Kyrgyzstan and Tajikistan are marked by a severe paucity of hydrocarbon resources, thus dependent on imports to meet their demands.

2.2.3.1 The Energy Strategy of Uzbekistan

Uzbekistan is another important oil and gas producer in Central Asia. It nevertheless faces problems such as inadequate oil transit pipelines as an entirely landlocked country. Nonetheless, Uzbekistan embraces an open-door policy, beckoning foreign capital and technology. On April 28th, 2000, Uzbekistan adopted a presidential decree, “On Measures to Attract Direct Foreign Investment into Oil and Gas Surveying and Production,” stating that foreign companies are exempt from all taxes during the exploration and investment period, also granting foreign investors exploring new hydrocarbon fields in the Ustyurt region a concession term of 25 years, which can be prolonged if required.⁹⁶

This precedent was a precursor of a succession of pragmatic and advantageous policies that Uzbekistan has formed to attract foreign investment in the hydrocarbon sector, and has sparked tremendous interest abroad in Uzbekistan’s oil and gas industry. As of 2005, the policy incentives for foreign hydrocarbon exploration companies include: tax exemption during the geological survey period, privileges in profit tax, value added tax, consumption tax, and property tax.⁹⁷

⁹⁶ Tereshchenko, Vladimir. “Uzbekistan’s oil and gas route,” Oil of Russia, 2011, available at: <http://www.oilru.com/or/47/999>, (accessed: 20140516).

⁹⁷ “Investment Climate of the Republic of Uzbekistan,” Sito in costruzione, available at: <http://www.uzbekistanitalia.org/home/economia-e-affari/investments>, (accessed: 20140516).

By the end of 2006, the government of Uzbekistan passed into law the new “Mineral Resource Development Tax,” effective since January 1st, 2007. Particularly notable were that the usage tax on hydrocarbon resources and consumption tax on petroleum products were greatly reduced. The authorities even further bestowed more privileges on foreign hydrocarbon extraction companies; companies with foreign capital carrying out search and survey work in designated areas are endowed with special rights to dispose of any resources found in the area at their own will; foreign companies may acquire the right to develop oil fields through joint ventures or direct concession terms; if foreign investors fail to locate resources of industrial value within the area specified in the contract, they in turn are granted the priority in surveying new sites; both enterprises of single proprietorship and joint ventures are entitled, as long as stated in company charters or agreed in concessions, to process partially extracted hydrocarbon products and substances for export. Uzbekistan also issued numerous laws governing foreign investment in the oil and gas industry.⁹⁸

2.2.3.2 The Energy Strategies of Tajikistan and Kyrgyzstan

Both Kyrgyzstan and Tajikistan are marked by a severe paucity of hydrocarbon resources, thus dependent on imports to meet their demands.

Tajikistan became independent in 1991 and suffered from civil war started from May 1992 and finally ended in 1997.⁹⁹ Tajikistan has great potential to develop hydro-power. Water flows could be used to produce electricity for the region. Relative projects were initiated while Uzbekistan rejected the project fearing that those projects may limit its access to water supplies. Tensions between the two countries increased due to this and other issues.

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⁹⁸ “The three major oil-producing countries of Central Asia's energy policy,” Official Site of the Ministry of Land and Resources of the People's Republic of China, Apr 15, 2010, available at: http://big5.mlr.gov.cn/wskt/glkx/kcgl/201004/t20100415_715348.htm, (accessed: 20140301).

⁹⁹ “Tajikistan Civil War,” GlobalSecurity.org, available at: <http://www.globalsecurity.org/military/world/war/tajikistan.htm>, (accessed: 20140516).

¹⁰⁰ “Tajik Energy Policy Creates Regional Tension,” Future Directions International, Apr 11, 2012, available at: <http://www.futuredirections.org.au/publications/energy-security/27-energy-security-swa/464-tajik-energy-policy>

The Tajik Government adopted “The National Development Strategy for 2006–2015” whose goal is to attain sustainable economic growth, improve social services and reduce poverty.¹⁰¹

Kyrgyzstan has adopted the “National strategy for sustainable development of Kyrgyz Republic for 2013-2017.”¹⁰² This has a goal aimed at mining resources and also includes a means of dealing with natural resources and the economic potential of this mountainous country, from activities such as pastoralism, tourism and protection of biological diversity. Using the energy potential of the mountains helps to reduce other negative impact on the environment.¹⁰³

2.3 Security Concerns of Central Asian Countries

Critical security issues in the Central Asia region include political unrest in Kyrgyzstan (uprising in April 2010), transnational crimes (drug smuggling across borders), conflicts over resources among Central Asian states (such as Kazakhstan, Turkmenistan, and Uzbekistan being reluctant to supply energy to neighboring Kyrgyzstan and Tajikistan), water disputes on the Fergana border (due to the upstream countries, Tajikistan and Kyrgyzstan, insisting on building large hydro power stations, while the downstream Uzbekistan and Kazakhstan are opposed), factions within Central Asian nations (crackdowns on opposition parties in order to maintain monopolies of political power) and the complex and interwoven relations between major world powers (such as the competition among Russia, the U.S., China and other great powers).

-creates-regional-tension.html, (accessed: 20131128).

¹⁰¹ “National Development Strategy of the Republic of Tajikistan for the Period To 2015 (Draft),” State Committee on Investments and State Property Management of the Republic of Tajikistan, Aug 2006, available at: http://amcu.gki.tj/eng/images/stories/nds_en.pdf, (accessed: 20131201).

¹⁰² “Kyrgyzstan approves National Strategy for Sustainable Development for 2013-2017,” Amu Darya Basin Network, available at: <http://amudaryabasin.net/news/kyrgyzstan-approves-national-strategy-sustainable-development-2013-2017>, (accessed: 20140203).

¹⁰³ “The national goal of sustainable development,” KyrgyzTour, Feb 11, 2012, available at: <http://kyrgyztour.com/?p=145>, (accessed: 20140120).

The independence of Central Asian countries has been rather brief. In addition, their economic development has been subject to constraints placed upon them by their external environment and this has been further bogged down by several periods of economic recession. The region's security situation has always been volatile. There was first in the early 1990s a drop in production and hyperinflation brought about by the disruption of conventional economic links and financial difficulties.

Subsequently in 1998, the Central Asian countries were dealt a double blow by the Asian and Russian financial crises. The Color Revolutions in 2005 sent shock waves through the region as well. Lastly, in 2008, Central Asia encountered the detrimental effects of the global financial crisis and heavy security pressure imposed by the ongoing war in Afghanistan. It is due to these factors that Central Asia is unlikely to succeed in achieving social and political transformation.¹⁰⁴

There have been a few fundamental problems hindering the economic development of the five Central Asian countries since their independence from the Soviet Union. These can be elaborated by three points:¹⁰⁵

- 1) The economic development of Central Asian countries is impeded by their geopolitical environment. As basically landlocked countries they naturally have less access to the outside world, economic ties are hence more difficult to be established. Central Asia lacks direct access to ocean transport and must bypass and/or rely on countries such as China, Russia, and Iran to connect them to ocean transport routes.
- 2) After the disintegration of the Soviet Union, the existing industrial foundation was shattered due to its lack of competitiveness, ultimately downgrading most Central Asian countries to raw material exporters and primary industry producers. Moreover, past economic links and markets were associated with, or oriented towards, prior "domestic" partners within

¹⁰⁴ Sun, Zhuangzhi. "The social and political transformations among Central Asian countries: principles, characteristics and difficulties," *Russian Central Asian & East European Studies*, 2011, available at: <http://euroasia.cass.cn/news/161514.htm>, (accessed: 20110227).

¹⁰⁵ 王承宗, 「中亞經濟發展與商機」, *問題與研究* 6 (台北: 2003): 118。[Wang, Chengzung. *Zhongya Jingjifazhan Yu Shangji* (Central Asia's Economic Development and Business Opportunities) *Wenti Yu Yanjiu* (Issues & Studies) 6 (Taipei: 2003): 118.]

the former Soviet Union. Despite their intention to taper reliance on these Soviet era “domestic” regions or neighboring newly independent states, Central Asian countries found this goal unattainable in the short run.

3) In the past, the economy and finances of Central Asian countries depended much on reimbursement and provision from the Soviet Union’s central government. Suddenly these countries were cast adrift on their own. As their finances were mired in adversity, Central Asian countries were in need of external support and assistance, particularly in establishing new market economies and propelling necessary reforms.

2.3.1 Critical Security Issues in the Central Asia region ¹⁰⁶

2.3.1.1 Political Unrest in Kyrgyzstan

Since the violent uprising in April 2010, and an insurgency in the south in June 2010, the nation has been nearly paralyzed and the central government’s authority completely disintegrated.

2.3.1.2 Transnational Crimes

Transnational drug smuggling has been a dominant threat that has haunted the Central Asian countries for more than a decade. These activities are also closely related to circumstances in Afghanistan. In order to ensure the unobstructed nature of “drug trafficking corridors,” international criminal organizations disrupted Central Asia’s border security.

2.3.1.3 Conflicts over Resources among Central Asian States

Although natural resources in Central Asia are abundant, their distribution is as yet uneven.

¹⁰⁶ 孫壯志,「中亞地區安全的熱點問題與走勢分析」,《俄羅斯中亞東歐研究》2 (北京: 2011)。(Sun, Zhuangzhi. *Zhongyadiqu Anquan De Redian Wenti Yu Zoushifenxi* (An analysis of hotspots and developments in Central-Asian security) *Eluosi Zhongya Dongou Yanjiu* (Russian Central Asian & East European Studies) 1 (Beijing: 2011))

This not only contributes to huge gaps between each of the Central Asian country's economic development potential, but also it has planted the seeds for clashes and conflicts between the newly-independent republics. In recent years, issues of "energy security" became more and more prominent. Kazakhstan, Turkmenistan, and Uzbekistan, as hydrocarbon exporters, are reluctant to supply energy to neighboring Kyrgyzstan and Tajikistan, as they lack sufficient foreign exchange reserves to afford the high cost of imported hydrocarbons. This further leads to frequent energy crises in Kyrgyzstan and Tajikistan, thus affecting relations between nations in Central Asia. Consequently the level of tensions has escalated as a result.

2.3.1.4 Water Disputes on the Fergana Border

The Fergana region is situated at the border of Uzbekistan, Kyrgyzstan, and Tajikistan, with a dense multiethnic population of over 10 million people. The existence of ethnic enclaves and scarcity of irrigation water sources explain why the three countries till now have failed to complete border demarcation. The upstream countries, Tajikistan and Kyrgyzstan, insist on building large hydro power stations with the aim to intercept more water for economic gain. The downstream nations of Uzbekistan and Kazakhstan are nonetheless more powerful nations in comparison, also have taken a strong stand on the matter. As upstream water is vital to Uzbekistan's agricultural industry, Uzbekistan has continually issued warnings to Tajikistan and Kyrgyzstan, even threatening to adopt measures such as economic sanctions. Small-scale violent clashes have erupted at the border. For example, President Almazbek Atambayev of Kyrgyzstan announced in December of 2013 that a US\$1 billion Kyrgyz-Russian arms deal was made to prevent any "foreign army attack." If an agreement cannot be reached between upstream and downstream countries, large-scale clashes may arise. The complexities of unresolved disputes remain at issue.¹⁰⁷

2.3.1.5 Factions within Central Asian Nations

In order to maintain monopolies on political and economic power or prevent reform, some

¹⁰⁷ Satke, Ryskeldi. "Kyrgyz president fears war in the south," Asia Times Online, December 20, 2013, available at: http://www.atimes.com/atimes/Central_Asia/CEN-01-201213.html, (accessed: 20140208).

Central Asian nations crack down on opposition parties labeling them as terrorists or factors of instability towards their respective nations. Events in Uzbekistan are a prime example of this. Uzbekistan's president Islam Karimov labels his political opponents as "Islamic Fundamentalist terrorists." He labels unaffiliated opponents, as "Hizb ut-Tahrir" (an actual political organization founded in 1953 as a Sunni Muslim organization in Jerusalem, known as HT, Party of Liberation) which aims to restore Islamic rule in Muslim lands. HT supports democracy and is opposed to religious wars, ethnic favoritism and discrimination against women. Karimov announced that it was HT members who had a connection to a 30th of July, 2004 Tashkent bombing though there is a lack of evidence. More than 85 alleged HT members were subsequently arrested.¹⁰⁸

2.3.1.6 The complex and interwoven relations between major world powers

The Central Asia region is adjacent to China, Russia, and Iran, serving as an important crossroads for traffic from all directions. Its abundance of oil and gas reserves and crucial strategic position endow the region with extraordinary economic and security values in the eyes of major world powers. The power struggle between Russia and the U.S. over this region has been ongoing for over a decade, vying with each other on energy and disposition of armed forces, which can be exemplified by first the fight over "westbound" and "northbound" pipeline transit routes and then the dispute over military base construction in Kyrgyzstan. As the deadline for troop withdrawal from Afghanistan approaches and Iran's problems with Israel and the West continues, the geopolitical and strategic position of Central Asia is once again illuminated. China's investments in Central Asia's economy are ever-expanding; the European Union has given more substance to new strategies concerning Central Asia; Japan clings onto a "Central Asia plus Japan" meeting that opens up dialog among foreign ministers of the group; Turkey has advanced by hosting the 2010 Conference on Interaction and Confidence-Building Measures in Asia (CICA); and India is proactively seeking opportunities for northward entry. Each of these major world powers has its own stakes in Central Asia, yielding intertwined relationships and leaving little room for negotiations. Thus, the

¹⁰⁸ Schwartz, Stephen. "Hizb ut-Tahrir in Uzbekistan and Kazakhstan," Center for Islamic Pluralism, August 11, 2004, available at: <http://www.islamicpluralism.org/1268/hizb-ut-tahrir-in-uzbekistan-and-kazakhstan>, (accessed:

occurrences of collision of interests can be expected to increase.

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3. The Strategy of China's Energy Diplomacy in Central Asia

3.1 Current Circumstances of China's Energy Usage, Supply and Demand and the Strategic Security of China

3.1.1 Current Circumstances of China's Utilization of Energy Resources

China became a net importer of oil in 1993. China depends on oil and natural gas for its continued economic growth. According to the predictions of the Mid-term and Long-term Energy Development Strategies, by the Chinese Academy of Engineering, from 2030 to 2050, crude oil demands of China will reach 644 million tons by the year 2030. Without management, dependence on imported oil will exceed approximately 70% of total consumption by 2030. In order to ensure economic safety, it is necessary for China to face and consider these issues.

In recent years, China has experienced rapid economic growth. Demand for energy, especially oil, has increased drastically as a consequence. China became a net importer of oil in 1993. Moreover China depends on oil and natural gas for its continued economic growth. The transportation and power generation sectors are the main consumers of oil in China. In addition, the ever-growing use of automobiles by consumers in China now also results in further increases in the demand for oil. Such demands will continue to expand in the future as China starts developing petrochemical industries.

By 2010, the GDP (Gross Domestic Production) of China reached 39.8 thousand billion RMB with an annual growth of 11.2%, and ranked second worldwide. Its national revenue reached 8.3 trillion RMB. Achievements that China obtained in economic development in recent years promoted its rapid economic growth, resulting in China becoming the largest “manufacturing plant of the world” in the 21st century; and thus it became the second largest economy globally. According to statistics from the IEA, China has become the second largest oil consuming country next to the United States in 2003. Domestic

yields and supplies of crude oil are facing two potential concerns: the first is that crude oil resources may not be sufficient, as domestic yields are inadequate to satisfy the needs; the other is that economic development would cause sudden spikes in growth of demand for oil, resulting in insufficiency of relevant oil resources, as well as continued dependence on imports.¹⁰⁹

According to the predictions of the *Mid-term and Long-term Energy Development Strategies*, by the Chinese Academy of Engineering, from 2030 to 2050, even in low-demand scenarios, crude oil demands of China will reach 644 million tons by the year 2030. Without management, dependence on imported oil will exceed approximately 70% of total consumption by 2030. Furthermore, according to statistics from the *World Energy Outlook 2030* revealed by BP in 2011, the oil consumption of China alone will necessitate the use of almost half of the total net global growth by 2030. In order to ensure economic safety, it is necessary for China to face and consider these issues.¹¹⁰

According to the *BP Statistical Review of World Energy 2013*, consumption of oil in the year 2012 was approximately 10,221 (thousand barrels daily), and the consumption of natural gas was about 143.8BCM (billion cubic meters). Meanwhile, oil yields in China in 2012 were only 4155 (thousand barrels daily), and the yield of natural gas was about 107.2BCM (billion cubic meters). At the end of 2012, proven reserves of oil in China were 173 thousand million barrels, which comprise only 1.0% of the world total, while proven reserves of natural gas were 3.1 trillion cubic meters, which equals only 1.7% of the world's total reserves.

¹⁰⁹ 徐慧芳，「中國的能源戰略-以中俄原油管道合作為例」，*中亞政經情勢與挑戰：2012年*（桃園：健行科技大學歐亞研究中心，2012年），頁188。[Hsu, Hueifang. *Zhongguo De Nengyuanzhanlue -Yi Zhonggeyuanyouguandao Hezuo Weili* (China's energy strategy – The example of the cooperation in Kazakhstan–China oil pipeline), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies Publishing, 2012): 188.]

¹¹⁰ “Dependence on foreign oil surpassed the United States for the first time. How to ensure energy security?,” Xinhua News Agency, Aug 13, 2011, available at: http://big5.xinhuanet.com/gate/big5/news.xinhuanet.com/energy/2011-08/13/c_121855256.htm, (accessed: 20140105).

China's oil consumption has increased from 6944(thousand barrels daily) in 2005 to 10221(thousand barrels daily).However, the growth of China's oil production has been quite limited hence its dependency rate has increased from 37% in 2005 to 53% in 2012 (please see Table 3-1 & Table 3-2).

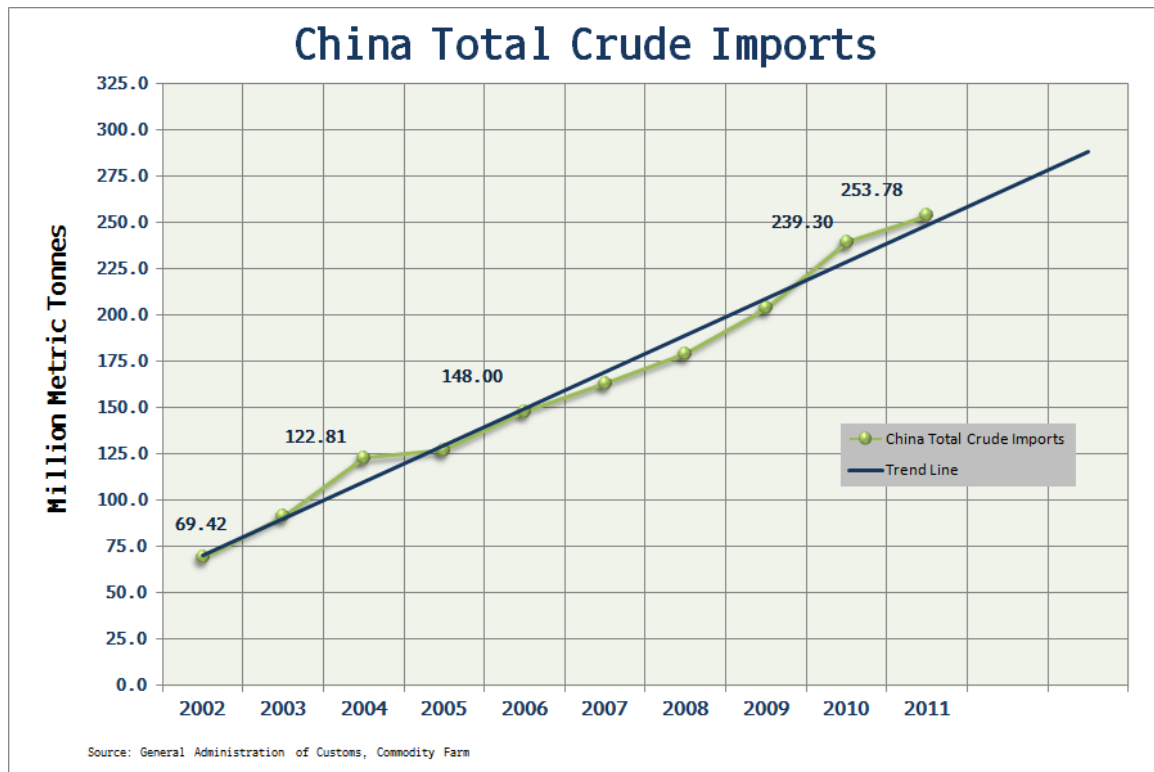
Table 3-1: Statistics for oil & natural gas production and consumption in China				
year	Oil production (Thousand barrels daily)	Oil consumption (Thousand barrels daily)	Gas production (BCM, Billion Cubic Meters)	Gas consumption (BCM, Billion Cubic Meters)
2005	3642	6944	49.3	46.8
2008	3814	7947	80.3	81.3
2009	3805	8229	85.3	89.5
2010	4077	9272	94.8	106.9
2011	4074	9750	102.7	130.5
2012	4155	10221	107.2	143.8

Source: BP Statistical Review of World Energy 2013

Table 3-2: Statistics for oil imported, consumption and dependency rate in China				
year	Oil Production (Thousand barrels daily)	Oil consumption (Thousand barrels daily)	Oil Import (Thousand barrels daily)	Dependency Rate (%)
2005	3642	6944	2598	37%
2008	3814	7947	3577	45%
2009	3805	8229	4081	49%
2010	4077	9272	4753	51%
2011	4074	9750	4964	50.9%
2012	4155	10221	5430	53%

Source: BP Statistical Review of World Energy 2013

Chart 3-1: China's Total Crude Imports



Source: "China Crude Oil Imports – No Slow Down Here," Feb 3, 2012, CommodityFarm,
<http://www.commodityfarm.com/bh/2012/02/03/china-crude-oil-imports-no-slow-down-here>

3.1.2 The Challenge to the Energy Security of China

The maritime transportation of energy resources by China possesses potential risks. The fluctuation of international oil prices brings unstable factor to China's energy security. Since 2008, China has been speeding up development of its Strategic Petroleum Reserve (SPR) to prevent from sudden disruptions in oil supply. China finished filling the reserve tanks of first phase SPR sites (Zhenhai, Huangdao, Daishan) in 2009. Phase two has eight sites which is forecast to be completed by 2015. The third phase of construction of SPR facilities is forecasted to be complete by 2020. The total capacity of all three phases of its SPR facilities will amount to approximately 500mb.

3.1.2.1 Maritime Transportation Risks ¹¹¹

China imports approximately 130 million tons of oil every year; the main transportation method is by sea. More than 70% of imported oil is shipped via the Malacca Strait. The main transportation corridor is from the Indian Ocean via the Strait of Malacca, and then through the South China Sea. It is a remote route through the Strait of Malacca, where transportation is extremely busy and piracy poses a continuing threat, which in turn raises importation costs due to incursion of higher maritime shipment fees and higher insurance costs. Particularly, when passing through the narrowest part of the Strait of Malacca with a width of 1.5 miles only, pirates may appear, situations may turn complicated, and accidents may occur at any time. Since the transport artery of oil for China faces such a huge potential threat, once a security incident occurs, domestic oil supply is in danger of being choked off.

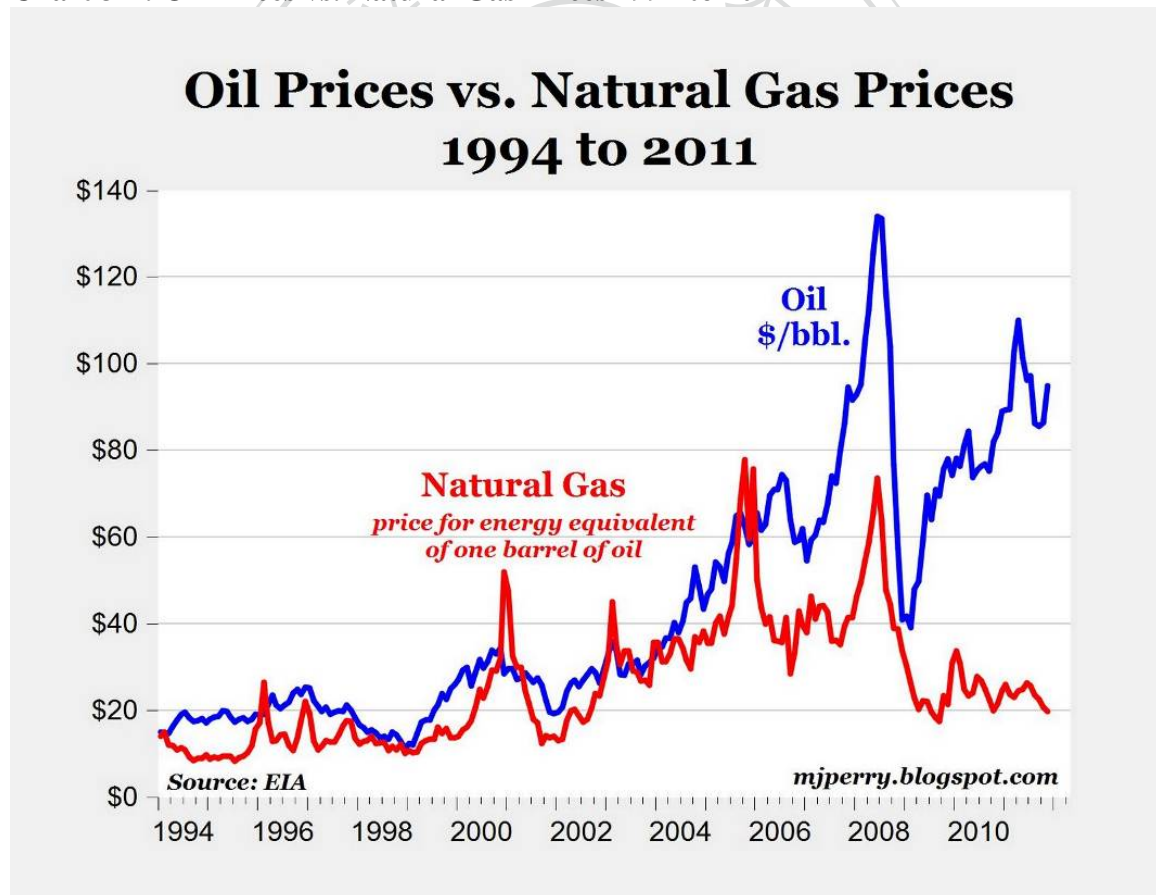
3.1.2.2 Fluctuation of International Oil Prices ¹¹²

¹¹¹ 吳明蕙，「中國能源問題之探討」，*經濟研究* 2 (台北: 2007): 280。[Wu, Minghuei. *Zhongguo Nengyuan Wenti Zhi Tanta* (A Study on China's Energy) *Jingji Yanjiu (Economic Research)* 2 (Taipei: 2007): 280.]

¹¹² "Retrospective and Prospects for the 2008 ~ 2009 international oil prices" china.com.cn, Jan 12, 2009, available at: http://big5.china.com.cn/economic/txt/2009-01/12/content_17094115.htm, (accessed: 20131201).

Despite the fact that China is the second largest energy consuming country in the world, its influence on world energy prices is rather limited. Due to a list of unfavorable factors, such as oil production capacity of OPEC members reaching their limits, insufficient oil refining facilities in China, as well as tensions in the Middle East, international oil prices rose to more than 70 US dollars in April, 2006 from approximately 32 US dollars in 2004. However, in 2009, the financial crisis of the United States impacted the real economy, causing the global economic downturn; the oil demand growth slowed significantly, and oil prices dropped sharply. In addition, US dollar trends also had an impact on changes in international oil prices.

Chart 3-2: Oil Prices vs. Natural Gas Prices 1994 to 2011



Source: Perry, Mark J. "Charts of the Day: Oil vs. Natural Gas Prices; On an Energy-Equivalent Basis Gas is 79% Cheaper vs. Oil," Nov 19, 2011, Professor Mark J. Perry's Blog on Economics and Finance, available at: http://mjperry.blogspot.tw/2011_11_13_archive.html

3.1.2.3 China's Insufficient Strategic Petroleum Reserve (SPR)

Arab members of the Organization of Petroleum Exporting Countries (OPEC) imposed an embargo against the West during the 1973 Arab-Israeli War. This crisis caused huge economic losses for many Western, oil importing economies at a global level. The Strategic Petroleum Reserve (SPR) was established to help prevent a repetition of such an economic disruption. The Arab oil embargo also fostered the establishment of the International Energy Agency (IEA) to develop plans and measures for emergency responses to energy crises and members of the International Energy Agency originally were required to keep crude oil reserves equivalent to 60 days' worth of net imports. After the 1979 (or second) oil crisis, members of the International Energy Agency became required to have a strategic petroleum reserve equal to 90 days of the prior year's net oil imports for their respective country.¹¹³

3.1.2.2.1 The First Phase of China's SPR Plan

Since 2008, China has been speeding up their development of the nation's Strategic Petroleum Reserve (SPR) to provide a solution to insulate its economy and safeguard the country's security interests from sudden disruptions in oil supply. Zhenhai of Ningbo City, Huangdao of Qingdao City, Daishan of Zhoushan City, and Dalian are the sites for China's SPR Phase I and all four sites are located in coastal cities. China finished filling the reserve tanks of these of first phase SPR sites in 2009. China has completed four stockpiling facilities with a capacity of around 103 mb in the first phase, almost 15 days of total oil consumption.¹¹⁴

¹¹³ Andrews, Anthony and Robert Pirog. "The Strategic Petroleum Reserve: Authorization, Operation, and Drawdown Policy," Congressional Research Service (CRS), available at: <http://www.fas.org/sgp/crs/misc/R42460.pdf>, (accessed: 20131125).

¹¹⁴ "Oil and Gas Emergency Policy - China 2012 update," International Energy Agency, available at: <http://www.iea.org/publications/freepublications/publication/name%2c28189%2cen.html>, (accessed: 20140220).

Table 3-3: China's Total Petroleum Consumption						
Year	2007	2008	2009	2010	2011	2012
(Thousand Barrels Per Day)	7534.08	7467.52	8539.72	9330.17	9852.08	10276.83

Source: U.S. Energy Information Administration (EIA),

<http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm?tid=5&pid=5&aid=2&cid=CH.&syid=2006&eyid=2012&unit=TBPD>

Beijing took advantage of lower oil prices right after the 2009 financial crisis to build up its strategic petroleum reserves. The prices for the crude oil stored in the first phase averaged only \$58 U.S. dollars a barrel. So, it is fair to say that the global financial crisis enhanced and hastened China's rise in the international market and the fluctuation of international crude oil prices does provide opportunities for China to accumulate stocks of oil for its SPR inventory whenever oil prices are low.

3.1.2.2.2 The Second Phase of China's SPR Plan

While the four Phase I sites are located in important coastal ports, the National Development and Reform Commission (NDRC) has shifted focus in selecting the Phase II sites to inland provinces. Phase II comprises eight storage sites built at the following locations: Zhanjiang (Guangdong), Huizhou (Guangdong), Lanzhou (Gansu), Jintan (Jiangsu), Jinzhou (Liaoning), Tianjin, Dushanzi (Xinjiang) and Shanshan (Xinjiang) forecasted to have total capacity of 206.9 million barrels.¹¹⁵ Phase two is still currently under construction,¹¹⁶ and it is forecast

¹¹⁵ Guan, Qingyou. "China's oil reserves need to make up classes," FTChinese.com, May 3, 2012, available at: <http://big5.ftchinese.com/story/001044373>, (accessed: 20110227).

¹¹⁶ "Oil and Gas Emergency Policy - China 2012 update," International Energy Agency, available at:

to be completed by 2015.¹¹⁷

3.1.2.2.3 The Third Phase of China's SPR Plan¹¹⁸

The third phase of SPR facilities construction is forecasted to have a total capacity of 180 million barrels by 2020. The total capacity of the three phases of SPR facilities will amount to approximately 500mb.

3.2 Energy Interests of China in Central Asia

3.2.1 China Seeks to Exploit Multiple Energy Routes due to Increasing Energy Demands

China became a net oil importer in 1993. China's demand for oil has been surging ever since, in response to its increasingly rapidly expanding economy. In 2003, China became the second-largest consumer of petroleum products behind the United States. To prevent any energy shortage, China set up a special fund that aims to establish overland pipeline routes and to invest in overseas oil and natural gas infrastructure and assets. Given Kazakhstan's massive reserves and geographic position close to China, this nation is an ideal candidate for economic cooperation. Despite the fact that Turkmenistan is not neighboring China, through utilization of pipelines via Uzbekistan and Kazakhstan to China, Turkmenistan's natural gas is exported to China.

Chinese scholars Ming Ting-Chuan (明庭權) and Han Shwe-Fong (韓學峰) (2004)

<http://www.iea.org/publications/freepublications/publication/name%2c28189%2cen.html>, (accessed: 20140308).

¹¹⁷ "Strategic petroleum reserve (China)," Wikipedia.org, available at:

[http://en.wikipedia.org/wiki/Strategic_petroleum_reserve_\(China\)](http://en.wikipedia.org/wiki/Strategic_petroleum_reserve_(China)), (accessed: 20131230).

¹¹⁸ "People's Republic of China, 2012" International Energy Agency (IEA), 2012, p11-12, available at: http://www.iea.org/publications/freepublications/publication/China_2012.pdf, (accessed: 20140225).

observed in the early 2000's that sources of Chinese importation of crude oil were not sufficiently diverse, while the routes by which imports were made were vulnerable, except for the fuel sources which could be imported from Russia or Central Asia, all imports were arriving to China via sea routes. Moreover, 80% of these seaborne imports are coming via one route through the Indian Ocean via the Straits of Malacca and then through the South China Sea. This route is particularly subject to impediments such as blockades by foreign powers, pirates ranging out of Somalia as well as endemic to the Straits of Malacca. Therefore, as a means of improving China's energy security and strategic interests, the development of better relations with the Central Asia nations is crucial.¹¹⁹

3.2.1.1 China's Energy Demands are increasing due to its Booming Economy

China has a rapidly growing economy, which has driven the country's high overall energy demands, especially its demand for oil, and the quest to secure energy resources. Rapidly increasing energy demands have made China an extremely important player in regard to the world's energy markets and these demands have a huge impact on China's economic development as well. China's demands for oil have doubled over the past decade, increasing from 3.3 million barrels per day (bpd) in 1995 to 6.8 million barrels per day (bpd) in 2005. "The country's further development faces constraints regarding energy, resources and the environment. These are our basic national conditions. This is the real China," Premier Wen Jiabao said on September 23rd, 2010 at the annual general session of the UN General Assembly. During those ten years, oil consumption in China grew at an annual rate of 6.66%, while the growth rate for oil production was barely 1.75%, making the country a net oil importer since 1993. China's demand for oil has been surging ever since, in response to its increasingly rapidly expanding economy.

3.2.1.2 China's Counter-Measures to prevent an Energy Shortage

¹¹⁹ 明庭權、韓學峰，「21 世紀中國石油安全與中國中亞石油戰略」，*蘭州學刊* 5 (蘭州: 2004): 46-48。
[Ming, Tingquan and Xuefeng Han. *21shiji Zhongguo Shiyouanquan Yu Zhongguo Zhongya Shiyouzhanlue* (21st Century China's Energy Security and their Petroleum Strategy in Central Asia), Lanzhou Academic Journal 5 (Lanzhou: 2004): 46-48.]

There are several major impediments to China's energy security such as insufficient domestic oil production, and global resource scarcity. Therefore, China has shown increasing interest in oil-producing countries in recent years and seeks cooperation with Russia, Central Asian and African countries to ensure a secure supply of energy for its economic development.

¹²⁰ In spite of that fact, the problem of a lack in domestic crude oil stockpiles is getting worse. Thus, China is exploring ways to use some of its huge foreign exchange reserves to set up a special fund to enhance domestic production and conserve in regard to consumption of energy resources. ¹²¹

Moreover, this special fund also aims to establish overland pipeline routes from abroad for import of hydrocarbon fuels for domestic consumption, to assist the Chinese petroleum industry to invest in overseas oil and natural gas infrastructure and assets, and to invest in global resource futures on markets abroad. If China can become better integrated with the economies of such nations then China can better utilize imported energy supplies from not only the Middle East but from Russia and Central Asia in a stable manner long-term.

3.2.1.3 China's Ideal Candidate for Energy Cooperation in Central Asia

In terms of the production of energy within the five-nation, Central Asia region, Kazakhstan is the foremost producer, followed by Turkmenistan and then Uzbekistan – while Kyrgyzstan and Tajikistan's production is negligible. It is estimated that Kazakhstan's proven oil and gas condensate reserves amount to some 5.3 billion tons, while its reserves-to-production ratio for oil is 7:10. Given its massive reserves and geographic position close to China, this nation is an ideal candidate for economic cooperation. ¹²²

¹²⁰ 魏百谷，「中國油氣公司在中亞的能源布局」，*中亞政經情勢與挑戰：2012 年*（桃園：健行科技大學歐亞研究中心，2012 年），頁 40。[Wei, Baiku. *Zhongguoyouqigongsi Zai Zhongya De Nengyuanbuju* (Strategy and operation of Chinese oil companies in Central Asia), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies Publishing, 2012): 40.]

¹²¹ Bao, Yi. "China's Strategic Interests in Central Asia: Cooperation with Central Asian Countries," *Central Asia and the Caucasus* 5 (Sweden: 2001): 97-99.

¹²² 陳章華，「中國與中亞能源合作之探究」，*中亞政經情勢與挑戰：2012 年*（桃園：健行科技大學歐亞

The Central Asian states sit atop enormous natural gas deposits. Turkmenistan possesses the world's fourth largest reserves of natural gas resources, which is the largest among all the Central Asian countries, followed by Uzbekistan and then Kazakhstan. According to the Ministry of Commerce (MOFCOM) of the Government of the People's Republic of China, Turkmenistan possesses 2.9 trillion cubic meters of proven gas reserves, while, Uzbekistan has 1.9 tcm, and Kazakhstan has 1.8 tcm.

Moreover, in the first eight months of 2012 Turkmenistan revealed that it had increased its access to existing natural gas resources within the country by 10.1% and that increase in tapped resources also resulted in a 12.8% increase in exports. Despite the fact that Turkmenistan is not neighboring China, we can infer that the bulk in this increase was in exports to China, through utilization of pipelines via Uzbekistan and Kazakhstan to China, which in turn allows the transit countries to also profit from export of Turkmen natural gas to China.

In regard to the circumstances of Kyrgyzstan and Tajikistan's potential to also cash in on transit of energy resources, due to the less stable conditions in the countries as well as geographical features (e.g. extremely mountainous, harsh winter climate) that would make the construction and engineering of such pipelines difficult, despite their advantageous proximity to China, they have yet to cooperate in such transit schemes.

3.2.2 The Benefits for China to exploit energy in Central Asian Countries

In the work "Geo-politics of Petroleum and Natural Gas in the New Century," (1998) Xu Xiao-jie(徐小杰) mentions that China is eager to extend its influence westward and with the

研究中心，2012 年），頁 86。[Chen, Changhua. *Zhongguo Yu Zhongya Nengyuanhezuo Zhi Tanjiu* (The research on the energy cooperation between Central Asia and China), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies Publishing, 2012): 86.]

establishment of the Central Asia-China gas pipeline which not only meet eastern China's energy demands, but also enhance economic development of China's western regions. In Chang Hsimo(張錫模)'s 2004 work “中亞區域安全淨評估” ('A General Assessment of Central Asia's Regional Security'), the author asserts that (as of 2004) China is an influential player in the region however it trails Russia and the US in regard to its influence.

In the work published in 1998, “Geo-politics of Petroleum and Natural Gas in the New Century,” Xu Xiao-jie(徐小杰) mentions that China is eager to extend its influence westward and with the establishment of the "Central Asia-China gas pipeline corridor" then it is easily seen that China's interests in the region are as follows:¹²³

- 1) China can utilize oil and natural gas resources from Central Asia to satisfy energy demands especially in its expansive western regions that had previously been somewhat unfulfilled.
- 2) These western regions (especially “Xinjiang”) can also benefit from the economic integration that comes from these developments particularly in regard to economic advancement, stability, technical integration with local production and opening up of links to the neighboring countries.
- 3) China can play a more active role in the affairs of all of Eurasia through greater links, particularly through the development of a “Eurasian Land Bridge” or “New Silk Road” by providing infrastructure to better integrate China's geopolitical and economic spheres with those of Russia and the Middle East.

In 2004 work “中亞區域安全淨評估” (*Zhōng yà qūyù ānquán jìng pínggū*, or ‘A General Assessment of Central Asia's Regional Security’), Chang Hsimo(張錫模) asserts that (as of 2004) China is an influential player in the region however it trails Russia and the US in

¹²³ , 社會科學文獻出版社：北京) *世界的油氣地緣政治新*, 徐小杰1998 年 4 頁, (月 154-155。[Xu, Xiaojie. *Xinshijie De Youqidiyuanzhengzhi* (The Oil Geo-politics in the New World) Social Science Literature Publishing, (Beijing: April 1998): 153-157.]

regard to its influence, and it has three main national interests, as follows: ¹²⁴

1) **Security** – Central Asia has become a key focus of world geopolitical concern, which on one hand offers some advantages for China while on the other incurring some difficulties. While the region can be used by China as a springboard to project power towards the rest of the world, it can likewise be the base of other international powers to encircle, constrain or even threaten China. Given this geopolitical factor, it fundamentally influences China's strategic considerations of the region. This particular impacts China's assessment of internal security vis-à-vis the Chinese province of Xinjiang, the so-called Uighur Autonomous Region, otherwise known as East Turkestan that shares a culture, languages and thousands of years of cultural and religious heritage with the neighboring Central Asian republics which even host refugee and émigré Uighur communities. ¹²⁵

China's primary concern is to prevent outside intervention in the affairs of Xinjiang and Tibet and also prevent any disturbances that originate in the region from spilling over into its own territory. China's secondary concern is to expand China's influence and its military presence in the region as a means of both enhancing China's defensive perimeter and its voice in the international community.

2) **Economic** – Beyond security concerns, Central Asia provides a market for manufactured products and can offer a variety of natural resources, particular energy resources, and raw materials necessary for industry. Of course, Central Asia also offers a means of linking economically with Iran, and Europe. Since 1979, China's demand for energy has surged, and by 1993 China has become a great importer of energy resources making those resources in Central Asia of great interest to China, which has been consuming more oil than Japan since 2003, the year it became the world's second biggest consumer. In response to these ever increasing demands for energy so as to secure resources, China has boosted domestic production and exploration for resources to exploit and increased imports dramatically.

3) **Prestige** – China has pursued a position of esteem within the world community and taking

¹²⁴ , 財團法人兩岸交流遠景基金會：台北) *中亞區域安全淨評估*，張錫模2004 頁，(年 118-119。[Chang, Hsimo. *Zhongya Quyuanquan Jingpinggu (Net assessment of regional security in Central Asia)* Prospect Foundation Publishing (Taipei: 2004), pp. 118-119.]

¹²⁵ Bellér-Hann, Ildikó, M. Cristina Cesàro, Rachel Harris, and Joanne Smith Finley. *Situating the Uyghurs between China and Central Asia* (Farnham: Ashgate Publishing, 2007), p. 42.

part in this great competition for the resources available in Central Asia is one means of projecting its power and image as a powerful country within the international community. Moreover, China's measures in this regard serve as a counter-balance to growing American influence in the region (again stated as of 2004) with a potential to position China as the alternative world superpower.

3.2.2.1 The Benefits for China from Current Exploitation of Central Asian Energy Resources ¹²⁶

3.2.2.1.1 Meeting Eastern China's Energy Demands

Since the establishment of the Turkmenistan-China Natural Gas Pipeline and the Kazakhstan - China Petroleum and Natural Gas Pipeline, these energy links act as an 'energy new silk road' for China providing a cleaner, more efficient and more reliable source to satisfy the great demands of the industrialized cities of Eastern China ranging from Guangdong to Shanghai with economic ramifications for these areas. CNPC intends to expand that range further broadening it to include Shandong and Hong Kong and Macau. This also relieves risks faced by dependence upon seaborne liquefied natural gas imports.

3.2.2.1.2 Enhancing Economic Development of China's Western Regions

China began a program focusing on the development of its Western Region in 2000, the so-called "Open Up the West Program," aiming to reduce the gap between these regions economic development with the more advanced areas of Eastern China. Without close, fully developed relations with the neighboring five nations of Central Asia the aims of that program

¹²⁶ 中亞政經情勢與挑戰，「中國與中亞能源合作之探究」，陳章華：2012）年桃園，健行科技大學歐亞研究中心：2012 頁，（年96。[Chen, Changhua. *Zhongguo Yu Zhongya Nengyuanhezuo Zhi Tanjiu* (The research on the energy cooperation between Central Asia and China), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies

are impossible to achieve.

After the five Central Asian nations became independent, China has seen them as an enormous potential market for manufactured and processed goods particularly from its Western Regions. Moreover the economies of Western China and the Chinese side in comparison with the Central Asian side of Turkestan are in many ways complementary. For instance, Central Asian countries have better developed animal husbandry and mining but they have not advanced development in light manufacturing nor food industries while China has advantages to offer in regard to those industries.

Xinjiang is the gate to these five nations and it is also the biggest province of China, sharing similarities in climate, culture and geography with Central Asia. Many routes, such as the Dzungarian Gate, in Xinjiang have served as links between the two sub-regions in politics, culture, economic activities and religion. After the launch of the energy pipelines, the intangible distance between Xinjiang and mega cities in China has been reduced. Xinjiang can turn its advantage in resources into an economic advantage which in turn can accelerate the “Open Up the West Program,” and it will bring about benefits through the prospects for increased construction giving opportunities to manufacturing industries such as the steel and cement industries in the provinces where the pipelines pass through are constructed.

3.2.2.1.3 Benefiting the living environment of China’s urban society by utilizing cleaner energy to reduce excessive carbon emissions

Although natural gas use is rapidly increasing in China, this fuel comprised only 4 percent of the country's total primary energy consumption in 2012; that percentage is far less than found in comparable economies such as in America and Japan. As China is speeding up its measures to adjust its energy (consumption) structure and meeting the requirements of its mission to save energy and to reduce emissions, clean energy such as natural gas is given more prominence in China. As a result, China's 12th Five Year Plan (FYP), spanning 2011 to 2015,

promotes the use of natural gas. The 12th Five-Year Plan proposes that by 2020 the use of natural gas in the energy structure can be increased to 10% of total usage.

3.3 Energy Strategy and Policy Behavior of China in Central Asia

3.3.1 China's Energy Strategy in Central Asia

China's "11th Five-Year Plan on Energy Development" and The "Twelfth Five-Year" plan focus on the construction of strategic oil reserves, diversification of the energy supply system and clean modern energy industry system regarding to energy security. Due to its huge export potential, Central Asia is expected to become an important source of supply for China.

After the Soviet Union collapsed under internal pressure in 1991, there were significant changes in Eastern Europe. Moreover, China continued to work on its policy of reform and opening-up, which has helped China to progress in its economic development and allowed its leadership to realize that there is indeed a need to adjust fundamentally its energy development strategies. China's Medium and Long Term Energy Development Plan Outline for 2004-2020 (draft) ¹²⁷ was approved by the State Council in 2004, which guides the directions of China's energy development and constructs the main framework for China's 11th Five-Year Plan.

The 11th Five-Year Plan on Energy Development describes China's energy strategy, defining its energy development goals, developmental layout, reform direction and so on. The main discussion is in regard to strengthening the construction of coal mines and infrastructure, and vigorously developing coal-bed methane, and promoting the development of clean technologies in order to achieve the purpose of energy conservation and improved efficiency.

¹²⁷ "The "renewable energy and long-term Development Plan" (Draft) approved in principle by the State Council executive meeting," Xinhua News Agency, Jul 1, 2004, available at:

In regard to oil and natural gas, in addition to continuing to strengthen domestic and international oil and natural gas exploration and development, the establishment of a system of domestic oil reserves is recommended. It also focuses on the work of decentralization of supply risks towards imported oil and gas. In addition, it attaches great importance to energy security which will also accelerate the construction of strategic oil reserves, diversification of the energy supply system and work to achieve other goals.¹²⁸

In January of 2010 the State Council¹²⁹ decided to set up a National Energy Commission (NEC), whose duty it is to ensure that the state's energy needs are met and to strengthen the integration of the administration of energy industries in concert with the NDRC, while coordinating domestic energy development and international cooperation on major issues of energy. This commission was established to actively ensure the stability, security and sustainability of the energy supply system.

China's National Energy System is designed to have three focuses¹³⁰: First, China's national energy strategy is planned up to the year 2050 in accordance with the general concepts of the framework of China's energy development. Second, an outline is given for the mid- to long-term energy planning framework for the energy industry up to the year 2030. Third, an outline is given which focuses on energy development with the years covered by the "Twelfth Five-Year Plan."

http://news.xinhuanet.com/zhengfu/2004-07/01/content_1559228.htm, (accessed: 20130812).

¹²⁸ "National Development and Reform Commission, "11th Five Year Plan on Energy Development," April 2007," USC U.S.-China Institute, Apr 1, 2007, available at: <http://china.usc.edu/ShowArticle.aspx?articleID=1010&AspxAutoDetectCookieSupport=1>, (accessed: 20140526).

¹²⁹ "The National Energy Commission" Xinhua News Agency, Feb 4, 2010, available at: http://big5.xinhuanet.com/gate/big5/news.xinhuanet.com/ziliao/2010-02/04/content_12928556.htm, (accessed: 20140103).

¹³⁰ 徐慧芳，「中國的能源戰略-以中俄原油管道合作為例」，*中亞政經情勢與挑戰：2012年*（桃園：健行科技大學歐亞研究中心，2012年），頁188-190。[Hsu, Hueifang. *Zhongguo De Nengyuanzhanlue -Yi Zhonggeyuanyouguandao Hezuo Weili* (China's energy strategy – The example of the cooperation in Kazakhstan–China oil pipeline), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies Publishing, 2012): pp.188-190.]

The "Twelfth Five-Year Plan" further proposes to promote energy production and change of usage patterns, giving priority to thrift, reliance on domestic production, diversified development, protection of the environment, strengthening of international cooperation for mutual benefit, adjusting and optimizing the energy structure to construct a safe, stable, economical and clean modern energy industry system.

Moreover, it addresses rational planning, enhancement and construction of energy storage facilities, and improvement of the system of crude oil reserves, natural gas and coal reserves and strengthening of emergency response to maximum capacity usage scenarios as capacity building measures. The construction of oil and gas import strategic channels in the northwest, northeast, and southwest regions of China, as well as offshore. Also it urges the improvement of China's oil and gas trunk pipeline network. Adherence to policies which should be integrated for the deepening of international energy development and processing of information and mutually beneficial cooperation is also directed.

Central Asia, due to unique and favorable geological conditions, second only to the Middle East and Siberia, is the world's third-largest oil accumulation area, being rich in oil and natural gas. Due to its huge export potential, Central Asia is expected to become an important supply base for the world's energy markets.

For China, both oil and gas development and transportation mark its essential interests for the country. From Central Asia nations' policies, one can observe geopolitical and economic interests and needs, which forms a good opportunity for China's energy sector development and import channels. Moreover, it can lessen China's dependence on oil from the Middle East and can reduce risks.

3.3.1.1 The Measures China is taking to cooperate with Central Asian Countries

China's energy cooperation methods in Central Asia include signing of agreements to

enhance energy cooperation, loan-for-oil strategies, enhancing transportation of oil and gas through establishment of pipelines and using strategies of acquisitions and initiation of joint ventures. From 2006 to 2009 China and Central Asian countries have completed the Sino-Kazakhstan oil pipeline and the Central Asia–China gas pipeline (known also as the Turkmenistan–China gas pipeline). The interaction and cooperation occurring between China and the Central Asian countries after the Events of 9-11 shows that economic diplomacy has become an important method for China to gain a foothold in Central Asia, while expanding its influence in this region.

When the five Central Asian countries first became independent, China focused on economic and trade cooperation to achieve initial breakthroughs in collaboration with the five Central Asian countries. As these countries may possess considerable natural resources but lack capital and technology, this provides foreign countries an opportunity to enhance their investments in Central Asia. In addition to signing energy cooperation agreements with governments in Central Asia, the three major state-owned oil companies, private oil companies, and mining companies used different ways to initiate extensive energy cooperation with the Central Asian countries, hoping to be first in the competition to secure energy resources for exploitation, this study considers China's energy cooperation methods as described as follows:¹³¹

1) Signing of agreements to enhance energy cooperation

In order to strengthen energy cooperation, China and the five Central Asian countries have set up economic and trade committees, and reached final agreements during visits between presidents or prime ministers. During those visits, parties can exchange and sign various trade documents, such as energy cooperation agreements, trade agreements, memoranda of cooperation, letters of intent, and so on. Thereafter provision is made for a legal basis for (future) promotion of energy cooperation. In terms of the level of cooperation,

¹³¹ 陳章華，「中國與中亞能源合作之探究」，*中亞政經情勢與挑戰：2012年*（桃園：健行科技大學歐亞研究中心，2012年），頁87。[Chen, Changhua. *Zhongguo Yu Zhongya Nengyuanhezuo Zhi Tanjiu* (The research on the energy cooperation between Central Asia and China), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies Publishing, 2012): 87.]

there are government to government, and company to company agreements made.

In terms of the direction of these agreements and their fields of cooperation, China and the five Central Asian countries have made more comprehensive agreements, including construction of the China-Kazakhstan oil pipeline shipping oil from Kazakhstan's oil fields to China's Xinjiang province. China also cooperated with Turkmenistan to build the China-Central Asia Gas pipeline which transfers natural gas from Turkmenistan, passing through Uzbekistan.

2) Loan-for-Oil strategies

In 2009, China and Kazakhstan signed a 10 billion US dollar Loan-for-Oil Agreement. Later, the Government of Turkmenistan (GoTX) accepted a reported loan of US\$4 billion from the Chinese Development Bank to develop the world's second largest Galkynynsh (former called the South Yoloten) gas field. This strategy has helped China to lock in future supplies while establishing a large foothold in key producing states.

3) Enhancing transportation of oil and gas through establishment of pipelines

From 2006 to 2009 China and Central Asian countries have completed the Sino-Kazakhstan oil pipeline and the Central Asia-China gas pipeline (known also as the Turkmenistan-China gas pipeline). At present, the Sino-Kazakhstan Crude Oil Pipeline Project Phase II is undergoing construction, and it is expected that in the future China can be free of dependence on Middle Eastern oil, which can provide a stable source of oil for the development of its Northwest Territories.

Moreover, the first of the Central Asia-China Gas Pipeline A/B lines were completed in early November 2009. In October 2012, these two parallel lines became fully operational with a gas transmission capacity of 30 billion cubic meters. Consequently, daily gas transmission capacity was raised to 89 million cubic meters.

Line C of the Central Asia-China Gas Pipeline will run in parallel to the operating Lines A and B to transport gas from Turkmenistan, Uzbekistan, and Kazakhstan. In November 2011 this project has been started and is expected to be completed in January 2014 and will attain its designated output by 2015. After Line C is completed, the deliverability of the pipeline

will be upgraded to 55 bcm per year (A/B lines: gas transmission capacity of 30 billion cubic meters; C line: 25bcm per year), which will significantly enhance the availability of natural gas for use in China.

4) Using strategies of Acquisitions and Initiation of Joint Ventures

China National Petroleum Corporation (CNPC) in June of 1997 began investment into Central Asia's energy sector, when, due to geopolitical reasons, CNPC acquired at first a 60.3% stake in AktobeMunaiGas, marking the first chapter of its energy cooperation with Central Asian countries to be opened. CNPC has invested more than \$2.6 billion in Kazakhstan since 1997.

CNPC has evaluated the potential of Central Asia's energy sector as a higher priority than Africa's. Its goal is 'to highlight Central Asia, focusing on Kazakhstan, Turkmenistan, and Uzbekistan, in expanding the scale of oil and natural gas cooperation in the region viewing it as their company's most important oil and gas cooperation zone abroad.'

As can be observed Central Asia's energy resources have been treated as a major target mentioned in China's "Twelfth Five Year Plan." To secure these objectives the main methods include acquiring shares from oil-producing companies, direct acquisition of foreign oil companies to obtain equity in Central Asia, signing Technical Service Agreements (TSA) with energy-producing countries, initiating joint ventures in energy-producing countries to set up new companies or joint ventures with existing oil and gas companies, and cooperating with the world's largest oilfield companies to develop or exploit new sites in Central Asia.

From the various needs of the several, poor small countries in Central Asia, the motivation for developing relations with China is largely based on financial expectations. With the strengthening of China's economy along with reforms and opening up, backed by powerful market forces, China has gradually developed market incentives to promote peaceful, mutually beneficial relations based on political equality among nations while advocating a multi-polar world and pursuing a sequential pattern of "economic - political - military" global

expansion.

China's Central Asia strategy, as part of its global strategy, certainly is consistent in the direction of its development. The interaction and cooperation occurring between China and the Central Asian countries after the events of 9-11, show that economic diplomacy has become an important method for China to gain a foothold in Central Asia, while expanding its influence in this region.¹³²

3.3.1.2 Disadvantages and Challenges faced by China in pursuing its strategy in Central Asia

The five Central Asian republics of the USSR became independent countries in 1991, yet only after 1997 did China's state-owned energy provider head west to Kazakhstan and enter into a joint venture called CNPC-International Aktobe Petroleum. However, the largest oil and natural gas fields in Kazakhstan (Tengiz, Karachaganak, and Kashagan) were all already being developed with significant participation from Western energy companies. In addition, the perception of China as a threat created resistance to the expansion of Chinese influence; this is the so-called "China Threat Theory." As China's involvement becomes more and more extensive in the region, some nations particularly Kazakhstan (and Kyrgyzstan as well as Tajikistan) view the expatriate Chinese working population as immigrants with the potential to displace local workers and businesses.

3.3.1.2.1 China was slow to enter the "New Great Game" in Central Asia¹³³

¹³² , 「九一一後中共在中亞國際關係中的戰略選擇」, 余莓莓《展望與探索》8 (台北: 2003): 19。[Yu, Maymay. *Jiuyiyihou Zhonggong Zai Zhongyaguojiguanxizhong De Zhanlvexunze* (China's Strategic Calculations for Central Asia in its International Relations after 911), *Zhanwang Yu Tansuo (Prospect & Exploration)* 8 (Taipei: 2003): 19.]

¹³³ "New 'Great Game' in Central Asia: China 1, U.S./Russia, 0," The Marietta Times, October 5, 2013, available at: <http://www.mariettatimes.com/page/content.detail/id/554557/New--Great-Game--in-Central-Asia--China-1--U-S>

In late 1991, the sudden collapse of the Soviet Union occurred, causing the five Central Asian republics of the USSR to become independent countries, yet only after 1997 did China's state-owned energy provider head west to Kazakhstan and enter into a joint venture called CNPC-International Aktobe Petroleum.¹³⁴ This joint venture encompassed participation in the exploitation of the three largest oil and natural gas fields in Kazakhstan (Tengiz, Karachaganak, and Kashagan) which were all already being developed with significant participation from Western energy companies, such as BP, Exxon, Royal Dutch Shell Plc and Total who all had a stake.¹³⁵

3.3.1.2.2 Resistance to the Expansion of Chinese Influence -- "China Threat Theory"¹³⁶

China's strength is growing comprehensively, so understandably its neighbors and any polity it interacts with may feel a potential threat of being overwhelmed in a number of ways, be it economically, militarily, or demographically. Consequently interests within the nations it seeks to do business with or the very populations themselves sometime react negatively to Chinese involvement even as they might do in response to strong action on the part of other international powers.

Hence, there may arise a perception that China poses a threat to the sovereignty or integrity of these nations, particularly in places such as in Central Asia, Africa, Latin America and whenever Chinese actions are focused. Of course this also includes areas involved in energy cooperation and in response to oil and natural gas company mergers and acquisitions, loans for oil and other energy resources, which seem to lend credit to such theories as Chinese

--Russia--0.html?nav=5006, (accessed: 20140225).

¹³⁴ Liao, Xuanli. "Central Asia and China's Energy Security," *China and Eurasia Forum Quarterly* 4 (Taipei: 2006): 63.

¹³⁵ Sun, Yongxiang. "The New Development Trend of Kazakhstan Oil and Gas Industry," Central Asia Research Institute of Xinjiang Normal University, August 2, 2012, available at: <http://ccas.xjnu.edu.cn/s/151/t/194/ce/6a/info52842.htm>, (accessed: 20131108).

¹³⁶ Husenicová, Lucia. "The China Threat Theory Revisited: Chinese Changing Society and Future Development," CENAA, 2012, available at: <http://cenaa.org/analysis/the-china-threat-theory-revisited-chinese-changing-society-and-future-development>, (accessed: 20131030).

come to control foreign assets not unlike the UK and the US had formerly done in the Middle East.

An example of this resistance can be seen in the response of those opposed to the extensive dealings agreed upon between China and Kazakhstan, which include the \$10 billion loan for oil deal, when opposition in Kazakhstan cited the deals as evidence of Kazakhstan becoming China's "colony" after Chinese dominance replaced that of Russian dominance in the country.

The theory of China posing a threat has a constituency within Central Asian countries. As China's multifaceted involvement becomes more and more extensive in the region, some nations particularly Kazakhstan (and Kyrgyzstan as well as Tajikistan) view the expatriate Chinese working population as immigrants and public opinion is generally quite anti-Chinese as they view Chinese demographic incursion as a symptom of China's overpopulation and a sign of creeping demographic shift such as has taken place historically in Xinjiang (East Turkestan) and other areas peripheral to the original Han Chinese homeland which succumbed to China. Citizens also anticipate that their own officials are corrupt and allow Chinese investments to be made easily at lower than value due to the receipt of kickbacks. As well as allowing the sell-off of national assets too cheaply they suspect that their governments are influenced directly by China and this also is true in these governments allowing the "dumping" of goods into local markets thus depressing the producers of local goods. This perception, whether it is fact or fiction, certainly impacts the strategies involved in the region.

3.4 Central Asia's Oil and Gas Pipeline Construction and Cooperation with China

3.4.1 Oil Pipeline Construction

The construction of Kazakhstan oil pipeline was divided into three phases. In phase 1: In

March 2003, the 449-km oil pipeline between Kenkiyak in central Kazakhstan and to the Caspian oil terminal Atyrau was completed. Phase 2: The construction of pipeline from Atasu to Alashankou was completed in December 2005. Phase 3: The construction of Kenkiyak–Kumkol section was completed on 11 July 2009. In its entirety the 2,228 kilometers long pipeline runs from Atyrau in Kazakhstan to Alashankou in China's Xinjiang. The whole route is expected to reach a 20 million mt/per year capacity by 2015.

In July of 2004, the China National Petroleum Exploration and Development Corporation (CNODC) and KazTransOil's (KTO) each acquired a 50% stake in the Kazakhstan-China Pipeline LLP (KCP), a joint venture which is responsible for Kazakhstan oil pipeline's project investment, construction, operations and management of business pipeline.

The construction of the Kazakhstan oil pipeline was divided into three phases ¹³⁷:
 Phase 1: In March 2003, the 449-km oil pipeline between Kenkiyak in central Kazakhstan and the Caspian Sea oil terminal of Atyrau was completed.
 Phase 2: The construction of the pipeline from Atasu to Alashankou started in September 2004 and was completed in December 2005.
 Phase 3: The construction of the Kenkiyak–Kumkol section was agreed between Kazakhstan and China on 18 August 2007. This section was completed on 11 July 2009 (Phase 3).

In its entirety the 2,228 kilometers long pipeline runs from Atyrau in Kazakhstan to Alashankou in China's Xinjiang. The whole route is expected to reach a 20 million mt/py capacity by 2015. ¹³⁸

In May of 2006, the Kazakhstan–China oil pipeline began to convey product to China which was the first time that China imported crude oil from outside the country via pipelines.

¹³⁷ “Kazakhstan–China oil pipeline,” Baidu, available at: <http://baike.baidu.com/view/6735871.htm>, (accessed: 20140105).

¹³⁸ “Kazakhstan to expand section of China oil line to 400,000 b/d by year-end: minister,” Platts, Sep 18, 2013, available at: <http://www.platts.com/latest-news/oil/moscow/kazakhstan-to-expand-section-of-china-oil-line-26286775>, (accessed: 20140308).

This oil pipeline is designed to have annual capacity of 20 million tons. Half of the oil pumped via this pipeline is from Kazakhstan's Zhanazhol and Aktyubinsk (Aktobe) oilfields and half is from Russian oilfields in the Caspian region.¹³⁹ By the end of 2012, the total imports of crude oil from that pipeline exceeded 50 million tons. According to CNPC's estimates, the pipeline transportation capacity will also be greatly improved by 2013.¹⁴⁰

Chart 3-3: The China-Kazakhstan Oil Pipeline



Source: Compiled by author

¹³⁹ 吳賢煜大學碩士論文清雲科技，「中國與俄羅斯在哈薩克斯坦之能源競逐」，(桃園：2010 年 6 月)頁， 65。[Wu, Hsienyu. *Zhongguo Yu Eluosi Zai Hasakesitan Zhi Nengyuan Jingzhu* (China and Russia on energy competition at Kazakhstan), unpublished thesis, Ching Yun University, (Taoyuan: June 2010), pp. 65.]

¹⁴⁰ "CNPC to Expand Sino-Kazakhstan Crude Oil Pipeline," Xinhua News Agency, Apr 9, 2011, available at: http://big5.xinhuanet.com/gate/big5/news.xinhuanet.com/fortune/2013-04/09/c_124555598.htm, (accessed: 20121201).

3.4.2 Natural Gas Pipeline Construction

3.4.2.1 Construction of the China-Central Asia Gas Pipeline

The China-Central Asia Gas Pipeline has been gradually constructed since 2009. Beginning at Gedaim, on the Turkmenistan / Uzbekistan border, it passes through Turkmenistan, Uzbekistan, and Kazakhstan and ends at Khorgos, in the Xinjiang region of China. Line A and Line B of this pipeline each measure 1,833km in length. Until October of 2012 the A and B lines of this route had a total annual capacity of 30 billion cubic meters. Line C has a capacity of 25 billion cubic meters/year and is expected to begin pumping in early 2014. Line D is expected to begin pumping in 2016.

Construction of a natural gas pipeline from Central Asia to China has been underway since 2009, crossing Turkmenistan, Uzbekistan and Kazakhstan. This pipeline consists of dual parallel lines, Line A and Line B, each measuring 1,833km in length. It begins at Gedaim, on the Turkmenistan / Uzbekistan border, passes through Turkmenistan, Uzbekistan, and Kazakhstan and ends at Khorgos, in the Xinjiang region of China. Up until October of 2012 the A and B lines of this route had a total annual capacity of 30 billion cubic meters. The proposed C line was initiated with construction starting in November 2011, and will be laid parallel to the A and B lines, transporting natural gas from Turkmenistan, Uzbekistan, and Kazakhstan.¹⁴¹ It is expected to be completed in January of 2014, at which time China should be able to receive annually 55 billion cubic meters of natural gas, via A & B lines a total 30 billion cubic meters, with C line adding 25 billion cubic meters. On September 3rd, 2013, Chinese President Xi Jinping held talks with the president of Turkmenistan, Gurbanguly Berdimuhamedow, at Ashgabat. Discussions were held in regard to a new natural gas pipeline between the two countries that they will jointly build: the D line.¹⁴² The D line is scheduled for completion in

¹⁴¹ 陳章華，「中國與中亞能源合作之探究」，*中亞政經情勢與挑戰：2012年*（桃園：健行科技大學歐亞研究中心，2012年），頁 87-88。[Chen, Changhua. *Zhongguo Yu Zhongya Nengyuanhezuo Zhi Tanjiu* (The research on the energy cooperation between Central Asia and China), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies Publishing, 2012): 87-88.]

¹⁴² “The two countries agreed to build the fourth route, Line D, of the Turkmenistan-China pipeline,” Xinhua News Agency, Sep 5, 2011, available at: http://news.xinhuanet.com/fortune/2013-09/05/c_117233209.htm,

2016. As of the 25th Dec 2013, the Central Asian gas pipeline has a total capacity of 70 billion cubic meters gas to China.¹⁴³ (For details see the China - Central Asian gas pipeline map).

¹⁴⁴.

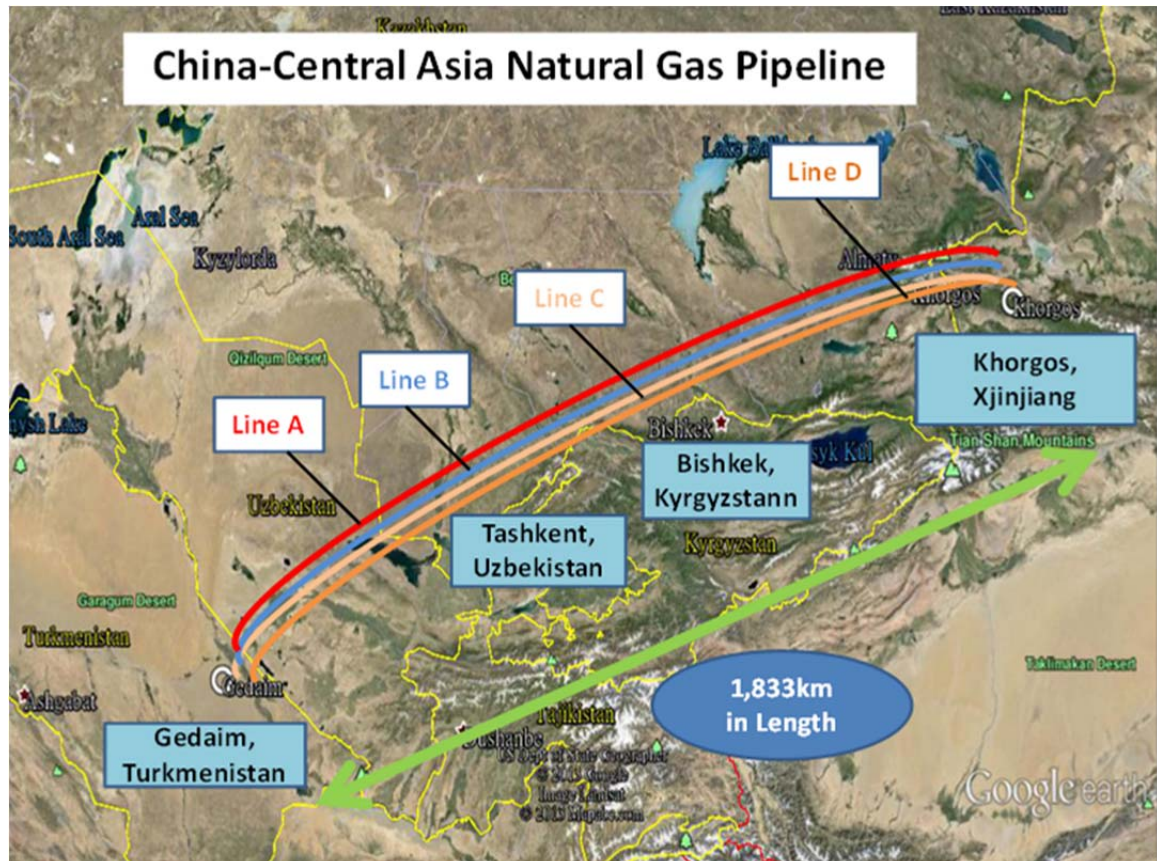
- 1) Line A, founded in June of 2008, came into operation on December 14, 2009.
- 2) Line B came on line on October 20, 2010. By June of 2012, Line A and B's transmission capacity had risen to a total of 30 billion cubic meters / year.
- 3) Line C was begun to be constructed in 2011, and is slated to have a natural gas transmission capacity of 25 billion cubic meters/year. This project cost \$ 2.2 billion. Line C's Khorgas metering station's construction in China is now nearing completion, and is expected to begin pumping in early 2014.
- 4) Line D is expected to begin pumping in 2016.

(accessed: 20121201).

¹⁴³ "The Central Asia-China gas pipeline has delivered 70 billion cubic meters to China," Xinhua News Agency, Jan 4, 2014, available at: http://big5.xinhuanet.com/gate/big5/news.xinhuanet.com/fortune/2014-01/04/c_118830749.htm, (accessed: 20140201).

¹⁴⁴ "The two countries agreed to build the fourth route, Line D, of the Turkmenistan-China pipeline," Xinhua News Agency, Sep 5, 2011, available at: http://news.xinhuanet.com/fortune/2013-09/05/c_117233209.htm, (accessed: 20121201).

Chart 3-4: The China-Central Asia Gas Pipeline Route



Source: Compiled by author

3.4.2.2 The West-East Gas Pipeline Project, Description

The Development of West-East Gas Pipeline Project has been divided into two phases. The first West-East gas pipeline project (WEPP I) started in the west from Lunnan oilfield in Xinjiang; it extends east, at a length of more than 4,200 km, passing through some major cities before reaching Shanghai. It was put into trial operation on the 1st of October, 2004. Construction of the Second West-East Gas Pipeline was commissioned on 30th June 2011. It runs from Khorghos in western Xinjiang, passing through Xi'an, Nanchang, south to Guangzhou, east to Shanghai. It transits Xinjiang, Gansu, Ningxia, Shaanxi, Henan, Hubei, Hunan, Jiangxi, Guangxi, Guangdong and Zhejiang and Shanghai (13 provinces) and Hong Kong.

3.4.2.2.1 The First West-East gas pipeline project (WEPP I) ¹⁴⁵

Construction began in February of 2002 and the pipeline was put into trial operation on the 1st of October, 2004. Starting in the west from Lunnan oilfield in Xinjiang, it extends east, at a length of more than 4,200 km, passing through some major cities before reaching Shanghai. The pipeline has a slated capacity of 12 bcm/year. The transited cities in nine provinces of China are Korla, Turpan, Shanshan, and Hami in Xinjiang; Liuyuan, Zhangye, Wuwei, Lanzhou, Dingxi, and Lique in Gansu; Zhengzhou and Xinyang in Henan; Hefei in Anhui; and Nanjing and Changzhou in Jiangsu.

3.4.2.2.2 The Second West-East pipeline project (WEPP II) ¹⁴⁶

Construction of the Second West-East Gas Pipeline commenced on the 22nd of February, 2008 and was commissioned on the 30th of June, 2011. It runs from Khorghos in western Xinjiang, passing through Xi'an, Nanchang, south to Guangzhou, east to Shanghai. It transits Xinjiang, Gansu, Ningxia, Shaanxi, Henan, Hubei, Hunan, Jiangxi, Guangxi, Guangdong and Zhejiang and Shanghai (13 provinces) and Hong Kong. With the main line having a length of 4,859 km plus several branch lines, the total length of this line is over 7000 km. It is China's first large-scale introduction of an

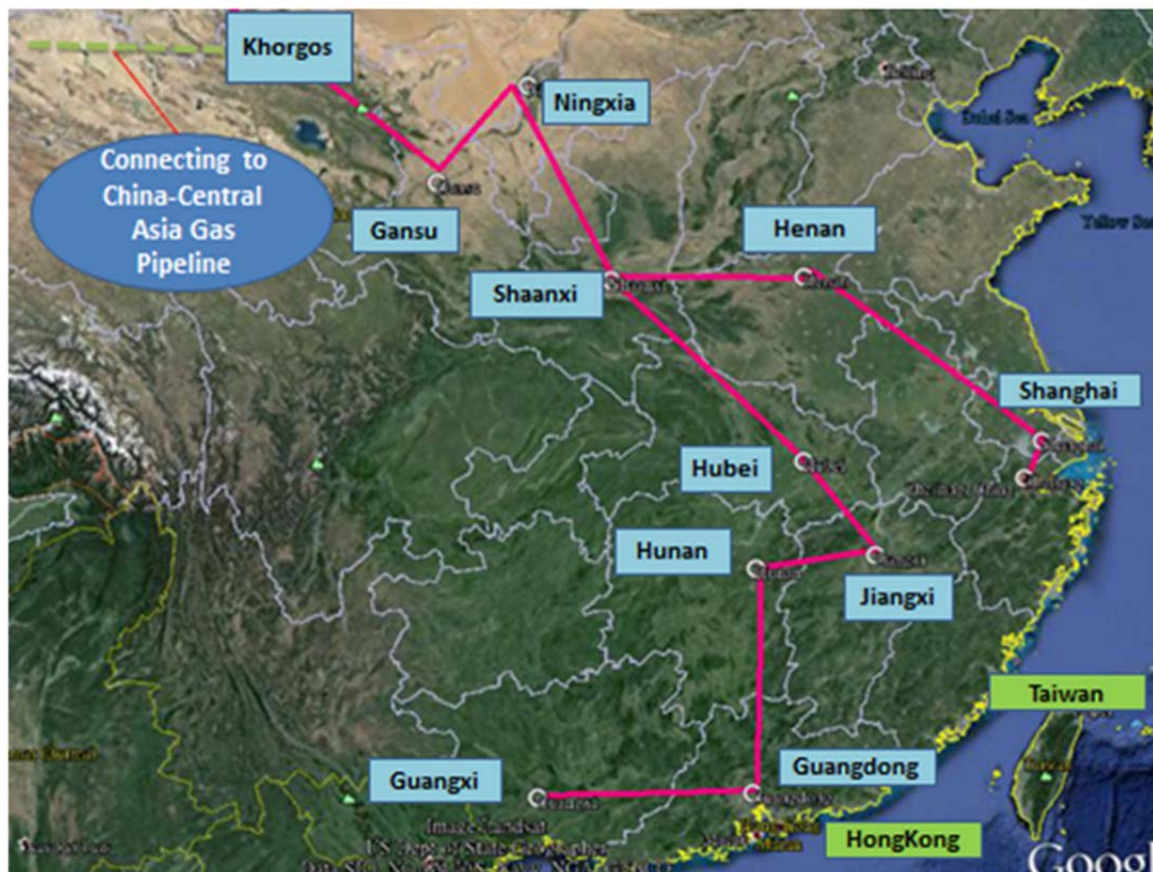
¹⁴⁵ "Briefing on West-East Pipeline Project," The U.S.-China Oil & Gas Industry Forum, available at: http://www.uschinaogf.org/Forum5/5XieGeguo_eng.pdf, (accessed: 20140518).

¹⁴⁶ "Second west-east gas pipeline project-working towards a greener tomorrow," CLP Power Hong Kong, available at: https://www.clp.com.hk/ourcompany/news/currentrelease/Documents/20121221/WEPII_EN.pdf,

import-sourced natural gas pipeline project. The importation of natural gas from the Central Asian nations of Turkmenistan, Uzbekistan and Kazakhstan stands at 30 billion cubic meters of natural gas annually.

The Central Asia–China natural gas pipeline (known also as the Turkmenistan–China natural gas pipeline) crosses the Kazakhstan–China border at Khorgos, where it connects to the second West–East Gas Pipeline. The Second West–East Pipeline project starts from Khorgos, Xinjiang in the west and reaches Shanghai in the east and Guangzhou in the south.

Chart 3-5: The West-East Gas Pipeline Project



Source: Compiled by author

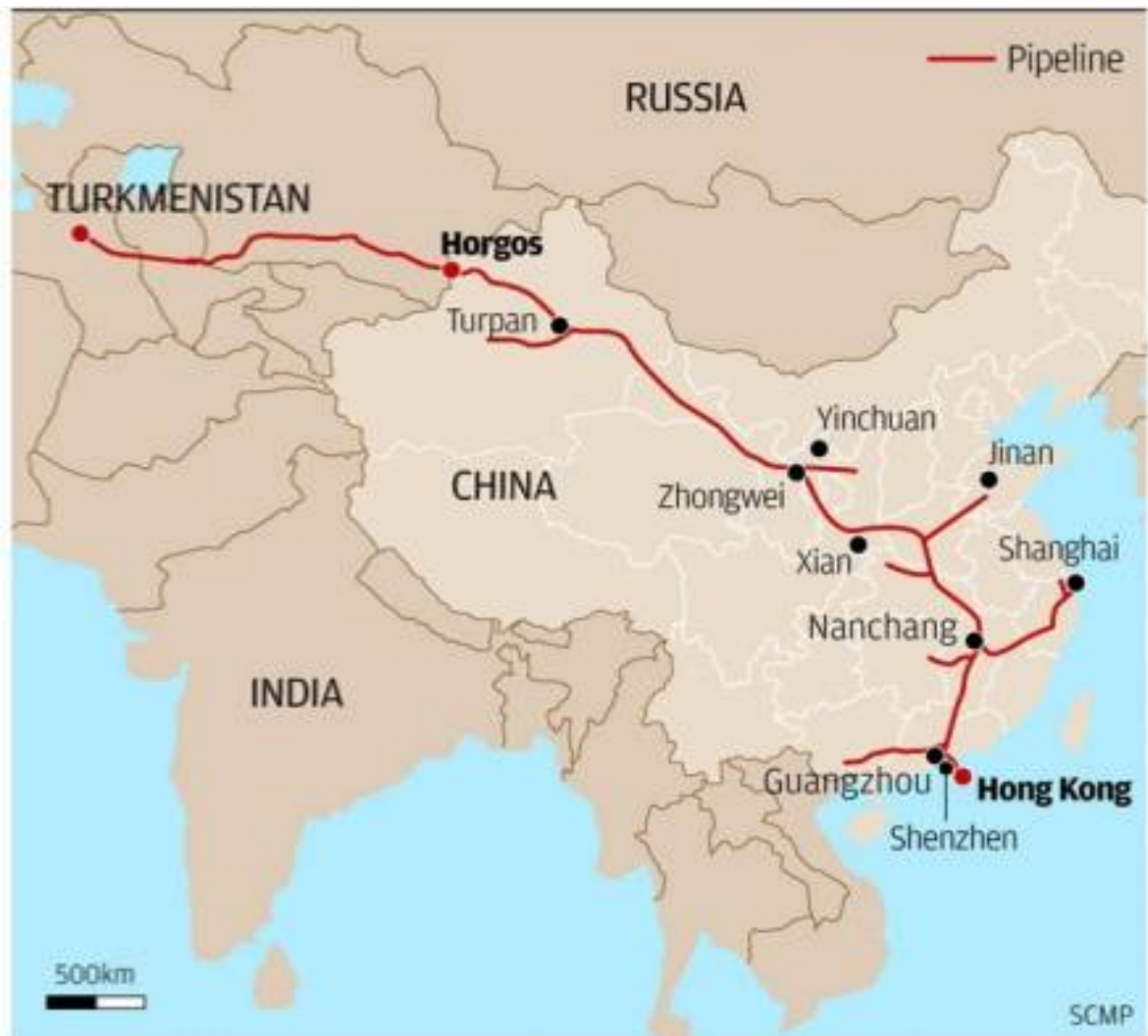
On June 30th, 2011, the Central Asian natural gas pipeline was successfully completed reaching Guangdong. By August 6th, 2013, the Second West-East pipeline operating in Guangdong had reached a length of 824 km, with a cumulative distribution of natural gas that exceeded 20 billion cubic meters.¹⁴⁷ The Second West-East pipeline project has a branch to Hong Kong that was completed at the end of 2012, connecting with the Black Point station for Hong Kong's Black Point power plants. According to the Hong Kong government plan, in 2015 the ratio of natural gas used for electricity generation in Hong Kong will be increased to over 50%.¹⁴⁸



¹⁴⁷ "The Second West-East Gas Pipeline has delivered over 2 billion cubic meters of natural gas to Guangdong," CNPC, available at: [http://xnyqt.cnpc.com.cn/News/xnyqt/sylm/tydt/201308/20130808_C380.shtml?COLLCC=606577562&,\(accessed:20131125\)](http://xnyqt.cnpc.com.cn/News/xnyqt/sylm/tydt/201308/20130808_C380.shtml?COLLCC=606577562&,(accessed:20131125))

¹⁴⁸ "Hong Kong branch of Second West-East Gas Pipeline completed and operational," PennEnergy, Oct 21, 2013, available at: <http://www.pennenergy.com/articles/pennenergy/2013/10/hong-kong-branch-of-second-west-east-gas-pipeline-completed-and-operational.html>, (accessed: 20140518).

Chart 3-6: The Route of Central Asia's Natural Gas Transported to Hong Kong



Source: South China Morning Post,
<http://www.scmp.com/lifestyle/technology/article/1261619/second-west-east-gas-pipeline-set-start-hong-kong-supplies>

China wants to rapidly double the amount of natural gas that it imports from Central Asia and it is working to increase and diversify the pipelines traversing the region. China currently receives natural gas via the Turkmenistan-Uzbekistan-Kazakhstan pipeline. The natural gas supplied by these pipelines is expected to meet the growing energy demands of China.¹⁴⁹



¹⁴⁹ “Central Asia-China Gas Pipeline, Turkmenistan to China,” Hydrocarbons Technology, available at: <http://www.hydrocarbons-technology.com/projects/centralasiachinagasp>, (accessed: 201410215).

4. The Challenges to China's Energy Cooperation with Central Asia

4.1 Prior Russian Domination of Central Asia's Economic Infrastructure and Orientation and Recent Russian Measures to Preserve or Regain that Dominance

Russia has played a dominate role in Central Asia for hundreds of years. After the collapse of the Soviet Union in 1991, Russia continues today to see the region as its own backyard. China and Russia have their mutual interests to maintain stability in the region. The Shanghai Cooperation Organization (SCO) which was founded in 2001 provides an intergovernmental platform for China and Russia to deal with their security and economic interests in Central Asia.

Russia has played a dominate role in Central Asia, ruling it as a part of its own empire for a hundred or more, or even in some areas several hundreds of years. Certainly Russia continues today to see the region as its own backyard and it is the home of millions of Russian citizens and ethnic Russian citizens of the newly independent republics of Central Asia.

In the initial years after the collapse of the Soviet Union, China and Russia found common interests in the region of Central Asia, as it was in their mutual interests to maintain stability in the region. Moreover, both have shared interest in the natural resources available in the region. For the Chinese direct purchase of resources was beneficial while for the Russians, given their existing dominance of infrastructure giving access to the region's resources, they could profit from sales of those resources to third parties, particularly to Europe.¹⁵⁰

¹⁵⁰ Zhao, Huasheng. "China-Russia Relations in Central Asia," The Asan Forum, Nov 22, 2013, available at: <http://www.theasanforum.org/china-russia-relations-in-central-asia>, (accessed: 20140518).

Both Russia and China feared the possible onset of instability that might sweep the region such as what occurred in Tajikistan in the early 90's where a civil war wracked the country and seemed to have the potential to ignite the whole region with sweeping changes. The Shanghai Cooperation Organization (SCO) which was founded in 2001 provides an intergovernmental platform for China and Russia to deal with their security and economic interests in Central Asia.¹⁵¹

4.2 Diplomatic Initiatives and Interaction between the United States, China, Russia and Other Countries in regard to Central Asia

4.2.1 China's Diplomatic Policy Initiatives in Central Asia

The 2004 Complementary Agreement between the People's Republic of China and the Russian Federation on the Eastern Section of the China–Russia Boundary marked the completion of demarcation of over 4,300 kilometers of border between China and Russia. In recent years, economically, China and Russia have enhanced their business cooperation and strategic partnership. These two international powers' multilateral cooperation continues under the framework of the Shanghai Cooperation Organization (SCO).

4.2.1.1 Initiatives to enhance Cooperation between China and Russia

The Treaty of Good-Neighborliness and Friendly Cooperation between the People's Republic of China and the Russian Federation (FCT), a twenty-year strategic treaty signed by Jiang Zemin and Vladimir Putin, on July 16th, 2001 framed a new chapter in Sino-Russian relations

¹⁵¹ Weitz, Richard. "Superpower Symbiosis: The Russia-China Axis" PetroChina Southwest Oil & Gasfield Company, available at: <http://www.worldaffairsjournal.org/article/superpower-symbiosis-russia-china-axis>, (accessed: 20140310).

and began a Russian-Chinese strategic partnership.¹⁵²

As a first step towards a comprehensive partnership in a variety of areas the two sides first determined to resolve existing disputes which included issues of border demarcation and conflicting claims. The 2004 Complementary Agreement between the People's Republic of China and the Russian Federation on the Eastern Section of the China–Russia Boundary marked the completion of demarcation of over 4,300 kilometers of border between China and Russia. There the border dispute between Russia and China, ongoing since the Japanese invasion of Manchuria in 1931, was resolved, which allowed for new plans and goals in the two parties' bilateral relations.¹⁵³

China and Russia, the two largest neighbors in the world, have mutually complementary economies, and there is great potential to their cooperation. In recent years, economically, China and Russia have enhanced their business cooperation and strategic partnership. Now, China is currently Russia's largest trading partner, with the volume in trade between the two countries reaching 88.16 billion U.S. dollars in 2012. Their bilateral economic cooperation may be viewed as extremely significant and one can expect that stable development will continue into the future.¹⁵⁴

These two international powers' multilateral cooperation continues under the framework of the Shanghai Cooperation Organization (SCO). The SCO is the only regional organization initiated by China, and China aims to expand its security and power in Central

¹⁵² “Treaty of Good-Neighborliness and Friendly Cooperation Between the People's Republic of China and the Russian Federation,” Ministry of Foreign Affairs of the People's Republic of China website, Jul 24, 2001, available at: http://www.fmprc.gov.cn/mfa_eng/wjdt_665385/2649_665393/t15771.shtml, (accessed: 20140518).

¹⁵³ 新大賽局，蔡振雄-大學碩士論文清雲科技，「印三國在中亞地區的競逐、中、俄 (桃園：2010 年 7 月)頁， 71-72。[Tsai, Chenshiung. *Xin Dasaiju -E、Zhong、Yin Sanguo Zai Zhongyadiqu De Jingzhu* (The New Great Game-The Rivalry between Sino-Russia and India in Central Asia), unpublished thesis, Ching Yun University, (Taoyuan: July 2010), pp. 71-72.]

¹⁵⁴ “Sino-Russian relations: Share opportunities and deeper common development,” Russia Beyond the Headlines (Chinese version), March 19, 2013, available at: <http://big5.tsrus.cn/guoji/2013/03/19/22129.html>, (accessed: 20131030).

Asia primarily through the SCO.¹⁵⁵

4.2.2 China's Main Challenges in the “New Great Game” in Central Asia¹⁵⁶

Literally within days of independence Central Asian leaders' telephones were ringing with requests from Western companies to discuss economic cooperation on a wide range of proposed projects. It has taken many years for the Chinese to reverse the tide of initial gains made by private Western companies. In comparison, in terms of capital, technology and management level, there is a large gap between them. Central Asian states perform a policy of balancing among foreign powers to pursue maximum benefits, which lends a factor of uncertainty to China's investments in Central Asia. Russia has taken various measures to maintain its dominance in the region including strengthening its oil and gas pipeline network, offering higher prices for natural gas to Turkmenistan to maintain optimal control over this crucial source, and pressing for a Eurasian natural-gas alliance among Turkmenistan, Kazakhstan, Uzbekistan, Belarus and (formerly) the Ukraine.

4.2.2.1 The US and other Western Interests head start in the “New Great Game”

At the fall of the Soviet Union American and other Western economic interests jumped at the chance of involvement to benefit from any scheme to open up Central Asian resources to world markets. Literally within days of independence Central Asian leaders' telephones were ringing with requests from Western companies to discuss economic cooperation on a wide range of

¹⁵⁵ 新大賽局」，蔡振雄-大學碩士論文清雲科技，「印三國在中亞地區的競逐、中、俄（桃園：2010 年 7 月）頁，72-73。[Tsai, Chenshiung. *Xin Dasaiju -E、Zhong、Yin Sanguo Zai Zhongyadiqu De Jingzhu* (The New Great Game-The Rivalry between Sino-Russia and India in Central Asia), unpublished thesis, Ching Yun University, (Taoyuan: July 2010), pp. 72-73.]

¹⁵⁶ 郭凱，「金融危機以來中亞格局的新變化以及中國的戰略選擇」，*中國商界* 12 (北京: 2009): 43-45。[Guo, Kai. *Jinrongweiji Yilai Zhongya Geju De Xin Bianhua Yiji Zhongguo De Zhanlue Xuanze* (The new pattern of changes in Central Asia since the financial crisis and China's strategic choices) *Zhongguo Shangjie* (*Business China*) 12 (Beijing: 2009): 43-45.]

proposed projects. It has taken many years for the Chinese to reverse the tide of initial gains made by private Western economic interests in Central Asia to achieve economic cooperation and partnerships in the region. In regard to business investment, the Chinese oil companies' rivals in Central Asia are Western multinational oil companies. In comparison, in terms of capital, technology and management level, there is a large gap between them.¹⁵⁷

4.2.2.2 Balancing Policy of Central Asian States leads to Uncertainty in Chinese Policymakers' Perceptions

After the collapse of Soviet Union in 1991, Central Asian states found themselves independent actors in the region. Great powers in the region compete and play a zero-sum game to seek the rich energy in the region. Due to their weak economic situations and the political status of Central Asian states, these states perform a policy of balancing among foreign powers interested in the region, including Russia, China, the U.S. and other nations so as to maintain regional security and to pursue maximum benefits, which lends a certain element of uncertainty to China's investment in Central Asia.¹⁵⁸

4.2.2.3 Competition between China and Russia within Central Asia

Given Russia's long-standing and ongoing ties to the region, Russia strongly opposed Europe and America becoming involved in the region in a substantive way. However, in the Chinese Russia has a more likely ally not only in the region but globally if only it can maintain its own standing while allowing Chinese ambitions, particularly economic ones to be satisfied.

Nonetheless, Russia is wary of the energy and security cooperation between China and Central

¹⁵⁷ Rumer, Boris Z. and Stanislav Zhukov. *Central Asia: The Challenges of Independence* (New York: M.E Sharpe, Inc., 1998): p. 26.

¹⁵⁸ Cornell, Svante E. "Finding Balance: The Foreign Policies of Central Asia's States," *Strategic Asia 2007-08: Domestic Political Change and Grand Strategy* (Seattle: 2007): 267.

Asian countries and has taken various measures to maintain its dominance in the region vis-à-vis all newcomers. Russia has maintained and strengthened its oil and gas pipeline network available for Central Asian exports to Europe as a means of maintaining its advantages in the region, signed agreements with Central Asian countries to cooperate in oil and gas exploration, development and processing, offered higher prices than in the immediate aftermath of the dissolution of the Soviet Union for the natural gas that Turkmenistan, Kazakhstan, and Uzbekistan export to maintain optimal control over these crucial sources of export, and have pressed for a Eurasian natural-gas alliance including not only in the region's net energy exporters such as Turkmenistan, Kazakhstan, and Uzbekistan but also including energy-importing countries, such as Belarus and (formerly the) Ukraine as an integration incentive for the Commonwealth of Independent States.¹⁵⁹

4.2.3 American Diplomatic and Policy Initiatives in regard to Central Asia

When it comes to the foreign policy of the United States, realism has been dominant, aimed at preventing the rise of any power that could possibly pose a threat to the United States. According to its traditional geopolitical assessments, the US sees both Russia and China, as a potential geo-strategic threat. In addition, the US has acted to limit the influence of both Iran and Islamist organizations in Central Asia both politically and economically. U.S. geopolitical strategy involves NATO's eastward expansion. For the U.S., acquisition of greater influence in Central Asia can restrain the influence of Russia, Iran, China, and other players, so as to secure the goals of the America's global strategy.¹⁶⁰

American initiatives have varied over time and which administration that was in power

¹⁵⁹ Muzalevsky, Roman. "Russia's Strategy in Central Asia: An Analysis of Key Trends," *Yale Journal of International Affairs* (Connecticut: Winter 2009): 30-31.

¹⁶⁰ Zhao, Xiaoshuo. "An Analysis of the Strategic Competition between the US and Russia in the Middle East," Xinjiang's philosophy and social sciences network, May 16, 2012, available at: http://big5.xjass.com/zy/content/2012-05/16/content_232498.htm, (accessed: 20131201).

and may be broadly categorized chronologically as follows:

4.2.3.1 After the Disintegration of the Soviet Union

That new U.S. strategy in Central Asia was mainly to support independent tendencies among those countries in the region in regard to their relationship to Russia, to include such countries into Western economic and political systems, and to assist in the development of oil resources in the region.

During the period of 1995 to 1999, the United States adopted large-scale measures to comprehensively strengthen cooperation with Central Asian countries, especially using North Atlantic Treaty Organization (NATO) to penetrate into Central Asia subsequently causing the loss of Russia's prior absolute advantage in the region. In 1997 the United States developed a new strategy for Central Asia, to yet further increase its penetration into the region, making progress in achieving cooperation in various fields, especially in the field of military, security and intelligence cooperation. That new U.S. strategy in Central Asia was mainly to support independent tendencies among those countries in the region in regard to their relationship to Russia, to include such countries into Western economic and political systems, and to assist in the development of efforts to exploit oil resources in the region. This last initiative particularly was aimed at making the region an American strategic energy base for the 21st century. Also the main purpose of these measures was to contain and weaken the influence of Russia and Iran in the region, while gradually transforming the region into an "area of strategic interests" for America.¹⁶¹

4.2.3.2 After the Events of “9-11”

The United States took advantage of the events of “9-11” when it invaded Taliban-ruled

¹⁶¹ Zhao, Xiaoshuo. “An Analysis of the Strategic Competition between the US and Russia in the Middle East,” Xinjiang's philosophy and social sciences network, May 16, 2012, available at: http://big5.xjass.com/zy/content/2012-05/16/content_232498.htm, (accessed:20140105).

Afghanistan which allowed it direct access to Central Asia. The United States used “the War on Terrorism” in Afghanistan as a context to secure military bases in Uzbekistan, Tajikistan and other countries. America’s military presence in Central Asia has directly challenged Russia’s traditional sphere of influence. The remarkable American influence is to weaken Russian efforts at integration between Central Asia and Russia, especially the Collective Security Treaty Organization (CSTO). The aim of U.S. was achieved by implementing a policy of assisting the allied regimes in the region with military assistance, economic aid, information exchange and training of their security sector. Besides, by establishing the Baku–Tbilisi–Ceyhan (BTC) pipeline project, the diversification of export route of Central Asian energy can be achieved.

The events of "9-11" have provided the United States unprecedented opportunities and conditions to expand its influence in Central Asia. The United States took advantage of this when it invaded Taliban-ruled Afghanistan which allowed it direct access to Central Asia. The United States has since been working to secure military bases and establish military power in Uzbekistan, Tajikistan and other countries, and publicly stated that even after the so-called “War on Terrorism” ends they will not abandon Central Asia. America’s military presence in Central Asia has directly challenged Russia’s stance that it is the only foreign power that may deploy military forces in Central Asia, which has been a major breakthrough for the United States challenging Russia's traditional sphere of influence.¹⁶²

In addition to continuing efforts to support independent tendencies among the Central Asia countries vis-à-vis Russia, after the events of 911, there have been various degrees of change in the relationships between the US and the Central Asian countries, which overall served to weaken then recent Russian efforts at integration between Central Asia and Russia, and reduced the effects of the Collective Security Treaty Organization (CSTO).¹⁶³

¹⁶² Giragosian, Richard. “The Strategic Central Asian Arena,” China and Eurasia Forum Quarterly, Volume 4, No. 1 (2006): 133-153, available at: http://www.silkroadstudies.org/new/docs/cef/quarterly/february_2006/richard_giragosian.pdf, (accessed: 20140518).

¹⁶³ Zhao, Xiaoshuo. “An Analysis of the Strategic Competition between the US and Russia in the Middle East,”

Post-911 the US developed a new strategy in part of its so-called “War on Terrorism” which also placed crucial emphasis on strategy objectives and set goals for the Central Asia region, where the US entered a closer partnership with Uzbekistan’s regime and had three other main points of focus.¹⁶⁴ The first of these was to completely include Central Asia into America and its European and Asian allies’ security architecture and to actualize the plan to station elements of the U.S. military within the region. Using the war in Afghanistan as a pretext, the U.S. military gained (at least for some time) the right to officially station troops in Uzbekistan, Tajikistan, and Kyrgyzstan, and also obtained a right of temporary use of Kazakhstan’s air force facilities when necessary.

The second of these was to strengthen the ability of the Central Asian governments to rule to prevent recurrences or similar events such as the Islamic Revolution in Iran or the radicalization of Taliban Afghanistan, which was itself a CIA project that got out of control. Hence, Uzbekistan’s Islam Karimov could for some time prior to the Andijan Massacre, obtain a non-ending line of credit from America so long as his opponents were so-called Islamic fundamentalists, a tactic employed by many Third World dictators.¹⁶⁵

This aim was achieved by implementing a policy of assisting the allied regimes in the region with military assistance, economic aid, information exchange and training of their security sector. As a case in point, Egypt’s Muslim Brotherhood was not a terrorist organization but rather just an ordinary Islamic-based political opposition group. Yet the former dictator of Egypt, ousted President Hosni Mubarak, had received backing from Western governments previously under the pretext of labeling as terrorists opposition groups

Xinjiang’s philosophy and social sciences network, May 16, 2012, available at:

http://big5.xjass.com/zy/content/2012-05/16/content_232498.htm, (accessed:20140212).

¹⁶⁴ 劉蕭翔、郭武平，「上海合作組織與俄中在中亞競合關係」，*問題與研究* 3 (台北: 2005): 137-138。[Kwo, Wuping and ShiauShyang Liou. *Shanghaihezuohezuzhi Yu E Zhong Zai Zhongya Jinghe Guanxi* (Competition and Cooperation between Russia and China in Central Asia and "Shanghai Co-operation Organization": Analytical View from International Regime) *Wenti Yu Yanjiu (Issues & Studies)* 3 (Taipei: 2005): 137-138.]

¹⁶⁵ Ambrosio, Thomas. *Authoritarian Backlash: Russian Resistance to Democratization in the Former Soviet Union* (Farnham: Ashgate Publishing, Ltd, 2009), p. 166.

such as the Muslim Brotherhood through arrest and imprisonment, framing them to avoid a popular overthrow of a deeply unpopular regime.¹⁶⁶

The third of these was to accelerate the development and export of Central Asian energy. This goal was in part achieved by the implementation of the Baku–Tbilisi–Ceyhan (BTC) pipeline project, connecting Baku, the capital of Azerbaijan and Ceyhan, a port on the south-eastern Mediterranean coast of Turkey, via Tbilisi, the capital of Georgia.

Since the independence of the five Central Asian countries, the United States has been actively involved in Central Asian affairs, and done so through multiple channels aiming to strengthen U.S. relations with Central Asian countries.¹⁶⁷

Among the key measures of this involvement via bi- and multilateral frameworks was through the Partnership for Peace (PfP) program initiated under the auspices of NATO, by which it expanded military exchanges and cooperation with the Central Asian countries, is the most important multilateral mechanism in the spread of American influence in Central Asia.

¹⁶⁸

While diplomatically the US has always stressed US support of the five Central Asian countries to maintain independent sovereignty and territorial integrity, US involvement has also extended to the signing of a series of oil, natural gas, natural resources and pipeline construction development contracts by U.S.-led international energy companies and Central Asian governments or their state-owned energy companies, as well as granting a variety of social and economic assistance by the US to help the five Central Asian countries with

¹⁶⁶ “Egypt: Terrorist Tag Politically Driven,” Human Rights Watch, Dec 28, 2013, available at: <http://www.hrw.org/news/2013/12/28/egypt-terrorist-tag-politically-driven>, (accessed:20140518)

¹⁶⁷ 張錫模，*中亞區域安全淨評估*（台北：財團法人兩岸交流遠景基金會，2004 年），頁 103。[Chang, Hsimo. *Zhongya Quyuanquan Jingpinggu (Net assessment of regional security in Central Asia)*: Prospect Foundation Publishing, (Taipei, 2004), p. 103.]

¹⁶⁸ “Beyond Afghanistan NATO's partnership with Central Asia and South Caucasus: A tangled partnership?,” Science Direct, Jan, 2014, available at: <http://www.sciencedirect.com/science/article/pii/S1879366513000274>, (accessed: 20140518).

economic and social development through various international organizations and U.S. government-related agencies.¹⁶⁹

4.2.3.3 After the Andijan Massacre

In the aftermath of the Andijan Massacre, in July of 2005 Uzbekistan reversed its position of maintaining close ties with America and established closer ties with the PRC.

In the aftermath of the Andijan Massacre,¹⁷⁰ with harsh criticism of Uzbekistan's repressive regime and calls for an impartial investigation coming from the West, in July of 2005 Uzbekistan reversed its position of maintaining close ties with America and established closer ties with the PRC which supported the regime's response in Andijan. Thereafter, Uzbekistan, under SCO auspices, invoked a provision within its agreements with the US asking the U.S. to withdrawal its troops from military bases in Uzbekistan. In addition Uzbekistan withdrew from the Western-aligned GUAM (Georgia-Ukraine-Azerbaijan-Moldova) in 2005 and then rejoined the CSTO the following year.¹⁷¹

A joint statement of the Shanghai Cooperation Organization conference at Astana, published in early July, demanded the withdrawal of US troops from Central Asia. On the 29th of July 2005, the Uzbekistan government requested that U.S. troops leave within 180 days.¹⁷² On November 21st, 2005, the withdrawal of US troops from Uzbekistan was completed.¹⁷³

¹⁶⁹ Cohen, Ariel. "U.S. Interests and Central Asia Energy Security," The Heritage Foundation, Nov 15, 2006, available at: <http://www.heritage.org/research/reports/2006/11/us-interests-and-central-asia-energy-security>, (accessed: 20140519).

¹⁷⁰ "Uzbekistan: No Justice 7 Years after Andijan Massacre," Human Rights Watch, May 12, 2012, available at: <http://www.hrw.org/news/2012/05/11/uzbekistan-no-justice-7-years-after-andijan-massacre>, (accessed: 20140518).

¹⁷¹ Shiriyeu, Zaur. "Uzbekistan's foreign policy: positive neutrality or zigzagging?," Today's Zaman, Aug 21, 2012, available at: http://www.todayszaman.com/columnists/zaur-shiriyeu_290018-uzbekistans-foreign-policy-positive-neutrality-or-zigzagging.html, (accessed: 20140519).

¹⁷² Beacham, John. "Opposition grows to U.S. military presence in Central Asia," Website for Party for Socialism and Liberation, Sep 1, 2005, available at: <http://www2.pslweb.org/site/News2?page=NewsArticle&id=11141>, (accessed: 20140519).

¹⁷³ Mirovalev, Mansur. "U.S. Completes Withdrawal From Uzbek Base," AP News Archive, Nov 21, 2005,

In response the US revised its initiatives; the new U.S. policy in Central Asia ¹⁷⁴ was mainly manifested in a prompt series of diplomatic measures to maintain and strengthen the U.S. military presence in Central Asian countries. The U.S. Secretary of Defense (Donald Rumsfeld) visited Kyrgyzstan (At that point Kyrgyzstan had undergone a Color Revolution and was seen as pro-Western in alignment.) and Tajikistan, in July 2005. Kyrgyzstan agreed that the United States could continue to use its Manas Air Base, and said that as long as the security situation in Afghanistan has not yet stabilized, the Manas base will still exist. Tajikistan stressed their support for joint operations by providing their airspace and territorial space per their responsibilities as a member state in coalition efforts to counter the threat of terrorism.

4.2.3.4 US Involvement in the Color Revolutions

Sreeram Chaulia mentions that the principal argument is that the main and direct causes of the Color Revolutions were United States foreign-policy interests (strategic expansion, energy security and the war on terrorism) as they were serviced by Ingos. In addition due to rising worries that the US was utilizing these “Color Revolutions” to engineer more pliable governments, friendlier to US initiatives and interests, in Central Asia, the US ostensibly took measures to calm these fears and to repair relations with these regimes.

Samuel Huntington asserts that in 1974 the United States first began to implement “a major shift in US policies toward the promotion of human rights and democracy in other countries” through the mechanism of American international NGOs (“Ingos”) as a means to promote regime change in targeted countries. Building on this theory, Sreeram Chaulia further asserts

available at:

<http://www.apnewsarchive.com/2005/U-S-Completes-Withdrawal-From-Uzbek-Base/id-33fc5823ee3b4a62a76e581dcea24a3b>, (accessed: 20140519).

¹⁷⁴ 鄭羽，「蘇聯解體以來美國對中亞政策的演變1991-2006」，*俄羅斯中亞東歐研究* 4 (北京: 2007): 64-66。[Zheng, Yu. *Sulian Jieti Yilai Meiguo Dui Zhongya Zhengce De Yanbian* (Changes of American policy in Central Asia since dissolution of the USSR (1991~2006)) *Eluosi Zhongya Dongou Yanjiu* (Russian Central Asian & East European Studies) 4 (Beijing: 2007): 64-66.]

that the causative agent behind the Color Revolutions was none other than the United States taking action through proxies to achieve American foreign-policy interests, particularly strategic expansion, energy security and later the war on terrorism) and the tools to engineer these so-called revolutions were none other than the aforementioned Ingos.¹⁷⁵ Through the intervention of US-sponsored Ingos, Georgia, the Ukraine and Kyrgyzstan were all subject to these engineered efforts. (There is some evidence to suggest the same for the current crisis in the Ukraine, but that is not within the purview of this study.) Moreover, it can be said that the US is selective when promoting human rights and democracy, doing so only when it serves American foreign-policy objectives. In regard to this the scholar, Thomas Carothers says, "The United States has close, even intimate relations with many undemocratic regimes for the sake of American security and economic interests... and struggles very imperfectly to balance its ideals with the realist imperatives it faces."¹⁷⁶

Energy-rich Central Asia is an attractive place to US policy makers and industry. However, the American strategy in Central Asia is not limited to energy. After the collapse of the Soviet Union, the United States hoped that the Central Asian countries would carry out reform politically and economically, to become more democratic and prosperous, more inclined to the strategic plans and wishes of the United States (and oriented towards the United States), more susceptible to be manipulated and influenced by their strategies, so that the United States could well reach their desired goals.¹⁷⁷ Some Central Asian countries chose to tolerate such a situation, allowing opposition parties and newspapers to criticize government stances on current events. In Turkmenistan and Uzbekistan, their opposition parties lacked the ability to replace the regime in elections, which caused significant changes in the geopolitical situation in 2003 and 2004.

¹⁷⁵ Chaulia, Sreeram. "Democratisation, NGOs and "colour revolutions," open Democracy, January 19, 2006, available at: http://www.opendemocracy.net/globalization-institutions_government/colour_revolutions_3196.jsp, (accessed: 20140120).

¹⁷⁶ Khan, Muqtedar. *Prospects for Muslim Democracy: The Role of U.S. Policy* (Washington, DC: Brookings Institution, Fall 2003): 10.

¹⁷⁷ "Central Asia and the South Caucasus: Reorientations, Internal Transitions, and Strategic Dynamics-C," Federation of American Scientists, Oct, 2000, available at: http://www.fas.org/irp/nic/central_asia.html, (accessed: 20140519).

In 2003, Georgia's "Rose Revolution" (November 2003-January 2004) occurred, being the first incidence of a Color Revolutions to occur in the former Soviet Union, where the Georgian opposition leader Mikheil Saakashvili overthrew the ruling regime of President Eduard Shevardnadze.¹⁷⁸

In 2004, the "Orange Revolution" in the Ukraine occurred when the opposition leader Viktor Yushchenko won the presidential election in November of 2004, replacing the regime in power at the time, somewhat replicating the events in Georgia.¹⁷⁹

The "Tulip Revolution" (or the First Kyrgyz Revolution) occurred in March 2005 after the Kyrgyz parliamentary election was over, overthrowing the then ruling regime of President Askar Akayev, a regime known for extreme corruption and dictatorial rule.¹⁸⁰

In addition due to rising worries that the US was utilizing these "Color Revolutions" to engineer more pliable governments, friendlier to US initiatives and interests, in Central Asia and the former Soviet Union under the guise of "promoting democracy," the US ostensibly took measures to calm these fears and to repair relations with these regimes. At that point U.S. policymakers argued that in order to achieve their long-term goal which is to establish a stable economic and political presence in Central Asia, the United States and the governments of the region should work together to strengthen the democratic system and defend human rights.

¹⁸¹ Nonetheless, with Uzbekistan and other regimes under the eye of interests such as Amnesty International and local leaders wary of being overthrown US influence suffered a serious setback.

As one of these measures US policy has since focused upon promoting economic cooperation with Central Asian countries, to reshape the attractiveness of the United States to

¹⁷⁸ "How the Rose Revolution happened," BBC News, May 10, 2005, available at: <http://news.bbc.co.uk/2/hi/4532539.stm>, (accessed:20140519)

¹⁷⁹ Soltanifar, Mohammad. "US-Russian Rivalry in the Caucasus: Towards a New Cold War?" Centre for World Dialogue, available at: <http://www.worlddialogue.org/print.php?id=345>, (accessed: 20140224).

¹⁸⁰ "A tulip revolution," The Economist, Mar 24, 2005, available at: <http://www.economist.com/node/3785139>, (accessed:20140519)

¹⁸¹ Kukeyeva, Fatima. *Color Revolutions in the Central Asia and the US Position* (Taipei: Taiwan International

Central Asian countries. On October 14th, 2005, Secretary of State Condoleezza Rice announced during her visit to Kazakhstan,¹⁸² that the United States Agency for International Development aid will further fund the Central Asian countries for an integration project to expand trade and investment in Central Asia, to help Central Asian countries to simplify customs procedures in accordance with international standards and best practices.

Meanwhile, the US worked to ensure that after the completion of the Baku - Tbilisi - Ceyhan oil pipeline, that Central Asia could provide sufficient oil export supplies. With the United States' active support, in June of 2006, Kazakhstan and Azerbaijan finally reached an agreement that 25 million tons of Kazakhstan's oil would be shipped by oil tankers from Aktau on the north Caspian Sea to Baku annually, an amount that is nearly half of the pipeline's transportation capacity.¹⁸³

4.2.3.5 Recent US Policy Concerns, Corrections and Revisions

4.2.3.5.1 The Eviction of US Forces from Manas Air Base in Kyrgyzstan¹⁸⁴

In February of 2009 Russia announced that they would give Kyrgyzstan \$2 billion in loans and \$150 million in aid in exchange for an informal promise to remove U.S. troops from its airbase in Manas. Soon after that, the Kyrgyz parliament immediately passed a bill which requests the U.S. military withdrawal from the Manas base. This shows that Russia can use credit to foreign countries as a tool of influence in exchange for a 'friendly policy' and 'right decisions.'

Studies Quarterly 2, Summer 2006): 81-96.

¹⁸² Daly, John C.K. *Kazakhstan's Emerging Middle Class*, (Washington, DC: Silk Road Paper March 2008): 15.

¹⁸³ Butrin, Dmitry. "Kazakhstan Hops on the Baku-Tbilisi-Ceyhan Line," *Kommersant*, June 19, 2006, available at: http://www.kommersant.com/p683264/r_1/Kazakhstan_Hops_on_the_Baku-Tbilisi-Ceyhan_Line, (accessed: 20120825).

¹⁸⁴ 周耿生，「上海合作組織於全球社會經濟動盪下的地緣政治效應」，*中亞政經情勢與挑戰：2012 年*（桃園：健行科技大學歐亞研究中心，2012 年），頁 71。[Chou, Kengsheng. *Shanghaihezuo zuzhi Yu Quanjishuhehuijingjidongdang Xia De Diyuazhengzhixiaoying* (Geopolitical efforts of the Shanghai Cooperation Organization in response to global socio-economic unrest), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies Publishing, 2012): 71.]

However, after months of negotiation on June 23rd of 2009, in the name of “investing in the Transit Center at Manas” Washington agreed to pay 180 million US dollars to Kyrgyzstan to keep the base open and continued to rent it out until 2014, while coordinating with Turkey to invest in Kyrgyzstan \$ 1 billion to assist Kyrgyzstan in transforming the Manas base into a civilian air hub. On June 3rd, 2014 Manas Air Base was finally closed.¹⁸⁵

4.2.3.5.2 The Kyrgyz Revolution of 2010 (Second Kyrgyz Revolution)

In Kyrgyz Revolution of 2010, the pro-US President Kurmanbek Bakiyev was replaced by the transitional government of President Roza Otunbayeva's leading to a reduction in the US military presence in Central Asia; this incident can be said to be a reversal of one of the Color Revolutions.

The Second Kyrgyz Revolution occurred in April 2010, when people took to the streets to protest against corruption occurring in the government of the Kyrgyz President Kurmanbek Bakiyev, and this event later became an ethnic conflict between Kyrgyz and Uzbeks, and the conflict even expanded further in June 2010, when some of the Uzbek minority was forced into exile, claiming that they were attacked in this incident and forced into Uzbekistan, and at that time there were a lot of massacres (mass killings) and other human rights violations that occurred as well. The incident caused the function of the Kyrgyz Legislature to strengthen and Roza Otunbayeva became the President of the new transitional government.¹⁸⁶

Because of the fact that the former Kyrgyz president, Kurmanbek Bakiyev, was perceived to be supported by the United States, presumably the incident may been directed by Russia, so that the pro-US President Kurmanbek Bakiyev was replaced by the transitional government of President Roza Otunbayeva's leadership to reduce the US military presence in Central Asia, in line with the strategic interests of Russia, and this incident can be said to be a

¹⁸⁵ “Key US air base supplying Afghanistan closes,” RT (Russia Today), Jun 3, 2014, available at: <http://rt.com/usa/163276-us-leave-manas-airbase>, (accessed: 20140603).

¹⁸⁶ Nichol, Jim. “The April 2010 Coup in Kyrgyzstan and its Aftermath: Context and Implications for U.S Interests,” Federation of American Scientists, Jun 15, 2010, available at: <https://www.fas.org/sgp/crs/row/R41178.pdf>, (accessed: 20140519).

reversal of one of the Color Revolutions (i.e., Georgia's Rose Revolution of 2003, Ukraine's Orange Revolution in 2004, and Tulip Revolution in 2005).¹⁸⁷

¹⁸⁷ Engdahl, F. William. "Kyrgyzstan as a Geopolitical Pivot in Great Power Rivalries-Washington, Moscow, Beijing and the Geopolitics of Central Asia," Global Research Centre for Research on Globalization, May 25, 2010, available at: <http://www.globalresearch.ca/kyrgyzstan-as-a-geopolitical-pivot-in-great-power-rivalries/19327>, (accessed:20140205).



Chart 4-1: Chronology of the Color Revolutions



Source: Compiled by author

Therefore after the 2010 coup in Kyrgyzstan, the focus was on issue of the U.S. military being removed from its military bases in Central Asia. However, on April 13th, 2010 Kyrgyz interim government leader Roza Otunbayeva promised the U.S. Secretary of State Hillary Clinton that Kyrgyz compliance with the U.S. agreement would continue to allow U.S. troops stationed at the Manas Base to support military operations in Afghanistan, which explains explicitly that Kyrgyzstan implements a policy of "balance" in its foreign policy.¹⁸⁸

In January of 2013, the U.S. Assistant Secretary of State Robert Blake announced that Washington was holding preliminary discussions with Kyrgyzstan over continuing to have access to Manas after 2014.¹⁸⁹ However, the Kyrgyzstan parliament, in June of 2013, decided that U.S. troops must withdraw from Manas Air Base before July 2014.¹⁹⁰

4.2.3.5.3 Eminent Withdrawal of U.S. troops from Afghanistan¹⁹¹

The U.S. government plans to complete the withdrawal of the majority of its military forces from Afghanistan before the end of 2014. On June 4th, 2012 during a Russian presidential visit to Uzbekistan, presidents Putin and Karimov, agreed that the withdrawal of U.S. troops from Afghanistan could allow Afghan-based terrorism to spread outward.

In 2001 the United States launched a war in Afghanistan, since then they have maintained a military presence there and in Central Asia. However, with the ongoing insurgency US forces are stuck in a quagmire. At present, the U.S. government plans to complete the withdrawal of

¹⁸⁸ "US to keep Kyrgyz air base until Afghanistan pullout – Clinton," RT (Russia Today), Dec 3, 2010, available at: <http://rt.com/politics/clinton-manas-kyrgyzstan-otunbayeva/>, (accessed: 20140519).

¹⁸⁹ "US Deputy Secretary of State Blake arrives in Central Asia," Central Asia Newswire, Jan 15, 2013, available at: <http://www.universalnewswires.com/centralasia/energy/viewstory.aspx?id=13474>, (accessed: 20140112).

¹⁹⁰ "Manas International Airport Ganci Air Base / Manas Air Base Bishkek, Kyrgyzstan," GlobalSecurity.org, available at: <http://www.globalsecurity.org/military/world/centralasia/manas.htm>, (accessed: 20140223).

¹⁹¹ 周耿生,「上海合作組織於全球社會經濟動盪下的地緣政治效應」,《中亞政經情勢與挑戰: 2012 年》(桃園: 健行科技大學歐亞研究中心, 2012 年), 頁 62。[Chou, Kengsheng. *Shanghaihezuo zuzhi Yu Quankuieshehuijingjijidongdang Xia De Diyuanshengzhixiaoying* (Geopolitical efforts of the Shanghai Cooperation Organization in response to global socio-economic unrest), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies Publishing, 2012): 62.]

the majority of its military forces from Afghanistan before the end of 2014. Afghanistan and the United States have reached an agreement that the Obama administration will give U.S. \$ 2.5 billion in aid to Afghanistan in 2013 and afterward the Afghan security forces will take over full responsibility for security matters by the end of 2014, while the United States and its NATO allies will provide the Afghan National Army and Afghan police with \$ 4.1 billion in military aid annually.

The withdrawal of U.S. troops, mainly made by US authorities in consideration of its domestic political circumstances, has led to a reshuffling of the deck in the New Great Game. It has also raised realistic concerns in regard to terrorism in Central Asia. On June 4th, 2012 during a Russian presidential visit to Uzbekistan, the two presidents Putin and Karimov, agreed that the withdrawal of U.S. troops from Afghanistan could allow Afghan-based terrorism to spread outward.¹⁹²

4.2.3.6 US – Russian Relations

The United States ignores Russia's staunch opposition to its planned missile defense system for Europe, forcing Russia to take tough counter-measures, with U.S. Military Bases in Central Asia making the two side's relationship even more complex over the years.

In Central Asia, Russia and the United States both have their own important strategic interests. The two sides have long competed for dominance in the region. Russia and the U.S. have conducted limited cooperation on counter-terrorism and security issues in Central Asia. However, there has been a confrontation between the two sides on a range of issues since 2011.¹⁹³ An example of these is in regard to the issue of global strategic stability and security, the United States ignores Russia's staunch opposition to its planned missile defense system for Europe, forcing Russia to take tough counter-measures, with U.S. Military Bases in Central Asia making the two side's relationship even more complex over the years.

¹⁹² "Uzbekistan: Putin, Karimov Talk Afghanistan Security," Eurasianet.org, Jun 5, 2012, available at: <http://www.eurasianet.org/node/65496>, (accessed: 20140519).

¹⁹³ Shi, Ze. "Central Asia's post-crisis circumstances: Achievements and Challenges," The Glocal, September 19, 2012, available at: <http://www.glocal.org.hk/articles/8933>, (accessed: 20131201).

Moreover, there is evidence to indicate ¹⁹⁴ that the United States has intervened in Russia's parliamentary and presidential elections, interfered with Putin's statecraft, publicly accused the Russian government of manipulation of elections, and shown explicit support of opposition parties which launched political attacks against Putin. Russia and the United States stand at odds in regard to the internal conflicts in Syria.

4.2.4 Russia's Foreign Policy and Diplomatic Initiatives in Central Asia

4.2.4.1 Relations between Russia and Central Asia

Central Asia was once part of the Soviet Union hence naturally Russia views Central Asia as part of its traditional sphere of influence, and wants to keep Central Asia secure as Russia's "backyard," while not allowing other Central Asian countries to fall under the control of outside powers. Though, in the last ten years, Central Asia and Russia's economic ties have weakened, still their economic relationships are close.

Central Asia was once part of the Soviet Union hence naturally Russia views Central Asia as part of its traditional sphere of influence. Moreover, there are a great many ethnic Russians still residing in the five Central Asian republics whom the Russian state must protect.

Moreover, strategically speaking only if Central Asia is a region that is friendly to Russia can Russia function unimpeded along its vast border with Central Asia where a strip of developed lands stretch from west to east. Only by maintaining the security to the soft underbelly of the Russian bear can it proceed to function fully and aspire to regain its status as a superpower.

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Russia and Central Asia border one another. If Central Asian states encounter economic difficulties, serious social differentiation, power vacuums or other causes of

¹⁹⁴ "Russia alleges USAID tried to influence elections," CBS News, Jan 18, 2013, available at: <http://www.cbsnews.com/news/russia-alleges-usaid-tried-to-influence-elections>, (accessed: 20140305).

¹⁹⁵ Nechepurenko, Ivan. "Russia Aims to Boost Security Alliance in Central Asia," The Moscow Times, May 29, 2013, available at: <http://www.themoscowtimes.com/news/article/russia-aims-to-boost-security-alliance-in-central-asia/480669.html>, (accessed: 20140519).

regional instability that instability will directly affect Russia and the large ethnic Russian population residing there. Hence turmoil in Central Asia is likely to lead to turmoil in Russia. Keeping Central Asia secure as Russia's "backyard," by not allowing other Central Asian countries to fall under the control of outside powers, nor allow a situation where there is the formation of a strategic threat to Russia's geopolitical interests, is also an important geostrategic objective of Russia.¹⁹⁶

Both in the past, as a part of the Soviet Union, and in the present as a component of the CIS, Central Asia is one of the economic regions most affected by Russia, and may be considered a natural expansion of Russia's economic space; a space that Russia can rely on for its economic recovery and development. Achieving a unified economic space with the CIS countries has long been a goal pursued by Russia. Though, in the last ten years, Central Asia and Russia's economic ties have weakened, still their economic relationships are close.¹⁹⁷

Central Asia is the most likely region for Russia to achieve a unified economic space with. Energy-rich Central Asia's output was controlled entirely by Russia totally in the past. If Russia can achieve effective implementation of its political influence in Central Asia countries, it will receive huge economic benefits. However, with the diversification of energy export pipelines in Central Asia, Russia is losing both economic benefits and its political influence in the Central Asian countries is also being weakened.¹⁹⁸

4.2.4.2 Russian Countermeasures to US Expansion in Central Asia

The Shanghai Cooperation Organization (SCO) acts as a counterweight to U.S. power as well as to other forms of instability such as regional disputes, drug trafficking, transnational organized crime, and all other kinds of security concerns.

¹⁹⁶ Zhao, Xiaoshuo. "An Analysis of the Strategic Competition between the US and Russia in the Middle East," Xinjiang's philosophy and social science network, May 16, 2012, available at: http://big5.xjass.com/zy/content/2012-05/16/content_232498.htm, (accessed: 20121105).

¹⁹⁷ Sinitsina, Irina. "Economic Cooperation Between Russia and Central Asian Countries: Trends and Outlook," University of Central Asia, Institute of Public Policy and Administration, Working Paper No.5, 2012, available at: <http://www.ucentralasia.org/downloads/UCA-IPPA-WP5-RussiaInfluence-Eng.pdf>, (accessed: 20140519).

¹⁹⁸ Zhao, Xiaoshuo. "An Analysis of the Strategic Competition between the US and Russia in the Middle East,"

With U.S. troops in Afghanistan and Central Asia, as well as NATO's advancing eastward expansion, in order to secure its own strategic interests, Russia, and China must unite their forces to exclude the influence of the United States from Central Asia. Their overlapping security interests in Central Asia are visible in the Shanghai Cooperation Organization (SCO), with the aim of acting as a counterweight to U.S. power as well as to other forms of instability such as regional disputes, drug trafficking, transnational organized crime, and all other kinds of security concerns.¹⁹⁹

The idea for the establishment of a "stabilization arch" put forward by Putin shows the basic spirit and strategic motive of Russian diplomatic policy initiatives in essence. However, due to its concern that China's penetration into Central Asia might be too deep, the SCO is seen merely an auxiliary mechanism for Russia's strategic presence in Central Asia.²⁰⁰

4.2.4.3 Russia's Post-Soviet Economic Integration Policy

4.2.4.3.1 Mechanisms of the Commonwealth of Independent States (CIS)

The CIS' multilateral framework greatly depends upon diplomacy and traditional power mechanisms; hence regional integration under the CIS framework has not met with success vis-à-vis Russia's core economic integration strategy.

Xinjiang's philosophy and social science network, May 16, 2012, available at:

http://big5.xjass.com/zy/content/2012-05/16/content_232498.htm, (accessed: 20131201).

¹⁹⁹ 新大賽局」，蔡振雄-大學碩士論文清雲科技，「印三國在中亞地區的競逐、中、俄 (桃園：2010 年 7 月)頁， 27-99。[Tsai, Chenshiung. *Xin Dasaiju -E、Zhong、Yin Sanguo Zai Zhongyadiqu De Jingzhu* (The New Great Game-The Rivalry between Sino-Russia and India in Central Asia), unpublished thesis, Ching Yun University, (Taoyuan: July 2010), pp. 27-99.]

²⁰⁰ 新大賽局」，蔡振雄-大學碩士論文清雲科技，「印三國在中亞地區的競逐、中、俄 (桃園：2010 年 7 月)頁， 27-99。[Tsai, Chenshiung. *Xin Dasaiju -E、Zhong、Yin Sanguo Zai Zhongyadiqu De Jingzhu* (The New Great Game-The Rivalry between Sino-Russia and India in Central Asia), unpublished thesis, Ching Yun University, (Taoyuan: July 2010), pp. 27-99.]

Russia promotes efforts towards greater integration with the Central Asian countries that had been former republics within the USSR. Initially these efforts utilized mechanisms within the framework of the Commonwealth of Independent States (CIS). Due to the fact that CIS multilateral framework greatly depended upon diplomacy and traditional power mechanisms, regional integration under the CIS framework has not met with success vis-à-vis Russia's core economic integration strategy. Therefore, in order to more pragmatically develop economic cooperation with the states of the region, Russia has been more inclined to establishing bilateral cooperative mechanisms putting effort in stabilizing smaller, sub-regional groupings. Thus, on the 29th of March, 1996 a "Customs Union of Belarus, Kazakhstan, and Russia" came into being within the CIS framework, which was later joined by Kyrgyzstan in December of 1996 and Tajikistan in 1997. However, efforts to promote that throughout the CIS met with resistance. Nonetheless, this small subgrouping formed the early forerunner for later integration attempts.²⁰¹

4.2.4.3.2 The Eurasian Economic Community (EAEC, also referred to as "EurAsEC")

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On October 10th, 2000, the Eurasian Economic Community (EAEC) was created by a treaty signed by Belarus, Kazakhstan, Russia, Kyrgyzstan and Tajikistan. The economic community also has aimed for, and partially achieved, economic integration and a custom's union. In 2005 the member states reached an agreement on the establishment of a customs union, the Eurasian Customs Union (ECU), which came into being on the 6th of October, 2007. In January of 2008, the Intergovernmental Council of the Eurasian Economic Community (EAEC) took place in Moscow.

After Putin's accession to the presidency, Russia's push towards greater economic and some degree of political integration was given greater impetus and a new formulation was created.

²⁰¹ 'Eurasian Economic Integration: Facts and Figures', Eurasian Economic Commission, 2013, available at: http://www.eurasiancommission.org/ru/Documents/broshura26Body_ENGL_final2013_2.pdf, (accessed: 20140519).

²⁰² Dragneva, Rilka and Kataryna Wolczuk. "Russia, the Eurasian Customs Union and the EU: Cooperation, Stagnation or Rivalry?," Chatham House | The Royal Institute of International Affairs, Aug 2012, available at: http://www.chathamhouse.org/sites/default/files/public/Research/Russia%20and%20Eurasia/0812bp_dragnevawolczuk.pdf, (accessed: 20140105).

On October 10th, 2000, the Eurasian Economic Community (EAEC) was created by a treaty signed by Belarus, Kazakhstan, Russia, Kyrgyzstan and Tajikistan. The economic community also has aimed for, and partially achieved, economic integration and a custom's union. The EAEC improved upon the prior CIS framework in a number of ways, including binding all signatories to its agreements by seeking to coordinate ratification and prohibit reservations, as well as creating a permanent executive office, the Integration Council. More importantly, the EAEC's founding treaty provided for improved dispute resolution through the setting up of a special court.²⁰³

Step by step this economic community has continued to develop. In 2003 the Eurasian Economic Community member states signed "The energy policy fundamentals of Eurasian Economic Community member states," representing a system of concepts officially adopted in these states with regard to goals, objectives, guidelines, basic trends, and arrangements for implementation of EAEC member states' energy policies. In 2005 the member states reached an agreement on the establishment of a customs union, the Eurasian Customs Union (ECU), which came into being on the 6th of October, 2007. In January of 2008, the Intergovernmental Council of the Eurasian Economic Community (EAEC) took place in Moscow and the Prime Ministers of Belarus, Kazakhstan and Russia signed nine agreements during that meeting within the framework of the Eurasian Economic Community. However, the Uzbekistan government decided to withdraw from the Eurasian Economic Community in November 2008.

4.2.4.3.3 The Eurasian Economic Community Customs Union ("Eurasian Economic Union")²⁰⁴

Again on the 5th of December, 2009, the leaders of Belarus, Kazakhstan and Russia met agreeing to launch a new customs union on 1st of January, 2010, which was then established.

²⁰³ "Agreement on foundation of Eurasian economic community (EAEC)," World Integrated Trade Solution (WITS), available at: <http://www.worldtradelaw.net/fta/agreements/eaecfta.pdf>, (accessed: 20140510).

²⁰⁴ Dragneva, Rilka and Kataryna Wolczuk. "Russia, the Eurasian Customs Union and the EU: Cooperation, Stagnation or Rivalry?," Chatham House | The Royal Institute of International Affairs, August 2012, available at: http://www.chathamhouse.org/sites/default/files/public/Research/Russia%20and%20Eurasia/0812bp_dragnevawolczuk.pdf, (accessed: 20140105).

²⁰⁵ This economic community was further augmented in July 2011, by the elimination of internal physical border controls, and on November 18th, 2011 a joint commission was set up, the Eurasian Economic Commission, whose aim it is to set up the “Eurasian Economic Union” by 2015. ²⁰⁶ This process so far has culminated in the creation of a “Common Economic Space” on January 1st, 2012 that is currently acceded to by Belarus, Kazakhstan, and Russia. The current EAEC and the proposed Eurasian Economic Union are considered by Russia as mechanisms by which they may integrate the post-Soviet space and Russia has been actively promoting the Eurasian Economic Union as an alternative to the EU’s integration mechanisms. Its rules are consistent with the World Trade Organization (WTO) and other international norms. Subsequently, Russia, Belarus and Kazakhstan continue to promote enlargement of the future Eurasian Economic Union within a more diverse framework for further economic integration. With three years of development, the Eurasian Economic Union should be launched on the 1st of January, 2015.

On May 29th, 2014, in Astana, Presidents Putin, Nazarbayev and Lukashenko, of Russia, Kazakhstan and Belarus respectively, signed the Treaty on the Eurasian Economic Union. ²⁰⁷ Subsequently, it was stated that Armenia would sign and join the EurAsEU on June 15th of 2014, with Kyrgyzstan joining sometime in 2015. ²⁰⁸

4.2.4.3.4 CISFTA (Commonwealth of Independence States Free Trade Agreement)

The CISFTA was signed on the 18th of October, 2011 among eight CIS member states: Russia, Ukraine, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, Moldova and Armenia. CISFTA aims to promote the free movement of goods under certain conditions. Uzbekistan’s president

²⁰⁵ “Russia, Belarus and Kazakhstan agree on customs union,” Journal Of Turkish Weekly, Dec 5, 2009, available at: <http://www.turkishweekly.net/news/93507/russia-belarus-and-kazakhstan-agree-on-customs-union.html>, (accessed: 20140510).

²⁰⁶ “Russia, Belarus, Kazakhstan sign pact,” United Press International, Nov 19, 2011, available at: http://www.upi.com/Top_News/World-News/2011/11/19/Russia-Belarus-Kazakhstan-sign-pact/UPI-15221321748054, (accessed: 20140510).

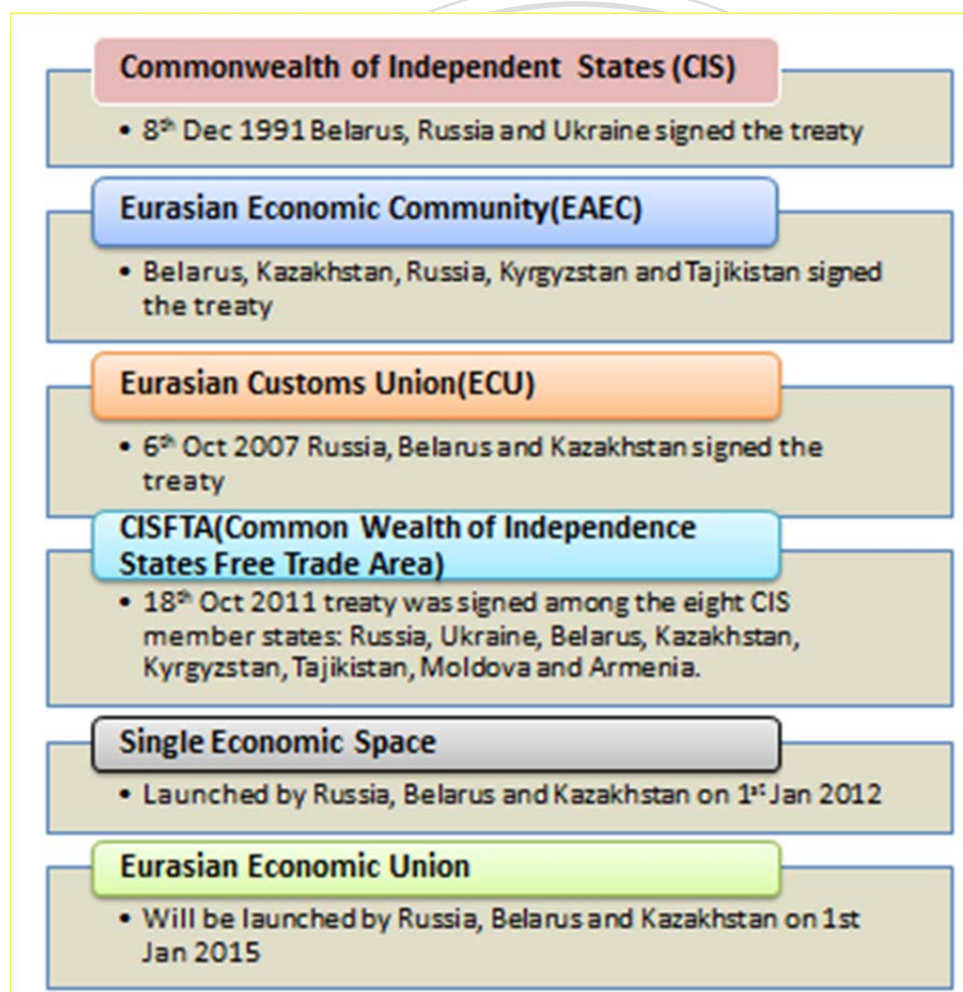
²⁰⁷ “Treaty on Eurasian Economic Union signed,” President of Russia, May 29, 2014, available at: <http://eng.kremlin.ru/news/22399>, (accessed: 20140529).

²⁰⁸ Panfilova, Viktoria. “Eurasian Economic Union Founding Treaty Signed,” Jun 3, 2014, available at: <http://journal-neo.org/2014/06/03/rus-dogovor-o-sozdanii-evrazijskogo-e-konomicheskogo-soyuza-podpisan>,

Islam Karimov also decided to join the CIS free trade zone in December 2013 ²⁰⁹

In December of 2011 Russian President Vladimir Putin was elected again, and Russia significantly accelerated the pace of integration within the CIS, and is actively promoting the proposed Eurasian Union through its framework, having become Putin's first priority strategic mission. ²¹⁰

Chart 4-2: Post-Soviet Eurasian Economic Integration Processes by Chronology



Source: Compiled by author

(accessed: 20140604).

²⁰⁹ Gadimova, Nazrin. "Uzbekistan joins CIS free trade zone," Azernews, Apr 3, 2014, available at: <http://www.azernews.az/region/65752.html>, (accessed: 20140519).

²¹⁰ Shi, Ze, "Central Asia's post-crisis circumstances: Achievements and Challenges," The Glocal, Sep 19, 2012, available at: <http://www.glocal.org.hk/articles/8933>, (accessed: 20140301).

4.2.4.3.5 The CSTO Mechanism

The Collective Security Treaty was an intergovernmental military agreement signed in 1992. The treaty took effect in 1994. Within the framework of the CSTO, the establishment and coordination of a security regime in Central Asia is considered as a key mechanism by which Russia can strengthen its influence in Central Asia. In 2002, with Russia's encouragement, the Charter of the Collective Security Treaty Organization and the Agreement on the legal status of the CSTO were signed.

The Collective Security Treaty was an intergovernmental military agreement signed in 1992. Three other post-Soviet states—Azerbaijan, Belarus, and Georgia—signed in 1993 and the treaty took effect in 1994. In 1999, six of its prior nine signatory states—with Azerbaijan, Georgia, and Uzbekistan opting out—agreed to renew the treaty for another five years, and in 2002 those six nations formally agreed to create the Collective Security Treaty Organization (CSTO) as a military alliance.²¹¹

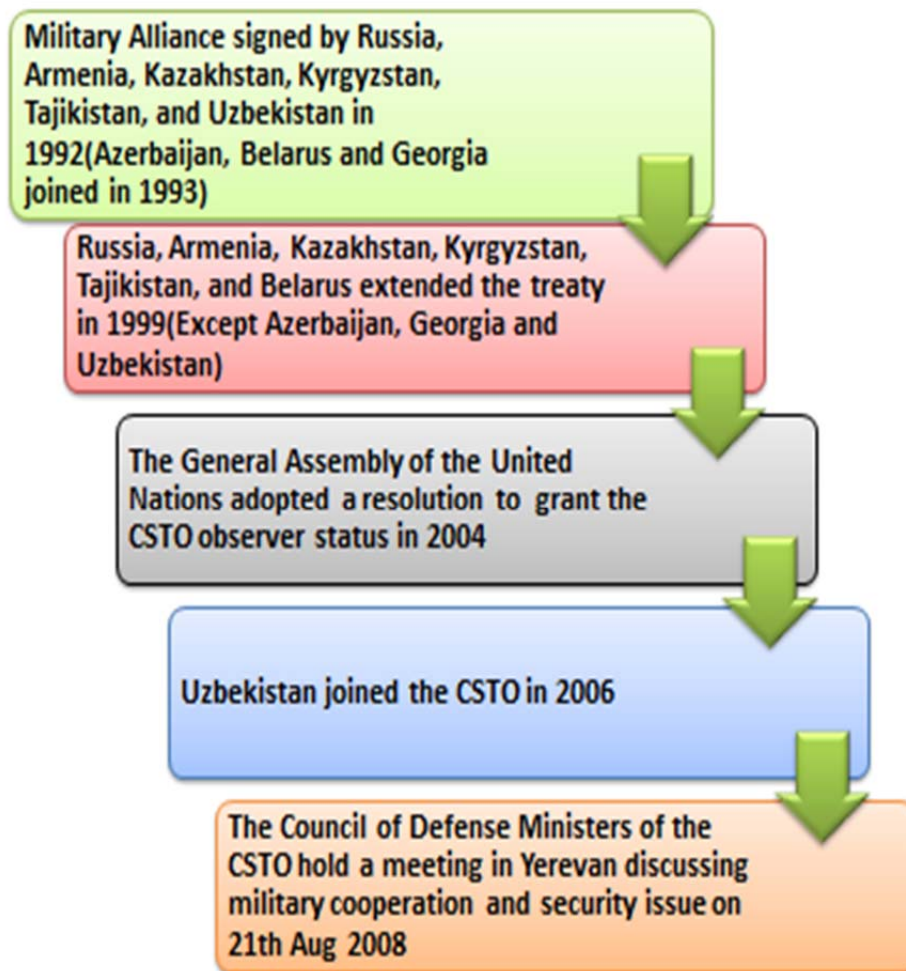
Within the framework of the CSTO, the establishment and coordination of a security regime in Central Asia is considered as a key mechanism by which Russia can strengthen its influence in Central Asia. In 2002, with Russia's encouragement, the Charter of the Collective Security Treaty Organization and the Agreement on the legal status of the CSTO were signed by the heads of all member states including Kazakhstan, Kyrgyzstan, Tajikistan, Belarus and Armenia in Chişinău, the capital and largest city of the Republic of Moldova. In 2004 the General Assembly of the United Nations adopted a resolution granting recognition of official observer status of CSTO at the UN. Uzbekistan joined the CSTO in 2006.²¹² The Council of Defense Ministers of the CSTO held a meeting in Yerevan on August 21st, 2008 discussing military cooperation and security issues within this organization.²¹³

²¹¹ "Collective Security Treaty Organization," Ministry of Foreign Affairs of the Republic of Belarus website, available at: <http://mfa.gov.by/en/organizations/membership/list/cddd96a3f70190b1.html>, (accessed: 20140519).

²¹² "Collective Security Treaty Organization," Ministry of Foreign Affairs of the Republic of Belarus website, available at: <http://mfa.gov.by/en/organizations/membership/list/cddd96a3f70190b1.html>, (accessed: 20140519).

²¹³ Yuldoshev, Avaz. "CSTO defense ministers meet in Yerevan to discuss cooperation issues," Media Group Tajikistan Asia-Plus, Aug 21, 2008, available at: <http://news.tj/en/news/csto-defense-ministers-meet-yerevan-discuss-cooperation-issues>, (accessed: 20140519).

Chart 4-3: A Chronology of the Collective Security Treaty Organization (CSTO)



Source: Compiled by author

4.2.4.3.6 The SCO as an Alternative Mechanism for Russia

Russia also utilizes the Shanghai Cooperation Organization to strengthen its energy cooperation with Central Asian countries. On June 15th, 2006 Russia's president proposed the creation of an energy club within the Shanghai Cooperation Organization and this initiative has received positive responses from all concerned.

In addition to the aforementioned mechanisms, Russia also utilizes the Shanghai Cooperation

Organization to strengthen its energy cooperation with Central Asian countries. On June 15th, 2006 Russia's president proposed the creation of an energy club within the Shanghai Cooperation Organization and this initiative has received positive responses from all concerned.²¹⁴ If this Shanghai Cooperation Organization energy club can be established, then its energy-exporting countries (Russia, Kazakhstan, Uzbekistan, and Iran) and energy-consuming countries (Kyrgyzstan, Tajikistan, China, and observers like India, etc.) will all join and benefit. The Shanghai Cooperation Organization member states and observer countries' oil reserves and production account for 20% of the world's total (OPEC accounts for 30%), and its natural gas reserves and production account for 43% of the world total reserves. It is easy to see that the Shanghai Cooperation Organization energy club will have a significant impact on international strategic circumstances regarding energy.²¹⁵

4.2.4.3.7 Russian-Iranian Relations

After NATO's expansion, Iran has become a potential ally of Russia to maintain mutual influence in Central Asia. Russian-Iranian joint efforts can reduce the pressure of American geopolitical measures curbing US influence in Central Asia.

After NATO's expansion, Iran has become a potential ally of Russia to maintain mutual influence in Central Asia. Russian-Iranian joint efforts can reduce the pressure of American geopolitical measures curbing US influence in Central Asia. Regarding the issues of energy development in Central Asia, Russia and Iran advocate that Caspian countries jointly develop the Caspian Sea, and that foreign countries have no right to intervene. For their part the Iranians have taken the initiative to counter the US, Russia, and Kazakhstan for more control of the energy resources coming from Central Asia, as Turkmenistan and Iran have negotiated the construction of a natural gas pipeline to transit through Iran.²¹⁶

²¹⁴ "Russia's President Putin proposes SCO "energy club,"" RiaNovosti News Agency, Jun 15, 2006, available at: <http://en.ria.ru/world/20060615/49512082.html>, (accessed: 20140315).

²¹⁵ 吳賢煜大學碩士論文清雲科技，「中國與俄羅斯在哈薩克斯坦之能源競逐」，(桃園：2010 年 6 月)頁， 54。[Wu, Hsienyu. *Zhongguo Yu Eluosi Zai Hasakesitan Zhi Nengyuan Jingzhu* (China and Russia's energy competition in Kazakhstan), unpublished thesis, Ching Yun University (Taoyuan: June 2010), pp. 54.]

²¹⁶ Brzezinski, Zbigniew, *The Grand Chessboard: American Primacy and Its Geostrategic Imperatives* (New York: Basic Books, 1997), pp.143-148.

4.2.4.3.8 Russian Counter-measures to the US

The primary task for Russian strategic operations in this region is to control Central Asian energy pipelines and petroleum output to prevent US-led Western interests continued expansion in Central Asia. Next is to prevent the outbreak of further “color revolutions” in the republics of the former Soviet Union.

The primary task for Russian strategic operations in this region is to control Central Asian energy pipelines and petroleum output to prevent US-led Western interests continued expansion in Central Asia. Next is to prevent the outbreak of further “color revolutions” in the republics of the former Soviet Union. There are 450,000 NGOs operating in Russia today, and it is estimated the 1/4 of the NGO receive foreign funds. In the past the United States has repeatedly through NGO funding and practices, portrayed through the media a wantonly undemocratic Russia or focused suspicion upon the legitimacy of Central Asia’s pro-Russian governments while waiting for an opportunity to promote “color revolutions” during the process of ‘democratization’ in Central Asian countries. So how to prevent color revolution from being triggered has become an important issue for the Russian government.²¹⁷

In response to the impact of the global financial crisis in 2008, the Eurasian Economic Community (EurAsEC) led by Russia created a 10 billion U.S. dollar fund to deal with the crisis. This highlighted Russia’s strength through financial assistance or loans to enterprises and other means, thereby assisting the needs of the Central Asian economies and securing its own strategic interests.²¹⁸

²¹⁷ “Is Russia tightening the noose on NGOs?” NBC News, Dec 21, 2005, available at: http://www.nbcnews.com/id/10546415/ns/world_news-europe/t/russia-tightening-noose-ngos/, (accessed: 20140519).

²¹⁸ 新大賽局」，蔡振雄-大學碩士論文清雲科技，「印三國在中亞地區的競逐、中、俄 (桃園：2010 年 7 月)頁， 63。[Tsai, Chenshiung. *Xin Dasaiju -E、Zhong、Yin Sanguo Zai Zhongyadiqu De Jingzhu* (The New Great Game-The Rivalry between Sino-Russia and India in Central Asia), unpublished thesis, Ching Yun University (Taoyuan: July 2010), pp. 63.]

4.3 Competition between United States, China, Russia and other countries in Central Asia over pipelines

4.3.1 The Start of the New Great Game in Central Asia

After the 1991 collapse of the Soviet Union, Central Asian countries looked further afield in an effort to find redress for their declining economies and new relationships were forged with the United States, China, Europe, Iran, Turkey, Japan and numerous other countries, an arena for competition between all of these foreign powers, in what has come to be called the “New Great Game.”

After the 1991 collapse of the Soviet Union, Central Asia was a vulnerable and potentially volatile region due to the threat of ethnic animosity, internal feuds, outside adventurism, political transition and an economic system in decline. Due to security concerns, Russia attempted to re-assert, maintain and strengthen ties with Central Asian countries, and established the system of the Collective Security Treaty Organization, providing some measure of security for the Central Asian states. However, due to its own economic transitional crisis, Russia abandoned assistance to those long dependent Central Asian countries, adopting instead what Chinese scholars call a *Shuai Bao Fu* (甩包袱) policy, which of course exacerbated their deep economic troubles. Therefore, the Central Asian countries looked further afield in an effort to find redress for their declining economies and new relationships were forged with the United States, China, Europe, Iran, Turkey, Japan and numerous other countries, making the region, which is highly strategic and rich in resources, an arena for competition between all of these foreign powers, in what has come to be called the “New Great Game.”²¹⁹

²¹⁹ 張鴻俊,「從地緣戰略論中國對中亞能源外交」,國立政治大學碩士論文(台北:2010年6月),頁37。
[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, National Chengchi University (Taipei: June 2010), pp. 37.]

Chart 4-4: Major Caspian Oil and Natural Gas Export Routes

Major Caspian oil and natural gas export routes



Source: U.S. Energy Information Administration, U.S. Geological Survey, IHS EDIN

<http://www.eia.gov/todayinenergy/detail.cfm?id=12931>

4.3.2 Competition for Central Asian Energy: the US's Strategies

4.3.2.1 Diversification of Geographical Sources for US Energy Imports

After the events of 911, the United States fully recognized the importance of diversification of risk in regard to sources of oil, and thus Central Asia has become an important objective for the United States. Explicitly, the US has security concerns in that it sees the region as a potential source for support of ideologies and political and religious affiliations to which it is opposed be it Islamist Iran or Fundamentalist Al-Qaeda or Taliban-linked organizations.

America is the world's largest oil importer and consumer. Securing supplies of oil is extremely important to ensure the economic prosperity and national security of the United States. U.S. oil imports mainly come from the turbulent Middle East. After the events of 911, the United States fully recognized that the importance of diversification of risk in regard to sources of oil, and thus Central Asia has become an important objective for the United States. U.S. interests in Central Asia can be divided into political, economic, and security interests.

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The American government's political interests are mainly based upon a geopolitical perspective, due to Central Asia's importance as a land-based hub between Europe and Asia, within the former sphere of influence of the Soviet Union; and that it is a key area of geostrategic importance to both Russia and China. Hence, one reason for America's involvement in Central Asia is to limit the presence of Russia and China in Central Asia.²²¹

Central Asia is an important international producer of oil and gas resources and regarded as a "second Persian Gulf." Therefore, certainly it is in America's economic interests

²²⁰ 中國周邊外交戰略之研究」，楊宗鑫 (2001-2009)國立政治大學碩士論文，「 (：台北2010 年 1 月)頁， 157-159。[Yang, Chungshin. *Zhongguo Zhoubian Waijiaozhanlue Zhi Yanjiu* (China's strategy of peripheral diplomacy (2001-2009)), unpublished thesis, National Chengchi University (Taipei: January 2010), pp. 157-159.]

²²¹ Mankoff, Jeffrey. "The United States and Central Asia after 2014," Center for Strategic & International Studies, Jan , 2013, available at: http://csis.org/files/publication/130122_Mankoff_USCentralAsia_Web.pdf.

to be involved in the region. Control of the oil and gas resources in this region, not only can ensure that the United States suffers no shortage of oil and gas to meet its domestic demand, but also thereby contain other foreign powers. Many scholars believe that the oil and gas resources in Central Asia are the most important point of interest for the U.S.²²²

Explicitly, the US has security concerns in that it sees the region as a potential source for support of ideologies and political and religious affiliations to which it is opposed be it Islamist Iran or Fundamentalist Al-Qaeda or Taliban-linked organizations. The frontier character and lack of infrastructure and economic integration of the region make it more likely that such ideologies could find support; such is the opinion of Western policy-makers.²²³

4.3.2.2 American Geo-strategy and Energy Cooperation with Central Asian States

After the five Central Asian countries gained independence in 1991, American economic interests initiated energy cooperation with Central Asian countries almost immediately and may be considered as having a plan to expand involvement. Specifically, U.S. energy strategy for the Central Asian countries can be categorized on the basis of energy interests, and geo-strategic considerations. The United States actively entered joint cooperation with the UK, France and other Western countries in the construction of westward oil pipelines, the BP-led BTC oil pipeline (Baku-Tbilisi-Ceyhan). Following the inauguration of the Baku-Tbilisi-Ceyhan (BTC) oil pipeline in July 2006, the US started to lobby more intensively for the construction of a Trans-Caspian natural gas pipeline to avoid Moscow's control of natural gas entering European markets from Central Asia.

After the five Central Asian countries gained independence in 1991, American economic interests initiated energy cooperation with Central Asian countries almost immediately and

(accessed: 20140519).

²²² Arvanitopoulos, Constantine. "The Geopolitics of Oil in Central Asia," Hellenic Resources Network, available at: <http://www.hri.org/MFA/thesis/winter98/geopolitics.html>, (accessed: 20140519).

²²³ Kozhevnikov, Roman. "U.S. warns of al Qaeda threat in Central Asia," Reuters News Service, Feb 20, 2010, available at: <http://www.reuters.com/article/2010/02/20/us-usa-centralasia-idUSTRE61J13920100220>, (accessed:

may be considered as having both a short-term plan to expand involvement as well as a comprehensive, long term strategy, which suggests movement in regard to both economic interests and geostrategic considerations. Specifically, U.S. energy strategy for the Central Asian countries can be categorized on the basis of these two concerns, one being considerations based upon purely energy interests, and the other encompassing geo-strategic considerations.²²⁴

Energy interests: The short-term goal is to promote U.S. business investment in Central Asia and the development of energy exploitation, while the long-term goal is to include the countries which have the potential of supplying oil and gas into America's energy supply system in order to achieve the goal of energy diversification and energy security.

Geo-strategic considerations: The short-term goal is to support Central Asian countries' energy exports, include the Central Asian countries in the US-led Western economic system, so as to ensure the independence of the five Central Asian countries politically and economically. The long-term goal is to prevent Chinese or Russian interference with these goals for Central Asia.

In 2005, at a time when the international average crude oil prices exceeded \$63 a barrel and with global energy supplies getting more strained, the U.S. Congress passed a bill, the "Energy Policy Act of 2005," which was signed into law by US President George W. Bush on August 8th, 2005. Broadening the channels of energy imports became a matter of top priority for the national interests of the United States. Due to the volatile situation in the Middle East, U.S. oil import channels are limited, so it is urgent to develop new sources of oil. In addition to Russia and Africa, Central Asia's vast oil reserves make the United States keen to access and exploit them. Controlling Central Asia's energy is one way that the U.S. can achieve

20140519).

²²⁴ 國立政治大學碩士論文，「從地緣戰略論中國對中亞能源外交」，張鴻俊（：台北2010年6月）頁，38。[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, National Chengchi University (Taipei: June 2010), pp. 38.]

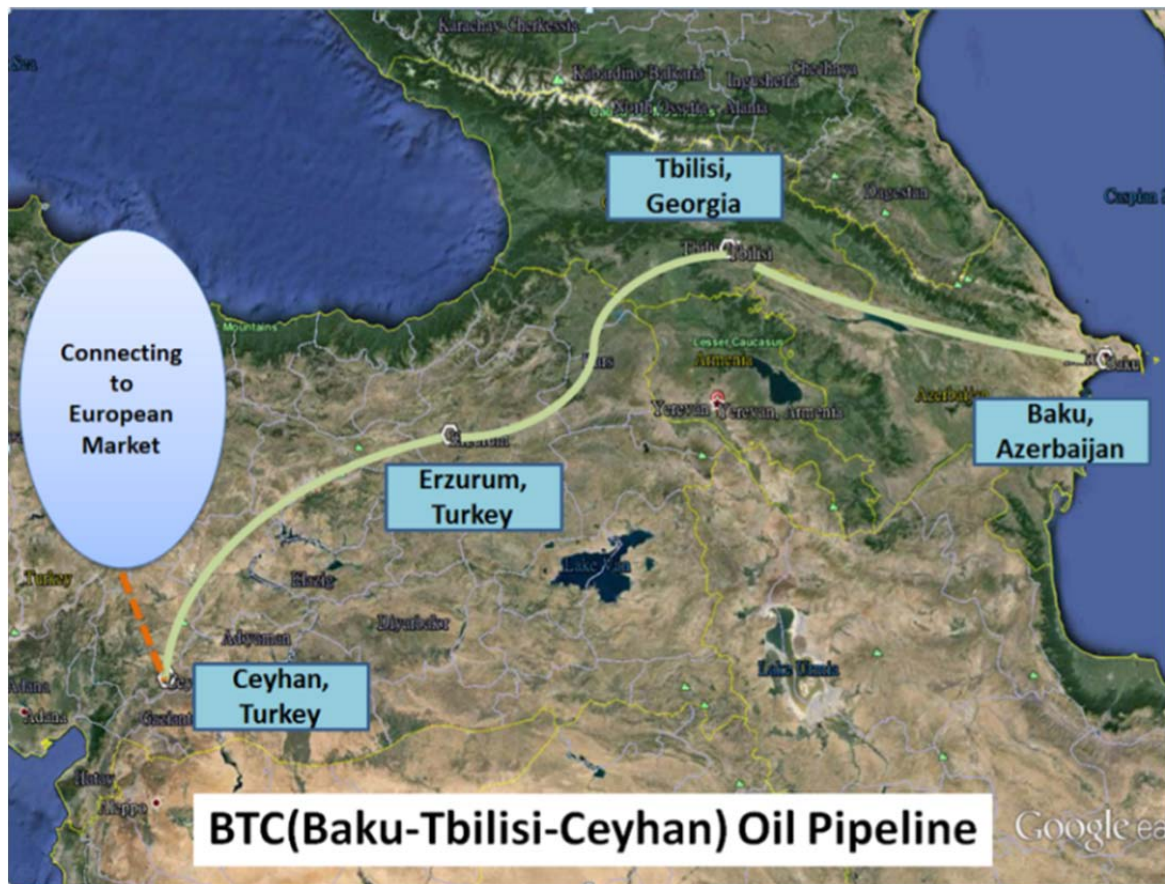
diversification of energy sources, and reduce its dependence on energy supplies from the Middle East.²²⁵

Although the United States has abundant capital and advanced oil exploration and drilling technology and expertise, the difficulty that the US faced for entry into the region's energy exploitation competition was that almost all oil and gas pipelines in Central Asia were entirely controlled by Russia. To break this monopoly, the United States actively entered joint cooperation with the UK, France and other Western countries in the construction of westward oil pipelines. The BP-led BTC (Baku-Tbilisi-Ceyhan) oil pipeline was completed in May 2005, and began operation in July of 2006, with Kazakhstan's President Nursultan Nazarbayev announcing that a significant portion of Kazakhstan's oil would transit via the BTC pipeline thereafter. At a length of 1,768km, the Baku Tbilisi Ceyhan (BTC) Pipeline travels from the Sangachal terminal near Baku, Azerbaijan, through Tbilisi, the capital of Georgia, and then through Turkey to the Ceyhan marine terminal on the Turkish coast of the Mediterranean (please see Chart 4-6 below), undoubtedly the key link in the so-called "East-West Oil Transportation Corridor." It is one of the great engineering endeavors of the new millennium and has changed the international oil market landscape and it is at the forefront of energy politics in the region.²²⁶

²²⁵ Zhao, Xiaoshuo. "An Analysis of the Strategic Competition between the US and Russia in the Middle East," Xinjiang's philosophy and social science network, May 16, 2012, available at: http://big5.xjass.com/zy/content/2012-05/16/content_232498.htm, (accessed: 20131201).

²²⁶ 張鴻俊,「從地緣戰略論中國對中亞能源外交」,國立政治大學碩士論文(台北:2010年6月),頁39。[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, National Chengchi University (Taipei: June 2010), pp. 38.]

Chart 4-5: The BTC (Baku-Tbilisi-Ceyhan) Oil Pipeline



Source: Compiled by author

Following the inauguration of the Baku-Tbilisi-Ceyhan (BTC) oil pipeline in July 2006, the US started to lobby more intensively for the construction of a Trans-Caspian natural gas pipeline. The Trans-Caspian Gas Pipeline was planned to have a capacity of 30 billion cubic meters (bcm) of gas and this pipeline would carry gas from Turkmenistan to Azerbaijan and then further, parallel to the BTC oil pipeline, thereby avoiding Moscow's control of natural gas entering European markets from Central Asia (please see the Chart 4-7 below).²²⁷

²²⁷ Liu, Qian. "Caspian pipeline gas OPEC conspiracy," finance.sina.com.cn, May 20, 2007, available at: <http://finance.sina.com.cn/j/20070520/16113610465.shtml>, (accessed: 20131208).

Chart 4-6: The Trans-Caspian Gas Pipeline



Source: Interfax Global Energy,

<http://interfaxenergy.com/gasdaily/article/6708/ec-predicts-transcaspian-pipeline-decision-by-june>

Although the United States is geographically distant from Central Asia, but still there are some principles to be observed in its energy planning and deployment in Central Asia: ²²⁸

- The signing of long-term agreements with Central Asian energy production and supply companies in regard to equity shares.
- Determination to allow Central Asian energy resources flow freely.
- Determination to break Russia's long-term monopoly and allow other countries to invest.
- Deploy security forces to prevent the destruction and plunder of strategic resources in the region.

²²⁸ 龍舒甲，「油氣能源與美國對中亞的政策」，*中亞學報* 5 (桃園: 2011): 40。[Lung, Shuchia. *Youqinengyuan Yu Meiguo Dui Zhongya De Zhengce* (Oil/Gas energy and the U.S. policy in Central Asia) *Zhongya Xuebao* (Central Asia Studies) 5 (Taoyuan: 2011): 40.]

4.3.3 Competition for Central Asian Energy: Russia's Strategies

Russia has long considered Central Asia to be its own 'backyard'. Geo-economically, the resources of Central Asia are an important complement to the Russian and traditional commodity markets, oil and mineral resources development and flows can bring enormous economic and political benefits to Russia. Geopolitically, Central Asia is a buffer zone between Russia and the Islamic world and is an important barrier to prevent the penetration of Islamic extremists' into southern Russia.²²⁹

After the collapse of the USSR, Russia and Kazakhstan signed a series of agreements in deepening energy integration. Through two aspects "exploration and development" and "transportation," Russia controls the oil and gas resources in Kazakhstan. For example, in 2002 Russian companies and KazMunaiGaz established a joint venture (Russia50-Kazakhstan 50), KazRosGaz. KazMunaiGaz -- holds a 50% stake in the project; Rosneft, 25%; and another Russian state company, Zarubezhneft the remaining 25%, for purchasing and marketing of natural gas, processing {it at gas processing plants in Russia as well as running other businesses} In July 2005 The production sharing agreement, signed between Russia and Kazakhstan (50-50), envisages total investments of \$23 billion for a 55-year period.²³⁰

4.3.3.1 Russian Oil Pipelines

In 2001, the 1,505-kilometre (935 mi) Caspian Pipeline Consortium (CPC) pipeline was opened to export oil from Tengiz to the Black Sea port of Novorossiysk in Russia. Via the Tengiz-Novorossiysk Pipeline and the Atyrau-Samara oil pipeline, Kazakhstan is allowed to export its oil to Russia and Europe.

²²⁹ 張鴻俊,「從地緣戰略論中國對中亞能源外交」,國立政治大學碩士論文(台北:2010年6月),頁40。
[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, National Chengchi University (Taipei: June 2010), pp. 40.]

²³⁰ 吳賢煜大學碩士論文清雲科技,「中國與俄羅斯在哈薩克斯坦之能源競逐」,(桃園:2010年6月)頁,53。[Wu, Hsienyu. *Zhongguo Yu Eluosi Zai Hasakesitan Zhi Nengyuan Jingzhu* (China and Russia's

Prior to 1997, exporters of Caspian oil had only one major pipeline option available to them, the Atyrau-Samara oil pipeline, from Kazakhstan to Russia, which transports about 15 million tons of oil annually. In 2001, 1,505-kilometre (935 mi) Caspian Pipeline Consortium (CPC) pipeline is opened to export oil from Tengiz to the Black Sea port of Novorossiysk in Russia. Via the Tengiz-Novorossiysk Pipeline and the Atyrau-Samara oil pipeline, Kazakhstan is allowed to export its oil to Russia and Europe (please see the Chart 4-8). Moreover, to ensure its dominant position of in Central Asia, Russia takes the geopolitical and geo-economic denial strategy to prevent energy pipeline projects that Turkmenistan and Uzbekistan and other Central Asian countries in cooperation with other countries.²³¹ In January 2010, CPC pipeline expansion project began, and the project will consist of the refurbishment of the existing five pump stations, the addition of 10 new pumping stations (2 in Kazakhstan, 8 in Russia) and is expected to be completed in 2014. At that time, the capacity will be expanded to 67 million tons in stages.²³²

energy competition in Kazakhstan), unpublished thesis, Ching Yun University (Taoyuan: June 2010), pp. 53.]

²³¹ 國立政治大學碩士論文，「地緣戰略論中國對中亞能源外交從」，張鴻俊（：台北2010年6月）頁，41。[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, National Chengchi University (Taipei: June 2010), pp. 40.]

²³² "Information about the Caspian Pipeline Consortium project," Velesstroy (company website), available at: http://www.velesstroy.com/index.php?cPath=30_55&language=en, (accessed: 20140519).

Chart 4-7: The CPC Oil Pipeline (Caspian Pipeline Consortium)



Source: Eni S.p.A.,

https://www.eni.com/en_IT/innovation-technology/eni-projects/karachaganak/karachaganak-project.shtml

4.3.3.2 Russian Natural Gas Pipelines

The Central Asia-Center gas pipeline is the main international pipeline connects Central Asia and Russia. Turkmenistan and, Uzbekistan use this pipeline to export natural gas to Russia and then to the Europe. While the Russia-led South Stream gas pipeline, a 2355 km long project (the pipe runs for 900 km under the Black Sea), is planned to bypass Ukraine and other transit countries, offering a direct gas transport channel to the Europe.

4.3.3.2.1 The Central Asia-Center gas pipeline ²³³

The arterial gas pipeline “Central Asia– Center,” designed to deliver 60 billion cubic meters (bcm) per year, was built (from 1966 to 1985) in Soviet times and earmarked for the transfer of Turkmenistan and Uzbekistan’s gas across Kazakhstan into Russia and a number of other Soviet republics. It is the main international pipeline that connects Central Asia and Russia. Turkmenistan, Uzbekistan use this pipeline to export natural gas to Russia and then to the Europe (please see the Chart4-9). In May 2007, an agreement was signed between Russia (Putin), Kazakhstan and Turkmenistan providing for Central Asian gas to be exported to Russia through the reconstructed and expanded western branch of the Central Asia-Center gas pipeline system, hoping to increase the capacity of the system from current 44 to 45 billion cubic meters (bcm) per year to 80 bcm.

Chart 4-8: The Central Asia-Center gas pipeline



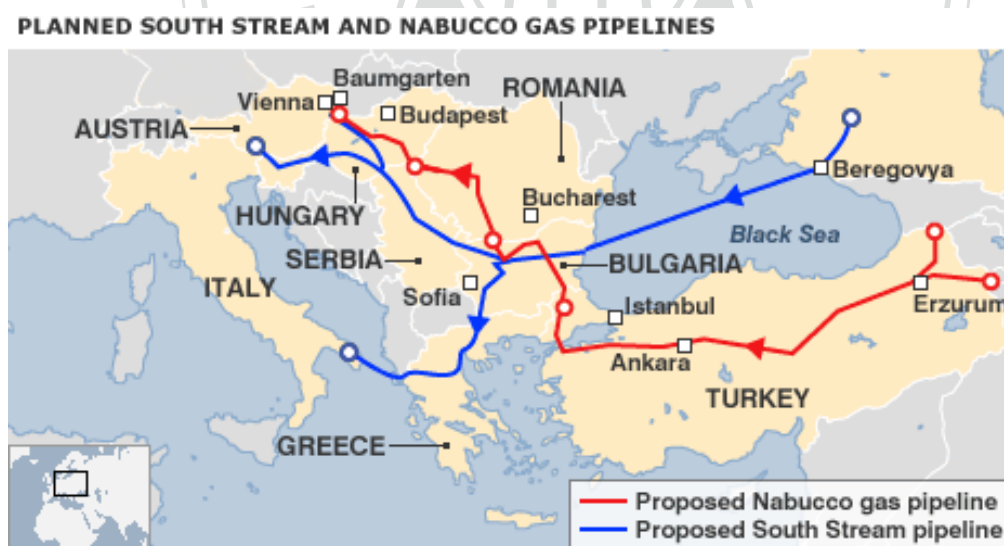
Source: Gazprom, <http://www.gazprom.com/about/production/projects/pipelines/central-asia>

²³³ “Central Asia – Center,” Gazprom (company website), available at: <http://www.gazprom.com/about/production/projects/pipelines/central-asia>, (accessed: 20140519).

4.3.3.2 The South Stream Gas Pipeline

The Russian-led South Stream gas pipeline is 2355 km in length (the pipe runs for 900 km under the Black Sea). On December 7th, 2012 construction of the South Stream was launched, and four pipeline arteries will be constructed with an annual transport capacity of 15.75 billion cubic meters (bcm). The pipeline will be laid under the Black Sea, through Turkey, Bulgaria, Serbia, Hungary and Slovenia, and finally arrive in Italy (please see Chart 4-10). The pipeline's commercial deliveries of natural gas to Europe are expected to start in the first quarter of 2016 so that Russia can pump natural gas directly under the Black Sea to Southern Europe. The project is set to reach its designed capacity of 63 billion cu m in 2018.²³⁴ The construction of the South Stream gas pipeline is seen as a strategic tool for Russia to counter the rival Nabucco project, which is being promoted by the European Union (EU).

Chart 4-9: The South Stream and Nabucco Gas Pipelines



Source: BBC News, <http://news.bbc.co.uk/1/hi/world/europe/8039587.stm>

²³⁴ Liu, Qian. "Caspian pipeline gas OPEC conspiracy," finance.sina.com.cn, May 20, 2007, available at: <http://finance.sina.com.cn/j/20070520/16113610465.shtml>, (accessed: 20130810).

4.3.3.2.3 Russia uses its Traditional Influence to Enhance Energy Cooperation in Central Asia

Russia uses its traditional influence to enhance energy cooperation in Central Asia including strengthening its energy cooperation with Kazakhstan, while attempting to monopolize Turkmenistan's gas exports and strengthening control of Uzbekistan's energy infrastructure.

Russia uses their traditional and existing political and economic ties with Central Asian countries as a mechanism to engage in the field of energy development in Central Asia. The relevant strategies and their implementation are as follows:

Strengthen energy cooperation with Kazakhstan²³⁵

On July 6th, 2005, a Production Sharing Agreement (PSA) for the Kurmangazy field was signed by the Kazakhstani Energy Ministry and RN-Kazakhstan. This PSA extends for 55 years and covers joint investments expected to amount to \$23 billion.

Attempts to monopolize Turkmenistan gas exports

In April 2003, during his visit to Russia, the President of Turkmenistan, Saparmurat Niyazov, and Russian President Vladimir Putin signed a 25-year gas supply agreement. Up to 2008, Russia bought about 50 billion cubic meters of gas from Turkmenistan annually.²³⁶ In April 2009, an explosion on the Central Asia-Center (CAC)-4 pipeline disrupted exports from the Central Asian nation to Russia. At that time, Turkmenistan accused Russia's energy behemoth

²³⁵ 張鴻俊，「從地緣戰略論中國對中亞能源外交」，國立政治大學碩士論文（台北：2010年6月），頁41-42。[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, National Chengchi University (Taipei: June 2010), pp. 41-42.]

²³⁶ Blagov, Sergei. "Deal with Turkmenistan Enhances Russia's Energy Position in Central Asia," Eurasianet.org, Jan 23, 2006, available at: <http://www.eurasianet.org/departments/insight/articles/eav012406.shtml>, (accessed: 20140519).

of "egregious" behavior by allegedly engineering a pipeline explosion. On December 22nd, 2009 in Ashgabat, Russian President Dmitry Medvedev and his counterpart in Turkmenistan, Gurbanguly Berdimuhamedov, witnessed the signing of documents on a bilateral gas trade and transportation agreement wherein Turkmenistan would deliver “up to” 30 billion cubic meters (bcm) annually to Russia from 2010 onward.²³⁷

Strengthening control of the Uzbekistan's energy infrastructure

An agreement on strategic cooperation in the gas sector between Uzbekneftegaz and Gazprom was signed in December 2002 and according to the document, Uzbekistan's gas for export was purchased during 2003-2012.²³⁸ In February 2005, Gazprom and the joint-stock company, Uztransgaz (a sub-holding of NHC Uzbekneftegaz), signed a mid-term agreement on natural gas transmission across the Republic of Uzbekistan from 2006 to 2010, aiming to enhance the capacity to reach 80 billion cubic meters of gas annually.²³⁹

4.3.3.2.4 Russia's energy strategy objectives in Central Asia²⁴⁰

Russia's strategies may be described as follows:

- Controlling the energy resources in the region is a means of controlling Central Asia; if Russia can achieve this aim then Central Asia will remain firmly in Russia's sphere of influence.
- Russia aims to counter American penetration into Central Asia, and prevent China's

²³⁷ Blagov, Sergei. "Russia Mends Energy Ties with Turkmenistan and Azerbaijan," The Jamestown Foundation, Jan 13, 2010, available at: http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news%5D=35904, (accessed: 20140519).

²³⁸ "Purchase contract and Transmission Agreement signed for Uzbek gas," Gazprom (company website), Dec 24, 2012, available at: <http://www.gazprom.com/press/news/2012/december/article152618>, (accessed: 20140519).

²³⁹ "Gazprom signs 2006-2010 transit deal with Uztransgaz," ICIS, Oct 14, 2005, available at: <http://www.icis.com/heren/articles/2005/10/14/9280331/gazprom-signs-2006-2010-transit-deal-with-uztransgaz.html>, (accessed: 20140519).

²⁴⁰ 吳賢煜大學碩士論文清雲科技，「中國與俄羅斯在哈薩克斯坦之能源競逐」，(桃園：2010 年 6 月)頁， 54。[Wu, Hsienyu. *Zhongguo Yu Eluosi Zai Hasakesitan Zhi Nengyuan Jingzhu* (China and Russia's

influence in Central Asia from becoming excessive.

- Further, controlling the energy resources in all regions of the former Soviet Union is a necessary condition for Moscow to carry out its geo-political control of those areas, which is seen as the only opportunity to redevelop Russian hegemony over the former Soviet Union by the authorities in Moscow.

In March 2010, during Russian Prime Minister Vladimir Putin visit to Central Asia, Kazakhstan committed to expanding their oil exports via Russian territory. Russia also agreed to provide technical assistance to Kazakhstan's nuclear power program.²⁴¹ In addition, an agreement was signed between Russia, Kazakhstan and Turkmenistan in which they plan jointly to construct a Caspian gas pipeline from Turkmenistan via Kazakhstan to the territory of Russia and export product to Europe. Moreover, a memorandum was signed for renovation and expansion of the western branch of the Central Asia–Center gas pipeline system, with capacity due to be expanded to 90 bcm per year. In short, this amount to an expansion of the domain of the Russian transit gas pipeline system allowing Russia to maintain its monopoly on export of Central Asian gas to the European market.²⁴²

4.3.4 Competition for Central Asian energy: the EU's Strategies

After the 2005 "color revolutions" trend in Central Asia, the EU began to improve its position in Central Asia via its foreign policy. The EU has launched the "Energy Strategy" and "The EU and Central Asia: Strategy for a New Partnership." However, the EU is dependent on Russian oil, gas and coal supplies. In recent years, there's gas dispute between Russia and Ukraine, and also Russia and Belarus due to the cost of natural gas transport, and those problems deepen the EU's concerns in regard to (relying on) Russia. To reduce dependence on Russian energy resources, and enhance the diversification of ways of energy supply, so that

energy competition in Kazakhstan), unpublished thesis, Ching Yun University (Taoyuan: June 2010), pp. 54.]

²⁴¹ Blagov, Sergei. "Medvedev, Nazarbaev fail to heal fault lines", Asia Times Online, Apr 6, 2011, available at: http://www.atimes.com/atimes/Central_Asia/MD06Ag01.html, (accessed: 20140315).

²⁴² 吳賢煜,「中國與俄羅斯在哈薩克斯坦之能源競逐」,清雲科技大學碩士論文(桃園:2010年6月),頁80。[Wu, Hsienyu. Zhongguo Yu Eluosi Zai Hasakesitan Zhi Nengyuan Jingzhu (China and Russia's energy competition in Kazakhstan), unpublished thesis, Ching Yun University (Taoyuan: June 2010), pp. 80.]

they hope that Central Asian countries to gradually increase oil and gas exports to Europe in order to reduce EU countries' dependence on Russia. With the support of the European Union, Nabucco Gas Pipeline International GmbH (NIC/ National Internship Consortium) was set up on 24 June 2004 to develop, construct and operate the Nabucco pipeline.

4.3.4.1 The EU's initiatives in Central Asia after the Color Revolutions

For the EU countries, Central Asia has an important geo-strategic position. First of all, Central Asia has rich oil and natural gas resources. After the 2005 "color revolutions" occurred in Central Asia, the EU began to improve its position in Central Asia via its foreign policy. The EU launched the "Energy Strategy" and "The EU and Central Asia: Strategy for a New Partnership." Those policies emphasize the important role of Central Asian energy security in regard to Europe's own energy security, and they systematically illustrate the exposition of the EU's strategic objectives in Central Asia, their means and the direction of cooperation.²⁴³

4.3.4.2 The Nabucco Gas Pipeline Project

The EU is dependent on Russian oil, gas and coal supplies. In recent years, there's been a gas dispute between Russia and Ukraine, and also Russia and Belarus due to the cost of natural gas transport, and those problems have deepened the EU's concerns in regard to its reliance upon Russia. Adding to the former concerns are the new complications arising from the ongoing Ukrainian Crisis. The EU hopes to reduce its dependence on Russian energy resources, and enhance its diversification of imports of energy supplies. The EU hopes to gradually increase its oil and gas exports to Europe from Central Asian countries in order to reduce their dependence on Russia. With the support of the European Union, the Nabucco Gas Pipeline International GmbH (NIC/ National Internship Consortium) was set up on the 24th of

²⁴³ 張鴻俊，「從地緣戰略論中國對中亞能源外交」，國立政治大學碩士論文（台北：2010年6月），頁30-43。[Chang, Hungchuen, *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, National Chengchi University (Taipei: June 2010), pp. 30-43.]

June 2004 to develop, construct and operate the Nabucco pipeline.²⁴⁴

The relationship between the EU and Central Asia was strengthened further in 2007 when the "Strategy for a New Partnership with Central Asia" was passed by the European Council, thereby obtaining energy cooperation with Central Asian countries by strengthening the legal basis of that cooperation. Its real purpose is to weaken Russia's influence in Central Asia.²⁴⁵ Moreover, the EU has announced that it will build the Nabucco natural gas pipeline which is slated to traverse Azerbaijan, Georgia, Turkey, Bulgaria, and Hungary. In 2009, the EU began promoting the "South Gas Corridor" project and in response to challenges from Western powers in Central Asia, Russia has also launched the Burgas - Alexandroupoli pipeline and the South Stream pipeline as a counter.²⁴⁶

The Nabucco gas pipeline, with a length of 3,900 km, if successfully completed, will be able to transport 30 billion cubic meters of natural gas per year. Gas extracted from Turkmenistan, Azerbaijan, etc. can be shipped through the Trans-Caspian gas pipeline and the BTC pipeline, followed by the Nabucco pipeline between Turkey, Romania, Bulgaria, Hungary and Austria. The southern branch of the pipeline could include natural gas from Iraq, Iran and other Persian Gulf countries.²⁴⁷

In November 2011, according to Reinhard Mitschek, managing director of Nabucco Gas Pipeline International GmbH, Nabucco would most probably need a third gas supplier after Azerbaijan and Turkmenistan to fill its capacity and he claimed that the project is

²⁴⁴ "Nabucco Gas Pipeline International GmbH (NIC)", Gulf Oil and Gas, available:

<http://www.gulfoilandgas.com/webpro1/prod1/suppliercat.asp?sid=10381>, (accessed: 20140308).

²⁴⁵ Abdulhamidova, Nurangez. "The European Union-Central Asia: in the light of the New Strategy," master's thesis, Linköping University, Jun, 2009, available at:

<http://liu.diva-portal.org/smash/get/diva2:286608/FULLTEXT02.pdf>, (accessed: 20140519).

²⁴⁶ "An EU Energy Security and Solidarity Action Plan," Report published by the Commission of the European Communities, Brussels, Nov. 13, 2008, available at:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0781:FIN:EN:PDF>, (accessed: 20140519).

²⁴⁷ "EU gas pipeline project near collapse: Analysts," The Peninsula, Feb 5, 2012, available at:

<http://thepeninsulaqatar.com/business/business-news/182281/eu-gas-pipeline-project-near-collapse-analyst>, (accessed: 20140520).

gaining attention from companies operating in Iraq, thus Iraq is considered a potential gas exporter to Europe. ²⁴⁸

European Energy Commissioner Günther Oettinger wrote in a newspaper column on July 5th, 2013 that the route planned for the Nabucco West pipeline project is not dead, and that there could still be an alternative gas route to Austria, which is still under discussion. ²⁴⁹

4.3.5 Competition for Central Asian energy: Japan's Strategies

In 1997, based on its energy and geopolitical considerations, Japan's Prime Minister, Hashimoto Ryutaro, introduced "Silk Road Diplomacy," Japan's policy placing Central Asia in an important position. Thereafter, the Japanese government continued to implement economic aid policies, strategies to increase diplomatic efforts in Central Asian countries, copying the Shanghai Cooperation Organization to establish a "Central Asia plus Japan" forum. In August 2004, on the basis of existing bilateral cooperation, during the visit of Yoriko Kawaguchi to Central Asia, the first meeting of the "Central Asia plus Japan" forum was held among the foreign ministers of Japan, Uzbekistan, Tajikistan, and Kyrgyzstan with incentives to expand the Japan's partnership with nations in the region. In 1995 the Japanese company Mitsubishi, Exxon, China's CNPC and other companies conducted a research project named "Turkmenistan-China-Japan Gas Pipeline Project." According to the project, a natural gas pipeline is planned to travel from the origin of the (natural gas) resources, Turkmenistan, through Uzbekistan, Kazakhstan, China's east coast, and finally to come across the Yellow Sea and make delivery to Japan. In recent years, the Senkaku Islands dispute has soured relations between Japan and China. How the two countries, through diplomatic channels, resolve the impasse is a major issue.

²⁴⁸ "Trans-Caspian gas pipeline vital to Nabucco," Petroleum Economist, Oct 17, 2011, available at: <http://www.petroleum-economist.com/Article/2918721/Trans-Caspian-gas-pipeline-vital-to-Nabucco.html>, (accessed: 20140316).

²⁴⁹ "EU's Oettinger says Nabucco route not dead –newspaper," Reuters News Agency, Jul 5, 2013, available at: <http://www.reuters.com/article/2013/07/05/gas-pipeline-eu-idUSL5N0FB0EY20130705>, (accessed: 20140320).

4.3.5.1 Japan's Silk Road Diplomacy

In 1968, Japan became the world's second largest economy. Japan's industry sector is highly developed but resources are extremely scarce. There are currently only a small number of oil fields off its coast in the Sea of Japan, which only account for 0.2% of the amount of the national supply, and the rest is imported. So Japan is a net importer of oil and its energy strategy is one of the priorities for the country's foreign policy. In 1997, based on energy and geopolitical considerations, Japan's Prime Minister, Hashimoto Ryutaro, introduced the concept of Eurasian Diplomacy, by promoting his policy of "Silk Road Diplomacy," outlining Japan's foreign policy, placing Central Asia in an important position.²⁵⁰

4.3.5.2 Establishment of the "Central Asia plus Japan" forum and Aid to Central Asia

In August 2004, on the basis of existing bilateral cooperation, during the visit of Yoriko Kawaguchi to Central Asia, the first meeting of the "Central Asia plus Japan" forum was held among the foreign ministers of Japan, Uzbekistan, Tajikistan, and Kyrgyzstan, which was a new form of collective cooperation designed as an effective mechanism with incentives to expand the Japan's partnership with nations in the region. On June 5, 2006 a subsequent meeting was held in Tokyo. The ministers produced a new "Action Plan" based on five "pillars" for cooperation: political dialogue, intra-regional cooperation, business promotion, intellectual dialogue, and cultural exchanges. On energy issues, with special emphasis on the promotion of mutual cooperation and support for the countries in the region, Japan decided to assist the Central Asian countries to build an energy transport corridor. In August 2006, the first visit of Japan's Prime Minister Junichiro Koizumi to Kazakhstan and Uzbekistan drew attention to possible cooperation between Japan and those two Central Asian countries when Koizumi declared that Japan's new foreign policy will be more actively involved with Central Asia.²⁵¹

²⁵⁰ Rakhimov, Mirzokhid. "Central Asia and Japan: Bilateral and multilateral relations," ScienceDirect.com, Jan, 2014, available at: <http://www.sciencedirect.com/science/article/pii/S1879366513000328>, (accessed: 20140508).

²⁵¹ Yuasa, Takeshi. "Japan's Multilateral Approach toward Central Asia," Slavic-Eurasian Research Center, available at: http://src-h.slav.hokudai.ac.jp/coe21/publish/no16_1_ses/04_yuasa.pdf, (accessed: 20140520).

From 1993, Japan provided assistance to Central Asia through the mechanism called “Official Development Assistance” (ODA). The total bilateral ODA to the five Central Asian countries reached \$2 billion in 2010 which mainly focus on infrastructure development in Central Asia.²⁵² The Japanese government continues to implement economic aid policies, strategies to increase diplomatic efforts in Central Asian countries, copying the Shanghai Cooperation Organization to establish a “Central Asia plus Japan” forum, Japan has gradually swayed the Central Asian countries to take the platform support in the international arena, and expanded its political influence in the region, making the political influence of China and Russia in Central Asia somewhat weakened.²⁵³

4.3.5.3 The Turkmenistan-China-Japan Gas Pipeline Project

In 1995 the Japanese company Mitsubishi, Exxon, China’s CNPC and other companies conducted a research project named "Turkmenistan-China-Japan Gas Pipeline Project" on whether transport of Central Asian gas through pipelines to China and onward to Northeast Asia is feasible. According to the project, a natural gas pipeline is planned to travel from the origin of the (natural gas) resources, Turkmenistan, through Uzbekistan, Kazakhstan, China’s east coast, and finally to come across the Yellow Sea and make delivery to Japan.²⁵⁴

In 2009 after the launch of the China-Central Asia gas pipeline, Xinjiang’s and China’s West-East pipelines are well connected. The western section of the complicated West-East Gas Pipeline Project links Xinjiang to Shaanxi, and the eastern section connects Shaanxi and Shanghai. When it arrives at the Shanghai terminal, natural gas can be delivered to

²⁵² Rakhimov, Mirzokhid. “Central Asia and Japan: Bilateral and multilateral relations,” ScienceDirect.com, Jan, 2014, available at: <http://www.sciencedirect.com/science/article/pii/S1879366513000328>, (accessed: 20140508).

²⁵³ Dadabaev, Timur. “Models of Cooperation in Central Asia and Japan’s Central Asian Engagements: Factors, Determinants and Trends,” ISN, available at: <http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=110796>, (accessed: 20140512).

²⁵⁴ Crandall, Maureen S. *Energy, Economics, and Politics in the Caspian Region: Dreams and Realities*

Lianyungang via the construction of smaller branches or rail routes to the north. After Turkmenistan's natural gas is transported to China's east coast port, Lianyungang, it can be shipped via the following two ways to Japan:²⁵⁵ By shipping the liquid natural gas (LNG) to Japan's sea ports via marine shipping. However, the cost for such shipping could be quite high and the volume that each tanker could carry is also inadequate. By constructing a gas pipeline from Lianyungang to Nagasaki in Japan (a total length of 900 km) (Please see Chart 4-12).

Currently, it's possible to transfer natural gas via the network of Central Asian gas pipelines and the West-East Gas Pipeline in China to Lianyungang, and the specific conditions for the pipelines to further extend to Japan have been initially equipped. However, because of the Senkaku Islands dispute between Japan and China, there has been a rapid deterioration in the relationship between the two countries.²⁵⁶ Therefore, how the two countries, through diplomatic channels, resolve the impasse is a major issue. Allowing Japan to receive natural gas from Central Asia, and also considering that China needs to meet its domestic demand for natural gas; can it export excess gas to Japan? China as a transit country could earn transit fees. In order to achieve a win-win situation, this issue deserves further research and consideration.

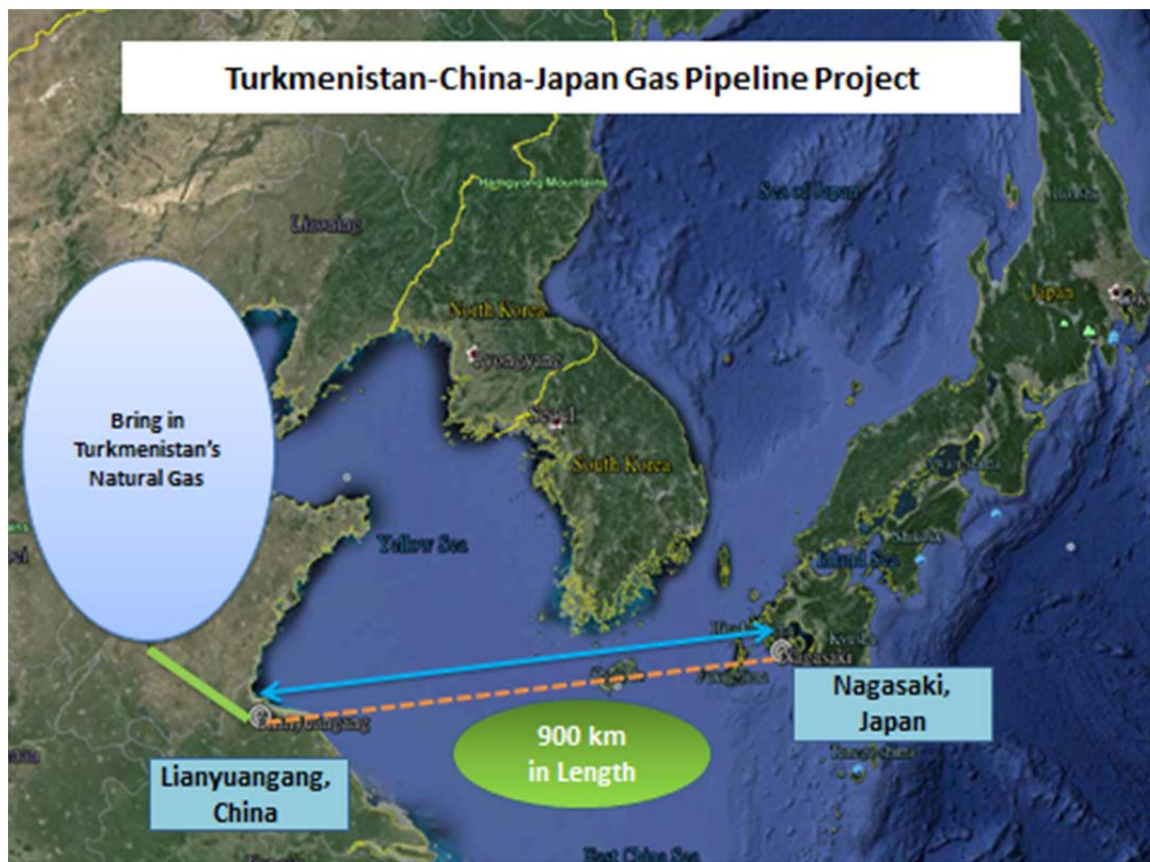
(Westport, Connecticut: Praeger Security International, 2006), p. 145.

²⁵⁵ Waelde, Thomas W. *The Energy Charter Treaty: An East-West Gateway for Investment and Trade* (London: Kluwer Law International, 1996), p. 92.

²⁵⁶ Posner, Eric. "Why Are China and Japan Inching Toward War Over Five Tiny Islands?," *Slate Magazine*, Feb 25, 2014, available at:

http://www.slate.com/articles/news_and_politics/view_from_chicago/2014/02/the_senkaku_or_diaoyu_islands_where_world_war_iii_could_start_because_of.html, (accessed: 20140520).

Chart 4-10: The Turkmenistan-China-Japan Gas Pipeline Project



Source: Compiled by author

4.3.6 Competition for Central Asian energy: India's Strategies

Since 1991 India has been actively interacting with the five Central Asian countries to establish stronger diplomatic relations through technical personnel training, loans and other assistance. The "India-Central Asia Dialogue" was organized and held as well. India's goal is to establish a trust relationship with the Central Asian countries via those activities, and to expand that relationship into a level of energy cooperation. The TAPI pipeline is supported implicitly by the United States, which starts from Turkmenistan's Dauletabad gas field, pass through Afghanistan, Pakistan, and finally arrive at Fazilka in India.

With India's increasing economic development, there is a growing demand for energy resources, and its external energy dependence is constantly increasing. However, India's traditional source, Iran, is somehow not stable as an oil supplier. (After the United States broke diplomatic relations with Iran in the 1980s, the United States has repeatedly accused Iran of secretly making nuclear weapons. Consequently, there is a bad relationship between these two countries.²⁵⁷) Fearing that buying too much oil from Iran may irritate the United States (the U.S. having announced an embargo on Iranian oil),²⁵⁸ India is urgently looking for new sources of gas and oil and therefore the energy-rich Central Asian region has become a new option.²⁵⁹

²⁵⁷ Borger, Julian. "US accuses Iran of secret nuclear weapons plan," The Guardian, Dec 14, 2002, available at: <http://www.theguardian.com/world/2002/dec/14/iraq.iran>, (accessed: 20140503).

²⁵⁸ Lakshmanan, Indira A.R. and Pratish Narayanan, "U.S. May Sanction India over Level of Iran-Oil Imports," Bloomberg, March 15, 2012, available at: <http://www.bloomberg.com/news/2012-03-15/u-s-may-sanction-india-over-level-of-iran-oil-imports.html> (accessed: 20140505).

²⁵⁹ Hemant, S., Persis Taraporevala, Kailash K. Prasad and Rani D. Mullen, "India Central Asia Backgrounder," Indian Development Cooperation Research, Centre for Policy Research, Jan 6, 2014, available at: <http://idcr.cprindia.org/p/page-4.html> (accessed: 20140505).

Since the Soviet Union's collapse in 1991, India has been actively interacting with the five Central Asian countries to establish stronger diplomatic relations through technical personnel training, loans and other assistance. In 2003 an anti-terrorism military exercise was held along with Tajikistan, on Tajik territory, and the "India-Central Asia Dialogue" was organized and held as well. India's goal is to establish a trust relationship with the Central Asian countries via those activities, and to expand that relationship into a level of energy cooperation. Nonetheless, India's energy cooperation activities in Central Asia have yet to reach fruition with no real progress to date.²⁶⁰

4.3.6.1 India's Failure to buy into the Kashagan Oil Field

Nonetheless, India's Oil and Natural Gas Corporation had originally concluded an agreement in November 2012 to purchase an 8.4 per cent interest in Kazakhstan's Kashagan oil field. However, in July 2013 the Kazakhstani state-owned energy firm KazMunaiGas bought that stake in the Kashagan field and then sold an 8.4 per cent interest to China's Chinese National Petroleum Company (CNPC) for US\$5 billion.²⁶¹

4.3.6.2 The Turkmenistan-Afghanistan-Pakistan-India (TAPI) Pipeline

The proposed Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline is supported implicitly by the United States,²⁶² and India earnestly hopes to get energy resources from Central Asia through this pipeline. To this end, India is in consultations with their long rivals, Pakistan, the transit country of this proposed pipeline, in order to meet its own growing huge

²⁶⁰ Hemant, S., Persis Taraporevala, Kailash K. Prasad and Rani D. Mullen, "India Central Asia Backgrounder," Indian Development Cooperation Research, Centre for Policy Research, Jan 6, 2014, available at: <http://idcr.cprindia.org/p/page-4.html> (accessed: 20140505).

²⁶¹ Tanchum, Micha'el and Shalem College, "India's Central Asia ambitions outfoxed by China and Russia," East Asia Forum, Oct 12, 2013, available at: <http://www.eastasiaforum.org/2013/10/12/indias-central-asia-ambitions-outfoxed-by-china-and-russia>, (accessed: 20140505).

²⁶² "US supports TAPI not Pak-Iran pipeline: Olson," Pakistan Today, March 5, 2013, available at: <http://www.pakistantoday.com.pk/2013/03/05/national/us-supports-tapi-not-pak-iran-pipeline-olson/>, (accessed: 20140507).

demand for energy because of the advancing economic development of India. The TAPI pipeline is meant to start from Turkmenistan's Dauletabad gas field, pass through Afghanistan, Pakistan, and finally arrive at Fazilka in India ²⁶³ (Please see Chart 4-13 below). This pipeline has not yet been put into implementation. Moreover, the areas that the TAPI pipeline are planned to pass through in Afghanistan and Pakistan are inhabited by Islamic radicals and terrorists making transportation security nearly impossible. ²⁶⁴

Russia has its traditional influence in Central Asia. It has a huge voice and influence among the Central Asian countries. From Russia's perspective, the TAPI pipeline represents a US violation of their sphere of influence in Central Asia and also it can damage Russia's Central Asian natural gas monopoly. In fact, the 2009 China - Central Asia gas pipeline has in part already destroyed Russia's monopoly. ²⁶⁵ However, because of the SCO mechanism, with interaction between China and Russia, they are closely related to each other. Russia may not be satisfied with, but they did not oppose the construction of China - Central Asia gas pipeline either. Being against Russia's interest it can be expected that they will put great effort into obstructing the construction of such a pipeline.

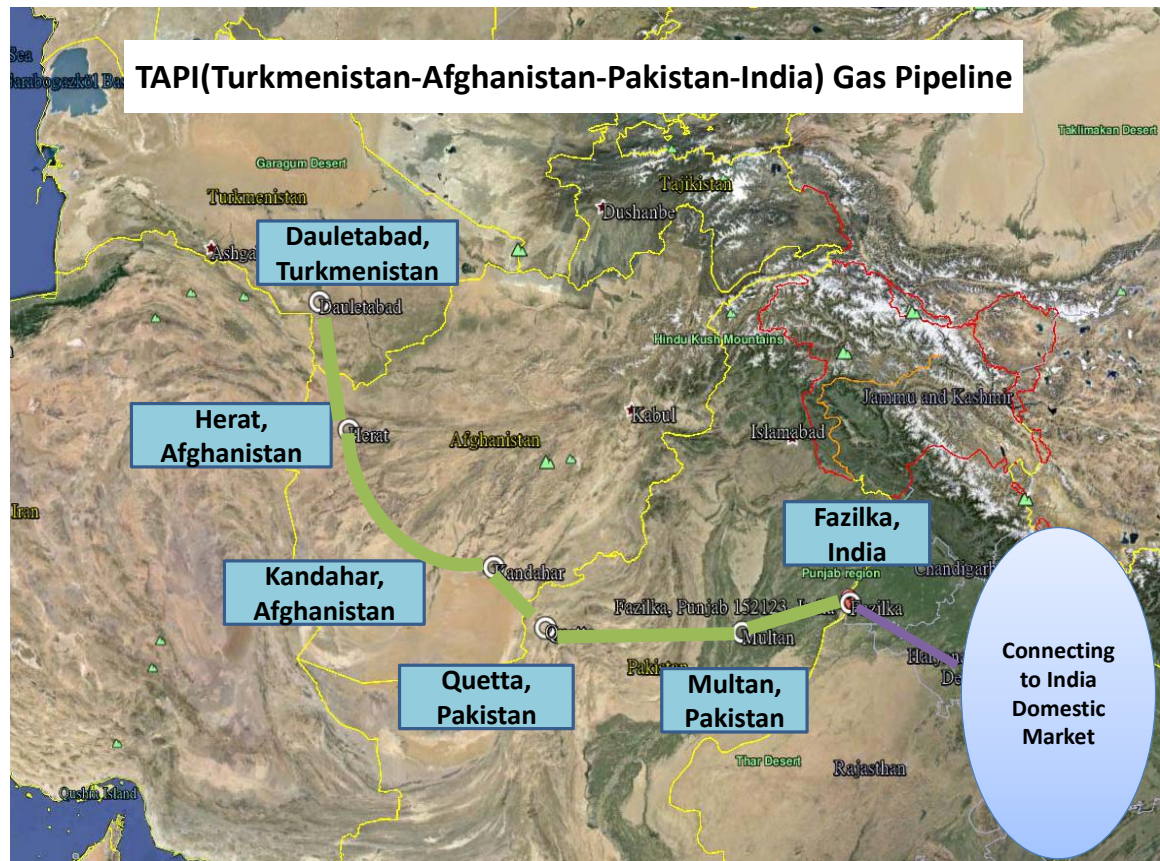
Moreover, China has completed construction of the China-Central Asia Gas Pipeline, so there's a steady stream of gas transported from the Dauletabad gas field in Turkmenistan into China. If the TAPI pipeline construction were completed, part of the Turkmenistan's Dauletabad gas field's reserve will be delivered to India, so that there will be a significant reduction in the natural gas transported to China and it will impact China's energy security. Therefore, the Chinese government is also opposed to the construction of the TAPI pipeline, The TAPI's construction would be bound to cause China and India to compete for the same natural gas.

²⁶³ "Turkmenistan- Afghanistan – Pakistan-India [TAPI] Pipeline," Ministry of Mines of Afghanistan, available at: <http://mom.gov.af/en/page/4717>, (accessed: 20140505).

²⁶⁴ Bhutta, Zafar. "TAPI gas pipeline: Kabul turns to Taliban for pipeline security," The Express Tribune, May 22, 2012, available at: <http://tribune.com.pk/story/382332/tapi-gas-pipeline-kabul-turns-to-taliban-for-pipeline-security/>, (accessed: 20140505).

²⁶⁵ Fitzpatrick, Catherine A. "US, Russia Compete for TAPI Role but China Enjoys Advantage in Turkmenistan," Natural Gas Europe, Oct 31, 2013, available at:

Chart 4-11: The Turkmenistan-Afghanistan-Pakistan-India (TAPI) Pipeline



Source: Compiled by author

4.3.7 Other Initiatives: the Russian-Korea Gas Pipeline

Russia is considering alternative pipelines to diversify its energy sales, i.e. bypassing China, via an overland gas pipeline route from Vladivostok, Russia through North Korea, and then onward to clients in South Korea.

Previously, in regard to imports of Russia's natural gas from Siberia negotiation, China asserted that the price of gas that Russia proposed is too high, the two sides have not quiet reached a consensus. The ongoing Ukrainian Crisis is changing these circumstances as aforementioned in section one. In this regard, in order to develop its natural gas exports from East Siberia as soon as possible, Russia thinks that they should not limit their market only to China. Instead, potential customers in Northeast Asia (such as South Korea) should also be taken into account. Thus, Russia is considering alternative pipelines to diversify its energy sales, i.e. bypassing China, via a gas pipeline from Vladivostok, Russia and then via an overland pipeline route passing through North Korea, and then onward to clients in South Korea.²⁶⁶

For Russia, the construction of a natural gas pipeline through North Korea can not only sell natural gas from Siberia and profit, but also allows its involvement in discussions of the North Korean nuclear crisis agenda in the Six-Party talks so that they can obtain greater influence in the Northeast Asia and to have opportunities to restore their great power standing. For South Korea, the construction of the pipeline not only can relieve the energy demands of the country needed due to their economic development; it can also ease relations and tensions between them and North Korea. In essence one stone kills two birds. In 2008 representatives from Russia and South Korea have discussed this subject, and the North Korean side also expressed their interest in this. However, after the November 2011 death of North Korean

²⁶⁶ Paik, Keun-Wook., Glada Lahn, and Jens Hein, "Through the Dragon Gate? A Window of Opportunity for Northeast Asian Gas Security," Chatham House, The Royal Institute of International Affairs, December, 2012, available at: <http://www.chathamhouse.org/sites/default/files/public/Research/Energy,%20Environment%20and%20Develop>

leader Kim Jong-il, the newly appointed leader Kim Jong-un was keen to eliminate political opponents and utilized missile tests and intimidation and other means to attempt to consolidate his power, showing a lack of interest in the energy pipeline issues and thus the pipeline project was suspended.²⁶⁷ In this regard, in 2014 in order to encourage North Korea to return to the negotiating table to discuss the energy pipeline issues, Russia declared that 90 percent of North Korea's loans are exempt (approximately \$10 billion).²⁶⁸

4.3.7.1 The Russian-Korea Gas Pipeline

Alternatively however there is a proposed pipeline starting from the source of natural gas on Sakhalin Island, Russia, that would transport its product via a gas pipeline network within the territory of Russia, through Khabarovsk, arriving at Russia's border city of Vladivostok, and then via an overland pipeline which would pass through North Korea and then eventually arrive in South Korea's capital Seoul (Please see the chart 4-14).²⁶⁹

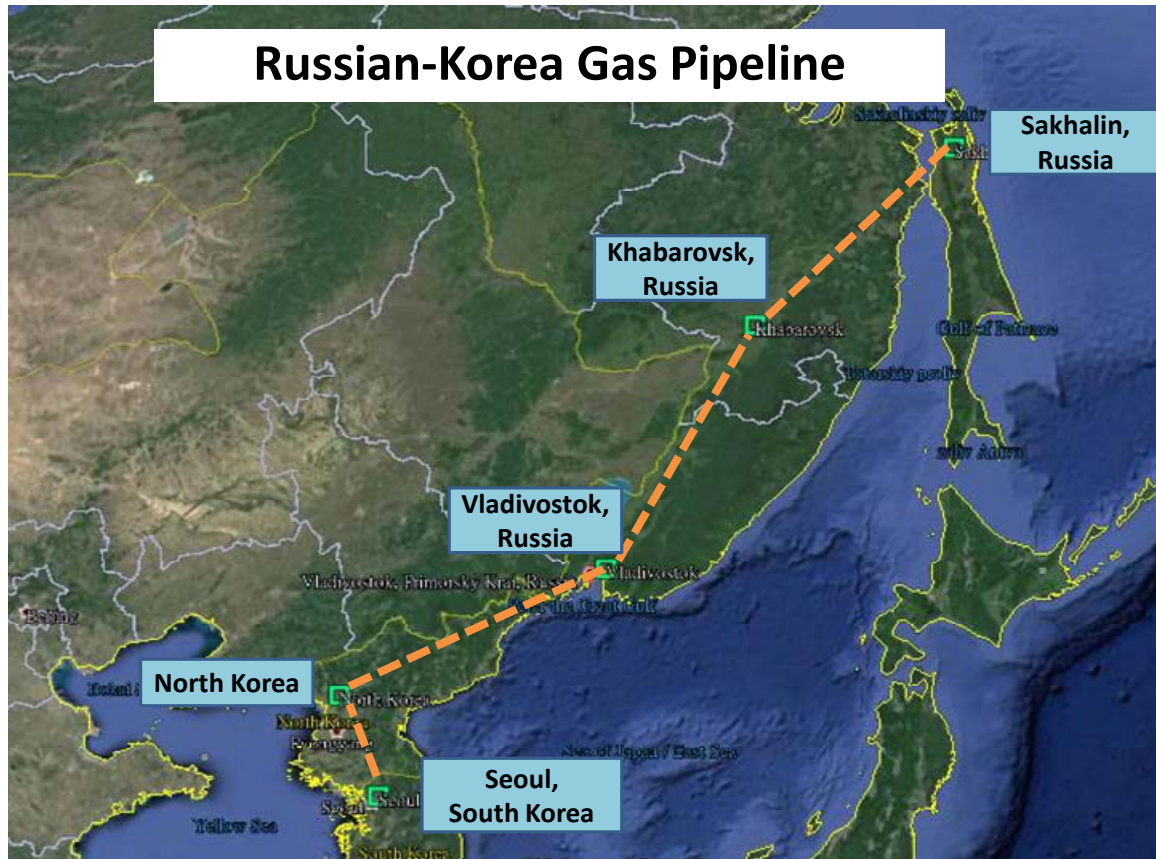
ment/1212bp_paik.pdf, (accessed: 20140506).

²⁶⁷ Paik, Keun-Wook., Glada Lahn, and Jens Hein, "Through the Dragon Gate? A Window of Opportunity for Northeast Asian Gas Security," Chatham House, | The Royal Institute of International Affairs, Dec, 2012, available at: http://www.chathamhouse.org/sites/default/files/public/Research/Energy,%20Environment%20and%20Development/1212bp_paik.pdf, (accessed: 20140506).

²⁶⁸ "Russia writes off 90 percent of North Korea debt, eyes gas pipeline," Reuters News Agency, Apr 19, 2014, available at: <http://uk.reuters.com/article/2014/04/19/russia-northkorea-debt-idUKL6N0NB04L20140419>, (accessed: 20140512).

²⁶⁹ Luft, Gal. "Will Korea Be the Next Ukraine?," American Center for Democracy, Apr 25, 2014, available at: <http://acdemocracy.org/will-korea-be-the-next-ukraine>, (accessed: 20140512).

Chart 4-12: The Russian-Korea Gas Pipeline



Source: Compiled by author

4.4 International Energy Companies Involvement in Central Asia

4.4.1 International Energy Companies Involvement in Kazakhstan

4.4.1.1 Western Countries as Early Comers to Kazakhstan

In the early 1990s under conditions of severe economic crises, the Kazakhstan government passed proposals to extensively attract and allow foreign investment into the country's oil and gas sector. During the mid-1990s, production share agreements were signed (with foreign companies) for exploring the country's three major fields – the on-shore Karachaganak and Tengiz fields and the off-shore Kashagan field. Western companies with advanced technology and funds obtained advantageous locations in Kazakhstan's oil exploitation. Russian dominance in the regional oil trade has been greatly weakened.

The United States and European countries have entered the Caspian Sea area to conduct oil exploration and exploitation activities even as early as the beginning of the Central Asian countries' independence. With advanced technology, much critical information as well as exploration and mineral rights were obtained at advantageous locations. Therefore, the U.S. and European oil giants became key players in Kazakhstan and have achieved a competitive advantage in their core business.²⁷⁰ In May 1992, Chevron became the first major Western oil company to begin operations in the newly independent Kazakhstan. Subsequently, foreign companies such as Agip, British Petroleum, Elf, and Turkish Petroleum entered this market as well. In a short span of four to five years, more than 50 oil companies from more than 20 countries began operations in Central Asia conducting oil and gas exploration, development and other business. Most of these oil companies are in Kazakhstan.²⁷¹ Russian dominance in

²⁷⁰ Feathers, Lori Ann. "Western Opportunities for Investment in the Oil Industry of the Former Soviet Union," Digital Commons @ American University Washington College of Law, 1992, available at: <http://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1546&context=auilr>, (accessed: 20140520).

²⁷¹ Bastas, Yusuf Nebi. "The Foreign Policy of Kazakhstan," DUO Digitale utgivelser ved UiO, May 15, 2013,

the regional oil trade has been greatly weakened. In today's Kazakhstan, Russian companies (of which the most important is Lukoil), other Western companies and Kazakhstan's domestic enterprises have been engaged in the development of Kazakhstan oil and gas resources running neck and neck.²⁷²

In the early 1990s under conditions of severe economic crises, the Kazakhstan government passed proposals to extensively attract and allow foreign investment into the country's oil and gas sector. On February 1993, an agreement on the formation of an international consortium was reached, consisting of seven foreign companies from the United States, Britain, France, Italy, the Netherlands, Norway {i.e., Agip, British Petroleum, Statoil, British Gas, Mobil, Total, Shell} and Kazakhstan {i.e., KazakhstanCaspianShelf}, to conduct exploration on the Kazakhstani shelf of the Caspian Sea. Financing for this project has mainly been provided by the United States and European countries.²⁷³ In April 1993, America's Chevron Corporation and the Republic of Kazakhstan officially established a \$20 billion joint oil venture, for 40 year duration.²⁷⁴

During the mid-1990s, production share agreements were signed (with foreign companies) for exploring the country's three major fields – the on-shore Karachaganak and Tengiz fields and the off-shore Kashagan field. Chevron is mainly engaged in the Tengiz field; while in July 1992 British Gas and the Italian state oil company (Agip) successfully started to develop the Karachaganak oil and gas field.²⁷⁵ A consortium, named Kazakhstancaspiishelf,

available at:

<https://www.duo.uio.no/bitstream/handle/10852/36938/BastasxMasterxoppgxStatsvitenskap.pdf?sequence=1>, (accessed: 20140520).

²⁷² Peterson, A. and K. Barysch, "Russia, China and the geopolitics of energy in Central Asia," CER, Nov 16, 2011, available at:

<http://www.cer.org.uk/publications/archive/report/2011/russia-china-and-geopolitics-energy-central-asia>, (accessed: 20140310).

²⁷³ "The North-Caspian project: the cradle of Kazakhstan's Caspian shelf," Oilnews.kz, Dec 18, 2013, available at: <http://oilnews.kz/en/home/portraits/the-north-caspian-project-the-cradle-of-kazakhstans-caspian-shelf>, (accessed: 20140513).

²⁷⁴ Morgan, Dan and David B. Ottaway, "Kazakh Field Stirs U.S.-Russian Rivalry," Washington Post, Oct 6, 1998, available at: <http://www.washingtonpost.com/wp-srv/inatl/europe/caspian100698.htm>, (accessed: 20140520).

²⁷⁵ Alexandrov, Mikhail. *Uneasy Alliance: Relations between Russia and Kazakhstan in the Post-Soviet Era, 1992-1997* (Westport, Connecticut: Greenwood Publishing Group, 1999), p. 262.

was established to explore the northern Caspian and the Kashagan field, comprising Italy's Eni, the UK's BG Group, BP, Mobil, and France's Total. Other countries' companies such as Lukoil only later joined in the competition in this segment of Kazakhstan's market.²⁷⁶

In Kazakhstan, the CNPC developed the Tengiz and Karachaganak oil fields through the oil company, AktobeMunaiGaz which is the third largest oil producer in Kazakhstan. China's CNPC Company bought a 50% stake of "Mangistaumunaigaz," Kazakhstan's fourth-largest oil company, for \$1.4 billion dollars. And the purchasing of Kazakhstan's "Mangistaumunaigaz" assets by China's CNPC further tightens Chinese involvement in the Kazakh oil market.²⁷⁷

4.4.1.2 International Companies Involvement in Kazakhstan's Oil Fields

4.4.1.2.1 Corporate Stakes in the Tengiz field²⁷⁸

The Tengiz oil field is located in northwestern Kazakhstan, in the city of Atyrau. It was discovered in 1979 and is one of the deepest and largest oil fields in the world. Its general proven reserves are 6 to 9 billion barrels. It has been in development since 1993 by the Tengizchevroil (TCO) joint venture, which includes Chevron (50 percent), ExxonMobil (25 percent), KMG (20 percent), and LukArco (5 percent). According to predictions, the production of Tengiz oil field will reach 854,000 bbl/d by 2021.

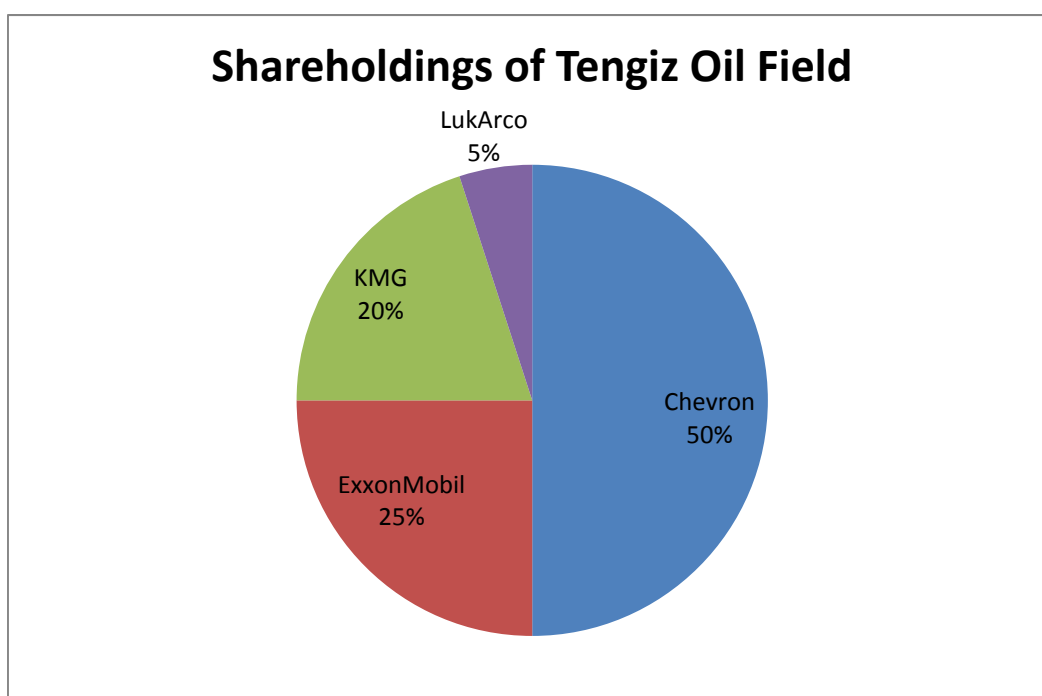
²⁷⁶ "Caspian Region in Focus," Arabian Oil and Gas, Jul 8, 2013, available at:

<http://www.arabianoilandgas.com/article-11274-caspian-region-in-focus>, (accessed: 20140520).

²⁷⁷ Peterson, A. and K. Barysch, "Russia, China and the geopolitics of energy in Central Asia," CER, Nov 16, 2011, available at:

<http://www.cer.org.uk/publications/archive/report/2011/russia-china-and-geopolitics-energy-central-asia>, (accessed: 20131201).

²⁷⁸ "Kazakhstan," U.S. Energy Information Administration (EIA) Official Website, Oct, 2013, available at: <http://www.eia.gov/countries/analysisbriefs/Kazakhstan/kazakhstan.pdf>, (accessed: 20140520).

Chart 4-13: Shareholdings of Tengiz Oil Field

Source: "Kazakhstan," U.S. Energy Information Administration (EIA), Oct 28, 2013, available at: <http://www.eia.gov/countries/analysisbriefs/Kazakhstan/kazakhstan.pdf> (Compiled by author)

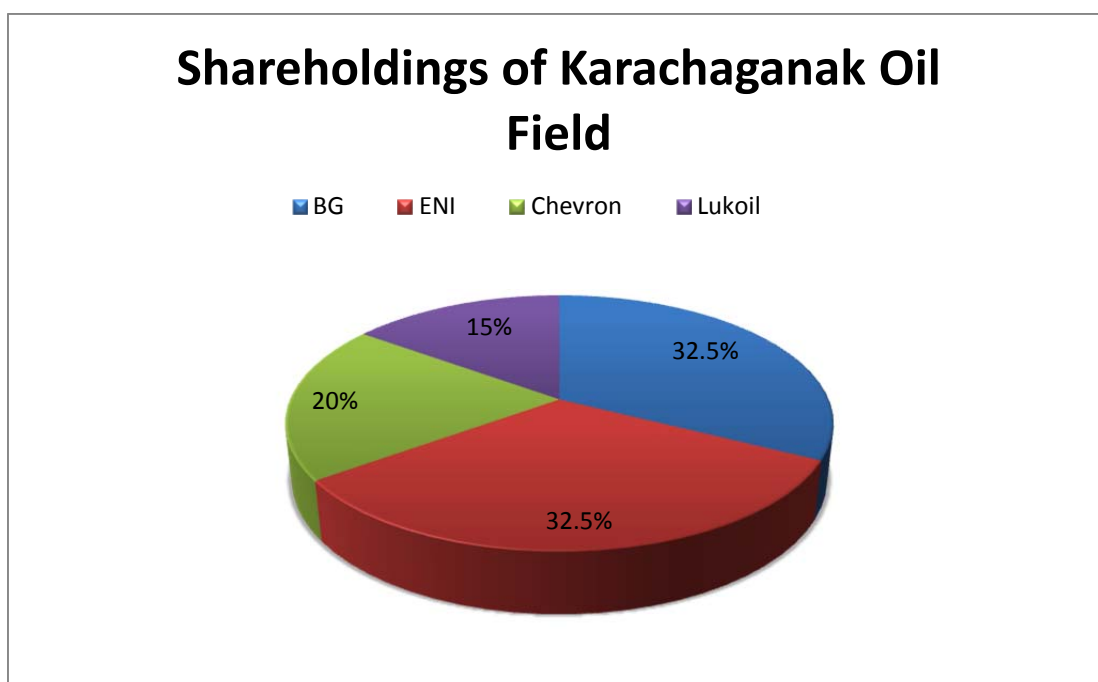
4.4.1.2.2 Corporate Stakes in the Karachaganak field

Karachaganak, also onshore in northwestern Kazakhstan close to the Russian border, had produced 244,000 bbl/d of condensate as of June 2012. According to Karachaganak Petroleum Operating (KPO), the field holds reserves of around 9 billion barrels of oil and gas condensate and 47 trillion cubic feet of natural gas. KPO includes BG (32.5 percent), Eni, (32.5 percent), Chevron (20 percent), and Lukoil (15 percent) among its shareholders.²⁷⁹

²⁷⁹ "Kazakhstan Energy Profile: Second Largest Oil Reserves among Former Soviet Republics – Analysis," Eurasia Review, Sep 20, 2012, available at: <http://www.eurasiareview.com/20092012-kazakhstan-energy-profile-second-largest-oil-reserves-among-former-soviet-republics-analysis>, (accessed: 20140325).

Industrial development of "Karachaganak" began in 1984. In 1992, the Kazakhstan government started actively searching for foreign investors for further development of this field. In November 1997, the final agreement on Production Sharing (FAPS) was signed in Washington DC. The duration of that agreement is 40 years (1998 to 2038).²⁸⁰

Chart 4-14: Shareholdings of Karachaganak Oil Field



Source: "Kazakhstan Energy Profile: Second Largest Oil Reserves Among Former Soviet Republics – Analysis," Eurasia Review, Sep 20, 2012, available at:

<http://www.eurasiareview.com/20092012-kazakhstan-energy-profile-second-largest-oil-reserves-among-former-soviet-republics-analysis> (Compiled by author)

²⁸⁰ "European presence in the Karachaganak project of Kazakhstan: history, production volume, delivery routes, opportunities and risks," East Time, Sep 30, 2011, available at: <http://easttime.info/analytics/kazakhstan/european-presence-karachaganak-project-kazakhstan-history-production-volume-del>, (accessed: 20140520).

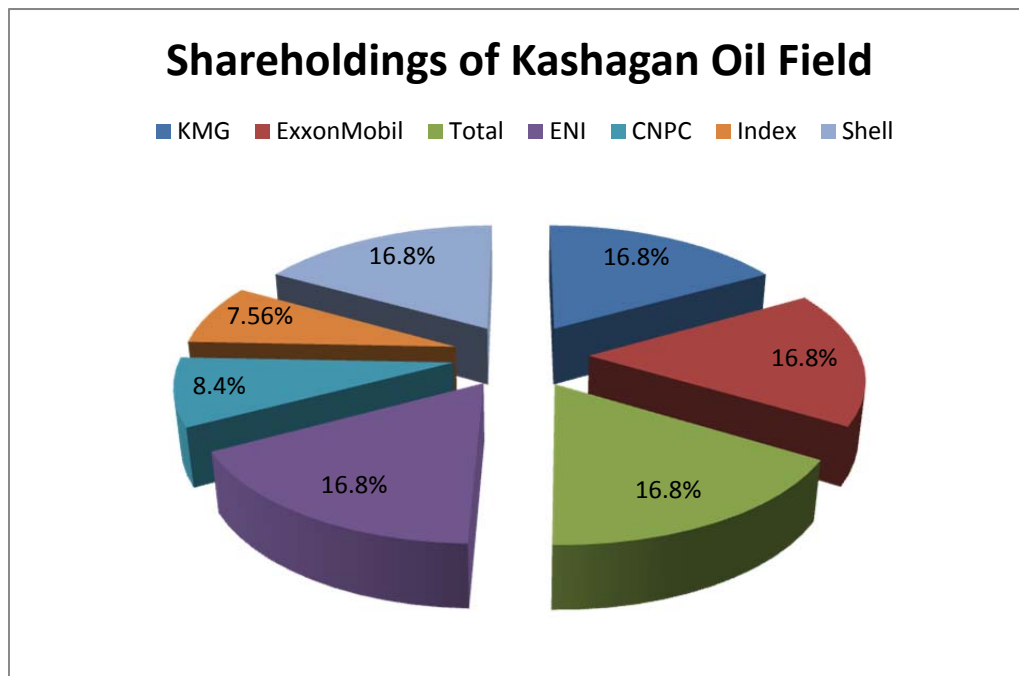
4.4.1.2.3 Corporate Stakes in the Kashagan field

This field is located in the northern part of the Caspian Sea close to Atyrau. The field's recoverable reserves are estimated at 11 billion barrels of oil. The field is being developed by the North Caspian Operating Company (NCOC) consortium. The NCOC PSA is comprised of KMG (16.8-percent), Eni (16.8-percent), ExxonMobil (16.8-percent), Shell (16.8-percent), and Total (16.8-percent), as well as CNPC with an 8.40-percent share and Inpex with 7.56 percent. KMG bought ConocoPhillips's 8.4% share on July 2nd 2013²⁸¹ then sold those shares to the CNPC (China National Petroleum Corp) at a price of \$5 billion after Chinese President Xi Jinping visited Kazakhstan in early September 2013.²⁸² The oil produced there is slated to supply the Kazakhstan–China oil pipeline. Xi's visit ensured that China acquired an interest in the Kashagan offshore oil field development project. The Oil and Gas Minister of Kazakhstan has estimated the oil field will pump 8 million tons of oil in 2014.²⁸³

²⁸¹ "KazMunaiGas Completes Acquisition Of 8.4% Stake in Kashagan Oil Field in Kazakhstan From ConocoPhillips For US\$5.4 Billion," Research Views, Jul 2, 2013, available at: <http://www.researchviews.com/energy/oil-gas/exploration-production/DealReport.aspx?sector=Exploration%20and%20Production&DealID=204670>, (accessed: 20140520).

²⁸² Daly, John. "China Buys \$5 Billion Share in Kazakhstan's Kashagan Caspian Field," OilPrice.com, Sep 18, 2013, available at: <http://oilprice.com/Energy/Crude-Oil/China-Buys-5-Billion-Share-in-Kazakhstans-Kashagan-Caspian-Field.html>, (accessed: 20140520).

²⁸³ "Major traders fighting for Kashagan oil production," Ship2Shore, Oct, 2013, available at: <http://www.ship2shore.it/english/articolo.php?id=11655>, (accessed: 20140520).

Chart 4-15: Shareholdings of Kashagan Oil Field

Source: “KazMunaiGas Completes Acquisition Of 8.4% Stake In Kashagan Oil Field In Kazakhstan From ConocoPhillips For US\$5.4 Billion,” Research Views, Jul 2, 2013, available at: <http://www.researchviews.com/energy/oil-gas/exploration-production/DealReport.aspx?sector=Exploration%20and%20Production&DealID=204670>, (Compiled by author)

4.4.1.3 Corporate Oil Production shares in Kazakhstan’s Overall Oil Production

In 2012, Kazakhstan had totally exported 7,220 (ten thousand tons) of oil, the capacity of which was shared by companies as follows: TengizChevroil 33%, Karachaganak Petroleum Operating (KPO) 9%, CNPC-AktobeMunaiGas 8%, Mangistaumunaigaz 8%, Embamunaygaz PD 7%, Kazgermunay JV LLP 4%, PetroKazakhstan Kumkol Resources (PKKR) 4%, Karazhanbasmunai 3%, Buzachi Operating Ltd 3%, and KarakudukMunai 2%. All remaining producers together have a 19% share of the total. ²⁸⁴

²⁸⁴ “Kazakhstan’s oil and gas reserves, mining and investment,” Ministry of Commerce of the People's Republic of China, Oct 23, 2013, available at: <http://cccfna.mofcom.gov.cn/article/i/dxfw/jlyd/201310/20131000361911.shtml>, (accessed: 20140321).

Table 4-1: 2012 Proportions of Production of Main Oil Companies in Kazakhstan	
Company Name	Proportion (%)
Tengizchevroil LLP	33%
Karachaganak Petroleum Operating (KPO)	9%
CNPC-AktobeMunaiGas	8%
Mangistaumunaigaz	8%
Embamunaygaz PD	7%
Kazgermunay JV LLP	4%
PetroKazakhstan Kumkol Resources (PKKR)	4%
Karazhanbasmunai	3%
Buzachi Operating Ltd	3%
KarakudukMunai	2%
Others	19%

Source: "Kazakhstan's oil and gas reserves, mining and investment," Ministry of Commerce of the People's Republic of China, Oct 23, 2013, available at:
<http://cccfn.mofcom.gov.cn/article/i/dxfw/jlyd/201310/20131000361911.shtml>, (accessed: 20140321).

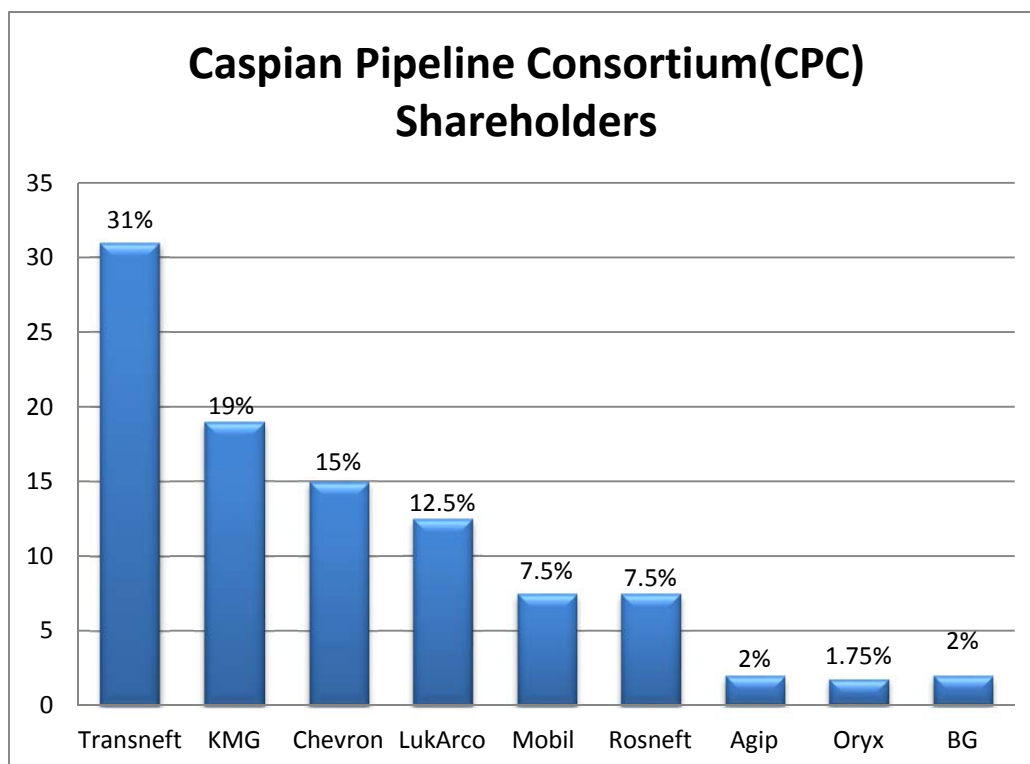
4.4.1.4 Pipeline Shareholdings in Kazakhstan

4.4.1.4.1 The Caspian Pipeline Consortium (CPC)

The Caspian Pipeline Consortium (CPC) oil pipeline was commissioned in 2001 and runs 940 miles from the Tengiz oil field to the Russian Black Sea port of Novorossiysk. The consortium's four largest shareholders are: Transneft (31 percent), KMG (19 percent), Chevron (15 percent), and LukArco (12.5 percent).²⁸⁵ The consortium transported 684,000 bbl/d of crude oil in 2011, including 608,000 bbl/d from Kazakhstan and 76,000 bbl/d from Russia. In 2011, these CPC consortium shareholders organized to expand capacity to 1.35 million bbl/d. The project is estimated to be completed in 2016.²⁸⁶

²⁸⁵ “Chevron and Other Shareholders Sanction Caspian Pipeline Expansion” Eurasia Review, available at: http://www.chevron.com/chevron/pressreleases/article/12152010_chevronandothershareholderssanctioncaspianpipelineexpansion.news, (accessed: 20140521).

²⁸⁶ “Kazakhstan,” U.S. Energy Information Administration (EIA) Official Website, available at: <http://www.eia.gov/countries/cab.cfm?fips=KZ>, (accessed: 20140516).

Chart 4-16: The Caspian Pipeline Consortium (CPC) Shareholders

Source: "Chevron and Other Shareholders Sanction Caspian Pipeline Expansion," Chevron Corporation, available at:

http://www.chevron.com/chevron/pressreleases/article/12152010_chevronandothershareholderssanctioncaspianpipelineexpansion.news (Compiled by author)

4.4.1.4.2 The Baku–Tbilisi–Ceyhan (BTC) Pipeline ²⁸⁷

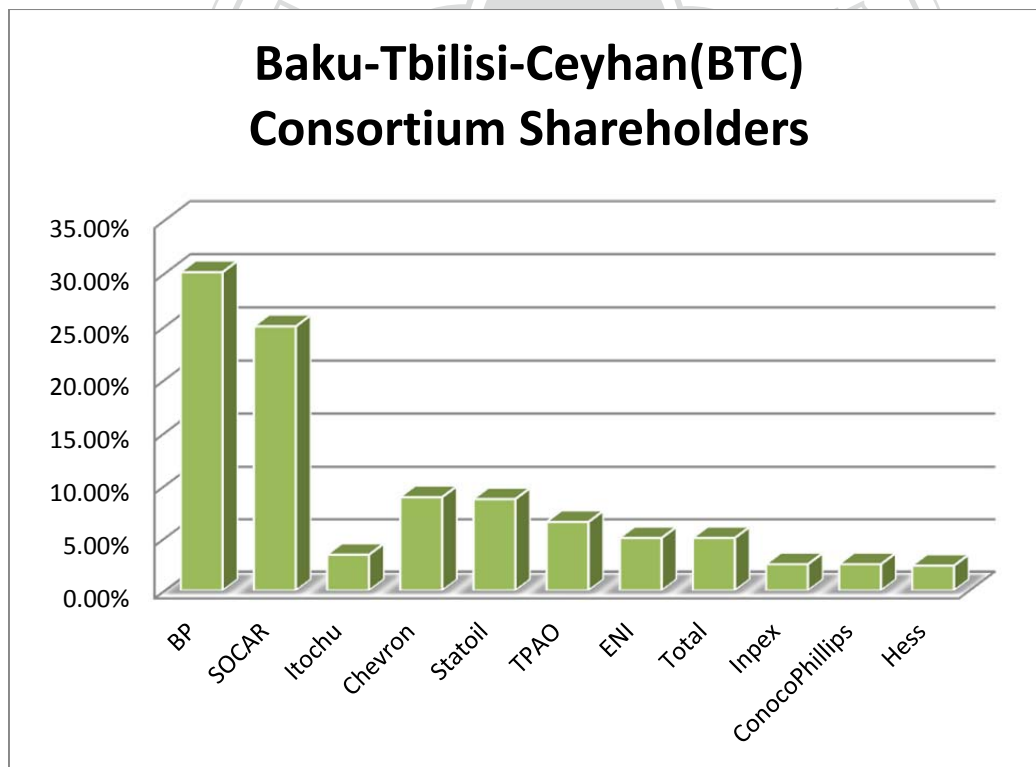
This pipeline is to be built by a consortium led and managed by BP. It is planned to be a 1,768 kilometers long crude oil pipeline from the Azeri-Chirag-Guneshli oil field in the Caspian Sea to the Mediterranean Sea, and its meant to connect Baku, the capital of Azerbaijan, and Ceyhan, a port on the south-eastern Mediterranean coast of Turkey,

²⁸⁷ "Baku-Tbilisi-Ceyhan (BTC) Caspian Pipeline," Hydrocarbons Technology, available at: <http://www.hydrocarbons-technology.com/projects/bp>, (accessed: 20140521).

via Tbilisi, the capital of Georgia. The BTC will boast a capacity of 1.2 million barrels per day.

Its main shareholders are: BP (United Kingdom) with 30.1%, the State Oil Company of Azerbaijan (SOCAR) (Azerbaijan) with 25.00%, Chevron (USA) with 8.90% (The original stake holder was Unocal. Chevron bought Unocal for the price of \$16.8 Billion on April 6 2005.²⁸⁸), Statoil (Norway) with 8.71%, Türkiye Petrolleri Anonim Ortaklığı (TPAO) (Turkey) with 6.53%, Eni (Italy) with 5.00%, Total (France) with 5.0%, Itochu (Japan) with 3.4%, Inpex (Japan) with 2.50%, ConocoPhillips (USA) with 2.50%, and Hess Corporation (USA) with 2.36%.

Chart 4-17: The Baku-Tbilisi-Ceyhan (BTC) Consortium Shareholders



Source: "Baku-Tbilisi-Ceyhan (BTC) Caspian Pipeline," Hydrocarbons Technology, available at: <http://www.hydrocarbons-technology.com/projects/bp> (Compiled by author)

²⁸⁸ "ChevronTexaco to Buy Unocal in \$16.8 Billion Deal," aftermarket News, Apr 6, 2005, available at: http://www.aftermarketnews.com/Item/32881/chevrontexaco_to_buy_unocal_in_168_billion_deal.aspx, (accessed: 20140521).

4.4.2 International Energy Companies Involvement in Turkmenistan

Turkmenistan was ruled by the “President for Life,” Saparmurat Niyazov, often cited as one of the world's most deranged dictators, until his sudden death in 2006. His rule resulted in a large degree of isolation of Turkmenistan from other countries, so foreign direct investment was very limited. Although his successor, Gurbanguly Berdymukhammedov, continues to implement strict political control over the country, he began to gradually open the energy sector to attract foreign companies to invest capital and technology, and as of 2009 investments have grown to \$1.4 billion. Foreign companies who want to participate in energy development must have negotiations with the Turkmenistani leader on an item by item basis. Turkmenistan has TurkmenNeft and TurkmenGaz, two state-owned companies which possess a virtual monopoly on upstream activity; those Turkmenistan's national oil and gas producers dominate the country's hydrocarbon exploration and production (E&P) activity.²⁸⁹

4.4.2.1 Foreign Companies' Investment in Turkmenistan

Turkmenistan's current policy is to provide a PSA to international energy companies, and limit the development of offshore gas resources to the Caspian region that is owned by this country. In the 1990's, the national oil and gas company of Malaysia, Petronas, started gas production in Turkmenistan's Section of the Caspian Sea.²⁹⁰ Regarding Blocks 11-12, the Maersk/Wintershall/OMEL consortium was forced to yield its exploitation rights in January 2010 due to poor drill test results. After signing a Production Sharing Agreement for the development of offshore Block 21 in 2009, together with Zarubezhneft, Itera carried out development in that region. In the summer of 2010, Turkmenistan invited oil companies

²⁸⁹ Peterson, A. and K. Barysch, “Russia, China and the geopolitics of energy in Central Asia,” CER, Nov 16, 2011, available at: <http://www.cer.org.uk/publications/archive/report/2011/russia-china-and-geopolitics-energy-central-asia>, (accessed: 20140510).

²⁹⁰ Peterson, A. and K. Barysch, “Russia, China and the geopolitics of energy in Central Asia,” CER, Nov 16, 2011, available at: <http://www.cer.org.uk/publications/archive/report/2011/russia-china-and-geopolitics-energy-central-asia>,

including Chevron USA and ConocoPhillips among others to submit bids for further blocks. Dragon Oil in the Chelekenfield and Eni in the Nebit Dag block also have signed different PSAs.²⁹¹

In the onshore, larger-scale natural gas sector which is easier to explore, Turkmenistan basically only allows foreign companies to participate as a service contracts, which is unattractive for most foreign companies, since most of them want to get the shares in form of gas output whether by PSA or joint ventures. The only exception is production sharing agreement for exploration and production of Bagtyyarlyk territory was signed in July 2007 between the Turkmen Presidential State Agency for Supervising the Use of Oil and Gas Resources and the China National Petroleum Corporation (CNPC), since then CNPC became the first exception to obtain a production sharing contract for onshore gas field development in Turkmenistan.²⁹²

4.4.2.2 Onshore Oil and Gas Development in Turkmenistan

4.4.2.2.1 The Khazar Project

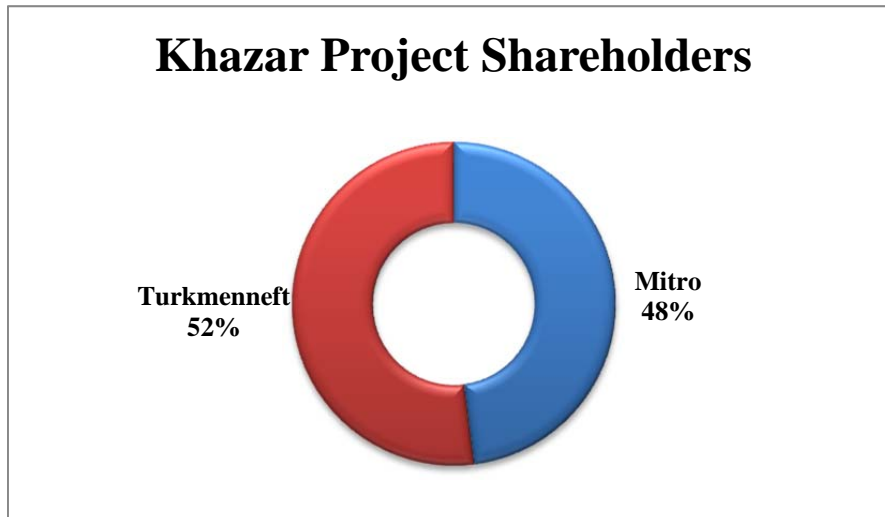
Mitro International, of Austria, signed a PSA with Turkmenneft State Oil Company in 2000, mainly in regard to the East Cheleken onshore fields, which is represented by the state concern, Turkmenneft (52%), who works as operator. The foreign partner, Mitro International Ltd. (48%), is a financial donor. This PSA spans a period of 25 years (from 2000 to 2025), and may be extended for five years; it designates a maximum annual production of oil 3,000,000 tons.²⁹³

(accessed: 20140510).

²⁹¹ “Reform in Turkmenistan: A Convenient Façade,” Crude Accountability, Apr, 2011, available at: <http://crudeaccountability.org/wp-content/uploads/2012/04/201104-ReformInTurkmenistan.pdf>, (accessed: 20140521).

²⁹² Peterson, A. and K. Barysch, “Russia, China and the geopolitics of energy in Central Asia,” CER, November 16, 2011, available at: <http://www.cer.org.uk/publications/archive/report/2011/russia-china-and-geopolitics-energy-central-asia>, (accessed: 20140510).

²⁹³ “Turkmenistan’s Energy Profile,” Official Site of the Ministry of Land and Resources of the People’s Republic of China, July 16, 2010, available at: http://www.mlr.gov.cn/zljc/201007/t20100716_724954.htm,

Chart 4-18: The Khazar Project

Source: "Turkmenistan Energy Profile," Official Site of the Ministry of Land and Resources of the People's Republic of China, July 16th, 2010, available at: http://www.mlr.gov.cn/zljc/201007/t20100716_724954.htm

(Compiled by author)

(accessed: 20140302).

4.4.2.2.2 Foreign Corporate holdings in the Nebit Dag field ²⁹⁴

The Nebit Dag Production Sharing Agreement ("PSA"), with its field located onshore in western Turkmenistan, was signed by Burren and Monument Oil and Gas PLC in August, 1996. Mobil joined in the following year. After a merger between Monument Oil and Gas PLC and Mobil, Burren acquired 100% ownership. In November 2007, ENI bought Burren Energy hence becoming the new owner and operator of the Nebit Dag block. ENI produced 12,000 barrels/day in 2009.

4.4.2.2.3 Gas fields on the right bank of the Amu Darya River (Bagtyyarlyk territory) ²⁹⁵

A 30 year production sharing agreement for exploration and production was signed in July 2007 between the Turkmen Presidential State Agency for Supervising the Use of Oil and Gas Resources and the China National Petroleum Corporation (CNPC) and according to the agreement, Turkmenistan will export 30 billion cubic meters of natural gas to China annually.

4.4.2.3 Caspian Offshore Oil and Gas Development

4.4.2.3.1 The Cheleken Offshore Project (operator – Dragon Oil)

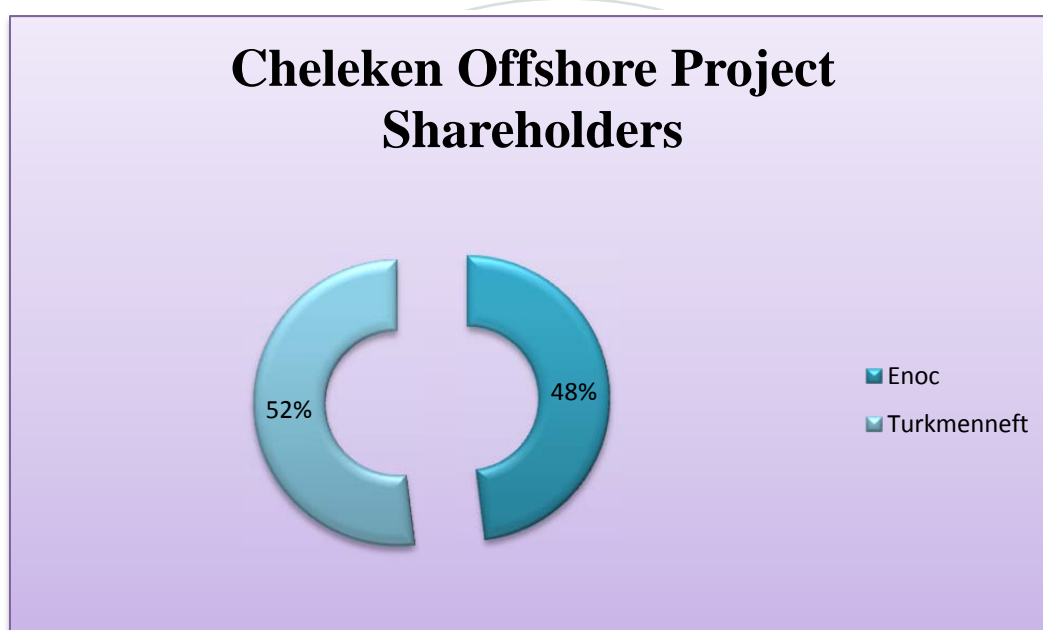
Dragon Oil is registered in Ireland. The Group's headquarters are in Dubai, United Arab Emirates. The Emirates National Oil Company Limited (ENOC) L.L.C., is a company ultimately owned by the Government of Dubai. Dubai's state-controlled Emirates National Oil Company (Enoc) owns 48 percent of Dragon, while Turkmenneft owns 52%. This

²⁹⁴ "ENI (Burren Energy PLC)," Crude Accountability, available at: <http://crudeaccountability.org/campaigns/turkmenistan/whos-who-in-turkmenistan-petroleum-company-dossiers/eni-burren-energy-plc>, (accessed: 20130820).

²⁹⁵ Peterson, A. and K. Barysch, "Russia, China and the geopolitics of energy in Central Asia," CER, Nov 16, 2011, available at: <http://www.cer.org.uk/publications/archive/report/2011/russia-china-and-geopolitics-energy-central-asia>, (accessed: 20131201).

project's expected oil reserves are thought to be 52 million tons. Dragon Oil was awarded a Production Sharing Agreement to explore and develop oil and gas at the offshore Cheleken Contract Area, comprising two offshore oil and gas fields, Dzheitune ("LAM") and Dzhygalybeg ("Zhdanov").²⁹⁶ The average daily oil production was 69,600 barrels/day in 2012 from Dragon Oil's Cheleken block.²⁹⁷

Chart 4-19: The Cheleken Offshore Project's Shareholders



Source: "Dragon Oil increases average daily oil production in Turkmen section of Caspian Sea," Trend, Nov 6, 2013, available at: <http://en.trend.az/capital/energy/2208453.html> (Compiled by author)

²⁹⁶ "Turkmenistan's Energy Profile," Official Site of the Ministry of Land and Resources of the People's Republic of China, July 16, 2010, available at: http://www.mlr.gov.cn/zljc/201007/t20100716_724954.htm, (accessed: 20140302).

²⁹⁷ "Dragon Oil increases average daily oil production in Turkmen section of Caspian Sea," Trend News Agency, Nov 6, 2013, available at: <http://en.trend.az/capital/energy/2208453.html>, (accessed: 20140121).

4.4.2.3.2 Foreign Corporate holding in the Offshore Block 1 field ²⁹⁸

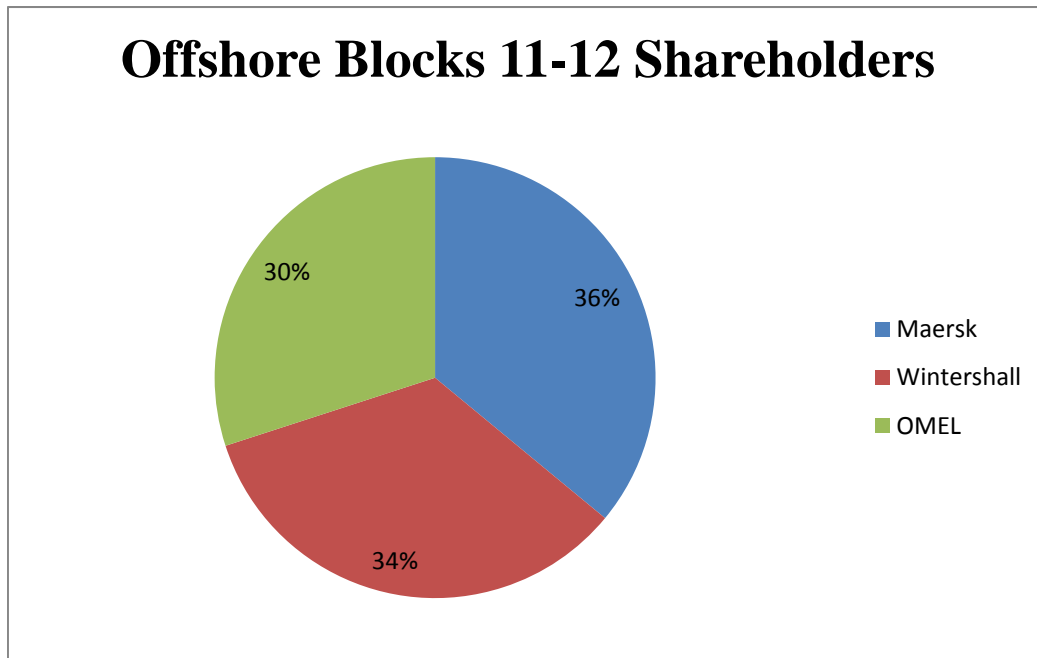
Block 1 covers 1,900 square km and includes the Magtymguly (formerly East Livanov), Ovez (Central Livanov) and Diyarbekir (Barinov) fields. Petronas and Turkmenistan signed a Production Sharing Agreement (PSA) for a duration of 25 years in 1996. In June 2007, Petronas announced the estimation of annual production will be increased to 10 billion cubic meters of gas.

4.4.2.3.3 Foreign Corporate holding in the Offshore Blocks 11-12 ²⁹⁹

The Offshore Blocks 11-12 cover an area approximately 5600 square km. In 2002, Turkmenistan awarded Maersk Oil and Exploration a Production Sharing Agreement for Offshore Blocks 11-12. According to 2007 agreements, the shareholders in the project were Maersk Oil (36 percent), Wintershall (34 percent) and OMEL (30 percent). However, the consortium was forced to yield the exploitation rights due to poor drill test results in January 2010.

²⁹⁸ “Petronas Carigali (Turkmenistan),” Crude Accountability, available at: <http://crudeaccountability.org/campaigns/turkmenistan/whos-who-in-turkmenistan-petroleum-company-dossiers/petronas-carigali-turkmenistan-sdn-bhd-pctcsb>, (accessed: 20140321).

²⁹⁹ “Maersk Oil Turkmenistan BV (operated by Wintershall),” Crude Accountability, available at: <http://crudeaccountability.org/campaigns/turkmenistan/whos-who-in-turkmenistan-petroleum-company-dossiers/maersk-oil-turkmenistan-bv-operated-by-wintershall>, (accessed: 20140521).

Chart 4-20: Offshore Blocks 11-12 Shareholders

Source: “Maersk Oil Turkmenistan BV (operated by Wintershall),” Crude Accountability, available at: <http://crudeaccountability.org/campaigns/turkmenistan/whos-who-in-turkmenistan-petroleum-company-dossiers/maersk-oil-turkmenistan-bv-operated-by-wintershall>.

4.4.3 Export of Energy from Central Asia

Through the purchase of Central Asian countries’ natural gas (and attaining a monopoly on purchase of gas from Central Asian countries) and using its own pipeline transportation Russia aims to prevent any Central Asian countries from direct access to the lucrative Western markets independently. In the past, the Russian gas company Gazprom often bought Turkmenistan’s gas at a low price, and then sold it to Ukraine and also sold the natural gas it produced to European customers at a price three times higher. In this way, Gazprom therefore gained huge profits. In 2007, Russia signed a new agreement with Turkmenistan and Kazakhstan hoping to upgrade and expand its gas-transportation pipelines from Turkmenistan and Kazakhstan along the eastern shore of the Caspian Sea, directly to Russia and the

intention was to overhaul the Soviet-era pipeline system known as Central Asia-Center, ensuring it would have a higher capacity. In 2008, Russia said that they are willing to buy natural gas in Central Asia at a higher price. The main goal is to stop the gas producers in Central Asia from signing contracts with Western clients in order to protect Russia's monopoly.



5. The Influence of Shanghai Cooperation Organization (SCO) to China's Diplomacy Policy In Central Asia

There are a number of regional cooperation mechanisms and organizations in Central Asia, including the Commonwealth of Independent States, the Eurasian Economic Community, the Collective Security Treaty Organization, and the Shanghai Cooperation Organization (SCO), as well as initiatives by the European Union, NATO and so on. Among those mechanisms, the SCO is the one which has the most relevance to China. Moreover the SCO is the only multilateral cooperation mechanism that China participates in involving Central Asia, and also it is the first regional cooperation framework from within which China advocates joint efforts. In 2003, its member states signed the Program of Multilateral Trade and Economic Cooperation declaring the need to achieve the goal that goods, capital, services and technology circulate freely among its signatory states within 20 years. Therefore, we can expect to see ever increasing functionality of the SCO beginning with anti-terrorism and security concerns, and gradually moving towards the field of economic integration.³⁰⁰ This study hereafter describes the origin of the SCO, its main features, the progress that China has made regarding its policy goals through involvement with the SCO and the expectations placed upon this organization.

5.1 China and the SCO: Its Structure and Development

5.1.1 The Founding of the SCO

³⁰⁰ 楊宗鑫，「中國周邊外交戰略之研究 (2001-2009)」，國立政治大學碩士論文 (台北：2010 年 1 月)，頁 153。[Yang, Chunghsin, *Zhongguo Zhoubian Waijiaozhanlue Zhi Yanjiu* (China's strategy of peripheral diplomacy (2001-2009)), unpublished thesis, NCCU (Taipei: Jan, 2010), pp. 153.]

The mechanism of the Shanghai Cooperation Organization (SCO) was founded based upon border negotiations that occurred in the late 1980s between China and the Soviet Union, and then in 1996 this was expanded into a “Shanghai Five” meeting in Shanghai with Russia, Kazakhstan, Kyrgyzstan, and Tajikistan to sign an agreement on military confidence building measures and completion of negotiations regarding border issues with Kazakhstan, Kyrgyzstan, Russia and Tajikistan respectively in 1998, 1999, 2004 and 2006. In addition to resolving border disputes and building trust, the Shanghai Five mechanism provided a platform for the five countries to deal with non-conventional threats to the region.³⁰¹

On June 15th, 2001 by declaring the formal establishment of the Shanghai Cooperation Organization, the cooperation of the Shanghai Five mechanism reached a higher level of cooperation, and Uzbekistan was allowed to join the Shanghai Five as a "completely equal member" and signed the ‘Shanghai Convention on fighting terrorism, separatism and extremism,’ and in June 2002, the 'Charter of the Shanghai Cooperation Organization' was signed, setting forth its organizational structure, status, agenda for cooperation among member states, institutional settings and operational principles.³⁰²

The events of “911,” the September 11th, 2001 terrorist attacks, added impetus to the immediate establishment of the SCO based on mutual security concerns of the member states. While the SCO has developed policies and actions aimed at achieving its anti-terrorism goals, but how these are performed is not entirely clear. Some see the SCO as more of a politically symbolic organization, rather than a regional organization as it does not have clearly defined tasks, capabilities and protocols typical of other regional organizations. Since 2002, the SCO member states have held several joint anti-terrorism exercises showing a trend of counter-terrorism cooperation between the member states is being strengthened.³⁰³

³⁰¹ Gao, Fei. “Discussion Papers in Diplomacy-The Shanghai Cooperation Organization and China’s New Diplomacy,” Clingendael, available at: http://www.clingendael.nl/sites/default/files/20100700_The%20Shanghai%20Cooperation%20Organization%20and%20China's%20New%20Diplomacy.pdf, (accessed: 20140225).

³⁰² “Brief introduction to the Shanghai Cooperation Organization,” Official web site of Ufa City Municipal District Administration of Bashkortostan Republic, available at: <http://ufacity.info/eng/shos/shos.php>, (accessed: 20140522).

³⁰³ Gao, Fei. “Discussion Papers in Diplomacy -The Shanghai Cooperation Organization and China’s New Diplomacy,” Clingendael, available at:

The establishment of the SCO was the result of the precedent of the "Shanghai Five" as well as China and Russia's response to threats posed due to NATO's expansion led by the US, plus their own internal ethno-religious conflicts. In the face of emerging non-traditional threats, China and Russia deemed it necessary to combat terrorism, separatism and religious extremism. After the events of September 11th, 2001 U.S. troops were stationed in Central Asia, so that the Central Asian countries were thought not to be dependent upon the SCO in regard to security issues, this led to a perception that the SCO would probably exist in name only. However, in June 2002, six heads of state signed the "Charter of the Shanghai Cooperation Organization" at a St. Petersburg summit which accelerated the development of the organization. The document agreed upon specifies the purpose and mission of the organization, principles, the direction of cooperation, institutional settings and operational principles, which not only benefit the organization's development but that also laid a legal foundation and officially was a key step towards making it a regional cooperation organization.³⁰⁴

5.1.2 Main Features and Basic Principles of the SCO³⁰⁵

5.1.2.1 The main goals and tasks of the SCO

The Charter of the Shanghai Cooperation Organization, Article 1, states that the main goals and tasks of the SCO are 'to strengthen mutual trust, friendship and good neighborliness between the member states; to consolidate multidisciplinary cooperation in the maintenance and strengthening of peace, security and stability in the region and the promotion of a new

http://www.clingendael.nl/sites/default/files/20100700_The%20Shanghai%20Cooperation%20Organization%20and%20China's%20New%20Diplomacy.pdf, (accessed: 20140225).

³⁰⁴ 楊宗鑫，「中國周邊外交戰略之研究 (2001-2009)」，國立政治大學碩士論文 (台北：2010 年 1 月)，頁 154。[Yang, Chungsin, *Zhongguo Zhoubian Waijiaozhanlue Zhi Yanjiu* (China's strategy of peripheral diplomacy (2001-2009)), unpublished thesis, NCCU (Taipei: Jan, 2010), pp. 154.]

³⁰⁵ "Charter of the Shanghai Cooperation Organization," SCO Summit of '13, available at: <http://www.scosummit2013.org/en/documents/hartiya-shanhayskoy-organizatsii-sotrudnichestva>, (accessed: 20140522).

democratic, fair and rational political and economic international order; to jointly counteract terrorism, separatism and extremism in all their manifestations, to fight against illicit narcotics and arms trafficking and other types of criminal activity of a transnational character, and also illegal migration; to encourage efficient regional cooperation in such spheres as politics, trade and economics, defense, law enforcement, environmental protection, cultural affairs, science and technology, education, energy, transportation, credit and finance, and also other spheres of common interest; to facilitate comprehensive and balanced economic growth, social and cultural development in the region through joint action on the basis of equal partnership for the purpose of a steady increase of living standards and improvement of living conditions of the peoples of the member states; to coordinate approaches to integration into the global economy; to promote human rights and fundamental freedoms in accordance with the international obligations of the member states and their national legislation; to maintain and develop relations with other states and international organizations; to cooperate in the prevention of international conflicts and in their peaceful settlement; to jointly search for solutions to the problems that may arise in the 21st century.'

5.1.2.2 The Principles of the SCO

The Charter of the Shanghai Cooperation Organization, Article 2, states that the principles of the SCO are 'mutual respect of sovereignty, independence, territorial integrity of states and inviolability of state borders, non-aggression, non-interference in internal affairs, non-use of force or threat of its use in international relations, seeking no unilateral military superiority in adjacent areas; equality of all member states, search for common positions on the basis of mutual understanding and respect for opinions of each of them; gradual implementation of joint activities in the spheres of mutual interest; peaceful settlement of disputes between the member states; the SCO being not directed against other states and international organizations; prevention of any illegitimate acts directed against the SCO's interests; implementation of obligations arising out of the present Charter and other documents adopted within the framework of the SCO, in good faith.'

5.1.2.3 The Membership of the SCO

Under the principle of openness, the SCO has granted observer status to a number of states, namely, Mongolia in 2004, and Pakistan, Iran, and India in 2005. Moreover, it has established a cooperative relationship with a number of international and regional organizations, such as ASEAN and the C.I.S. However, when in 2005 the United States applied to become an observer, it was rejected.³⁰⁶

The Membership of the SCO³⁰⁷ is as follows: Member States: China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan; Observer States: Afghanistan, India, Iran, Mongolia, Pakistan; and Dialogue Partners: Belarus, Sri Lanka, and Turkey.

5.1.2.4 The SCO's characteristics in organizational operation pattern³⁰⁸

The SCO has several interesting characteristics in its organizational operation pattern. One may be described as a new type of national interactive mode, due to the asymmetry of power among these countries. Since each state's interests are not the same, the interaction patterns show a "non-aligned" basis such that the pattern can be characterized as great nations and small countries cooperating based on a mutually beneficial cooperation model to avoid manipulation of any less powerful country by a more powerful country.

Another is that it is a framework for first bilateral and then multilateral negotiations. In other words, negotiations between countries take place first through bilateral negotiations, and then after having achieved a bilateral basis of understanding with each other, states reach a

³⁰⁶ 楊宗鑫，「中國周邊外交戰略之研究 (2001-2009)」，國立政治大學碩士論文 (台北：2010 年 1 月)，頁 155。[Yang, Chungsin, *Zhongguo Zhoubian Waijiaozhanlue Zhi Yanjiu* (China's strategy of peripheral diplomacy (2001-2009)), unpublished thesis, NCCU (Taipei: January 2010), pp. 155.]

³⁰⁷ "The Shanghai Cooperation Organisation," SCO, available at: <http://www.sectsco.org/EN123>, (accessed: 20140522).

³⁰⁸ 楊宗鑫，「中國周邊外交戰略之研究 (2001-2009)」，國立政治大學碩士論文 (台北：2010 年 1 月)，頁 155。[Yang, Chungsin, *Zhongguo Zhoubian Waijiaozhanlue Zhi Yanjiu* (China's strategy of peripheral diplomacy (2001-2009)), unpublished thesis, NCCU (Taipei: January 2010), pp. 155.]

consensus, and then hold multilateral talks. This factor improves the willingness and likelihood of participation by all states and especially less powerful ones.

5.1.2.5 The SCO's development of trade business and energy security development

The Program of Multilateral Trade and Economic Cooperation among the SCO Member States agreement was signed on the 23rd of September 2003; it proposed ideas such as the development of energy cooperation and the construction of new oil and gas pipelines. Under the SCO framework, Russia, China, and Central Asia presents a "suppliers - consumers - transporter" energy communication platform; a sort of union of suppliers, transit establishments and consumers of energy resources may be formed. The SCO member states reached a consensus to strengthen multilateral energy cooperation.³⁰⁹

On Oct. 26th, 2005, the SCO heads of government held their fourth meeting in Moscow, Russia. After an action plan was approved for the program of multilateral trade and economic cooperation, which involved 127 projects covering 11 fields, the SCO then entered a stage of pragmatic cooperation with an emphasis on security, trade and economy. Leaders agreed to promote cooperation in various fields including infrastructure construction, energy, telecommunications, finance, culture, tourism, science and technology.³¹⁰

In June 2006, at the SCO heads of state summit, Russian President Putin proposed the idea of creating an "Energy Club." Due to the different interests among each member state, the energy club's purpose is to create a mechanism to institutionalize multilateral energy cooperation. China is hoping to create some sort of 'SCO Energy Community' to marry its rapidly growing energy demand with rich energy supplies in Russia and Central Asia. The first unofficial meeting of the fuel and power ministers of the governments of the SCO

³⁰⁹ 孫丕澄，「俄中在中亞的能源競逐」，清雲科技大學碩士論文（桃園：2010 年 6 月），頁 100。[Sun, Picheng. *E Zhong Zai Zhongya De Nengyuan Jingzhu* (Russia and China in competition for Central Asia's energy), unpublished thesis, Ching Yun University, (Taoyuan: June 2010), pp. 100.]

³¹⁰ 張鴻俊，「從地緣戰略論中國對中亞能源外交」，國立政治大學碩士論文（台北：2010 年 6 月），頁 94。[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, NCCU, (Taipei: June 2010), pp. 94.]

member states was held in Moscow on June 29th, 2007. At the meeting of the ministers, a resolution concerning the establishment of the Energy Club was approved by five states: Russia, Kazakhstan, Kyrgyzstan, China, and Tajikistan. The five states decided to continue the incorporation of the Energy Club.³¹¹

Another SCO summit meeting took place in Bishkek on August 16th, 2007 and the Bishkek Declaration was signed by the member states which points out that energy resources play an important role in the sustainable economic development and supporting security of member states. Therefore, it was decided that members should strengthen cooperation in this field, to protect the SCO's regional and global security and stability. In addition, it was determined that the SCO member states should continue to promote energy dialogue, a mechanism that would unite energy producers, consumers and transit countries.

³¹²

The First Euro-Asia Economic Forum was convened by China in Xi'an in November of 2007. The member states of the Shanghai Cooperation Organization (SCO) and other states such as Mongolia, Iran, and India attended as well. This forum's purpose was to discuss Eurasian strategic energy cooperation and to expand that cooperation in the field of energy, energy security, regional stability and economic development within the participating countries.³¹³

A meeting of the Council of Heads of State of the Shanghai Cooperation Organization (CHS SCO) took place on the 28th of August 2008 in Dushanbe, Tajikistan. The heads of state voted for deepening interaction between the SCO and the United Nations, as well as the

³¹¹ 張鴻俊,「從地緣戰略論中國對中亞能源外交」,國立政治大學碩士論文(台北:2010年6月),頁103。[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, NCCU, (Taipei: June 2010), pp. 103.]

³¹² 張鴻俊,「從地緣戰略論中國對中亞能源外交」,國立政治大學碩士論文(台北:2010年6月),頁101。[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study unpublished thesis, NCCU, (Taipei: June 2010), pp. 101.]

³¹³ 吳賢煜,「中國與俄羅斯在哈薩克斯坦之能源競逐」,清雲科技大學碩士論文(桃園:2010年6月),頁67。[Wu, Hsienyu. *Zhongguo Yu Eluosi Zai Hasakesitan Zhi Nengyuan Jingzhu* (China and Russia's energy competition in Kazakhstan), unpublished thesis, Ching Yun University, (Taoyuan: June 2010), pp. 67.]

Commonwealth of Independent States, the Association of Southeast Asian Nations, the Eurasian Economic Community, the Collective Security Treaty Organization, the Economic Cooperation Organization and the United Nations Economic and Social Commission for Asia and the Pacific on the basis of a signed memoranda of mutual understanding. Moreover, that Memorandum deemed it expedient to put more effort into the information coverage of the activities of the Business Council, Interbank Consortium and the SCO Forum so as to consolidate the investment environment in the region and facilitate the implementation of large-scale joint economic development projects.³¹⁴

The governments of the member states of the Shanghai Cooperation Organization at a meeting of the Council of Heads of the SCO Member States in Yekaterinburg, Russia on the 15th and 16th of June 2009, emphasized the potential of observer countries and dialogue partners in the SCO to strengthen their trade and investment cooperation within the SCO framework. Energy resources are essential for economic development and improving people's lives and all SCO members determined to conduct mutually-beneficial cooperation based on equality and consultation, to ensure stable, secure and clean energy supplies. On December 9th, 2009 the SCO held the first meeting of its finance ministers and heads of central banks in Almaty, Kazakhstan, emphasizing the importance of maintaining a constructive dialogue among partners, finance regional cooperation, promoting economic growth, deepening of multilateral trade and economic relations among member states to consolidate their position within the world economy.³¹⁵

The eighth prime ministers' meeting of the Shanghai Cooperation Organization (SCO) member states opened in Beijing on October 14th, 2009. The meeting was chaired by Chinese Premier Wen Jiabao and was attended by his counterparts from Russia, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, and the prime ministers worked out joint measures to

³¹⁴ 張鴻俊，「從地緣戰略論中國對中亞能源外交」，國立政治大學碩士論文（台北：2010年6月），頁94。
[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study unpublished thesis, NCCU, (Taipei: June 2010), pp. 94.)]

³¹⁵ 張鴻俊，「從地緣戰略論中國對中亞能源外交」，國立政治大學碩士論文（台北：2010年6月），頁94-95。
[Chang, Hungchuen. *Cong Diyuanzhanlue Lun Zhongguo Dui Zhongya Nengyuanwaijiao* (Discussion of China's energy diplomacy towards Central Asian countries, geostrategic study), unpublished thesis, NCCU,

increase multilateral economic cooperation, cope with global financial crisis, and ensure steady economic growth in order to deepen cooperation among member states in economic, trade, finance and other fields.³¹⁶

On June 11th, 2010, the 10th Meeting of the Council of Heads of States of Shanghai Cooperation Organization (SCO) was held in Tashkent, Uzbekistan. It was determined that member states should clearly define the basic principles, priorities and project implementation approaches of multilateral economic cooperation, respond to the global financial and economic crisis, secure sustainable economic development via joint initiatives and to strengthen the role of the SCO Business Council and Bank Consortium so that trade and economic cooperation among member countries may develop rapidly.³¹⁷

5.1.2.6 The SCO Business Council and Interbank Consortium

Within the framework of the Shanghai Cooperation Organization, economic cooperation activities are monitored and divided between two major regional consultation organizations through intergovernmental exchanges by civil government departments.³¹⁸

5.1.2.6.1 The SCO Business Council

The SCO Business Council is an independent entity authorized to make advisory decisions and provide expert evaluations of the most promising activities that promote closer involvement of the SCO states' business communities in trade, economic and investment cooperation within the organization. It is formed to continue to promote joint ventures and

(Taipei: June 2010), pp. 94-95.]

³¹⁶ 國立政治大學碩士論文，「上海合作組織安全角色之研究」，呂學馥（：台北2010年9月）頁，84-85。[Lu, Hsyue Yen. *Shanghaihezuo-zuzhi Anquanjiaose Zhi Yanjiu* (Security role of the Shanghai cooperation organization studies), unpublished thesis, NCCU, (Taipei: September 2010), pp. 84-85.]

³¹⁷ 國立政治大學碩士論文，「組織安全角色之研究上海合作組」，呂學馥（：台北2010年9月）頁，81。[Lu, Hsyue Yen. *Shanghaihezuo-zuzhi Anquanjiaose Zhi Yanjiu* (Security role of the Shanghai cooperation organization studies), unpublished thesis, NCCU, (Taipei: September 2010), pp. 81.]

³¹⁸ 碩士論文國立政治大學，「上海合作組織安全角色之研究」，呂學馥（：台北2010年9月）頁，83-84。[Lu, Hsyue Yen. *Shanghaihezuo-zuzhi Anquanjiaose Zhi Yanjiu* (Security role of the Shanghai cooperation organization studies), unpublished thesis, NCCU, (Taipei: September 2010), pp. 83-84.]

cooperation among Member States' enterprises in order to enhance their mutual international competitiveness.

5.1.2.6.2 The SCO Interbank Consortium

Due to a lack of access to financing member states don't have strong capabilities for foreign investment, so the SCO states determined that they must build a multi-channel financial system, with the use of a more flexible market-oriented approach to provide financial services to large projects in this region. Moreover, measures were taken including the strengthening of cooperation with banks in Asia and Europe and other international financial institutions, actively introducing international financial institutions, funds, expanding financing channels of large projects in the region, and the rational use of export buyer's credit will be provided by Member States and other funds/loans.

5.1.3 Iran's admission to the SCO ³¹⁹

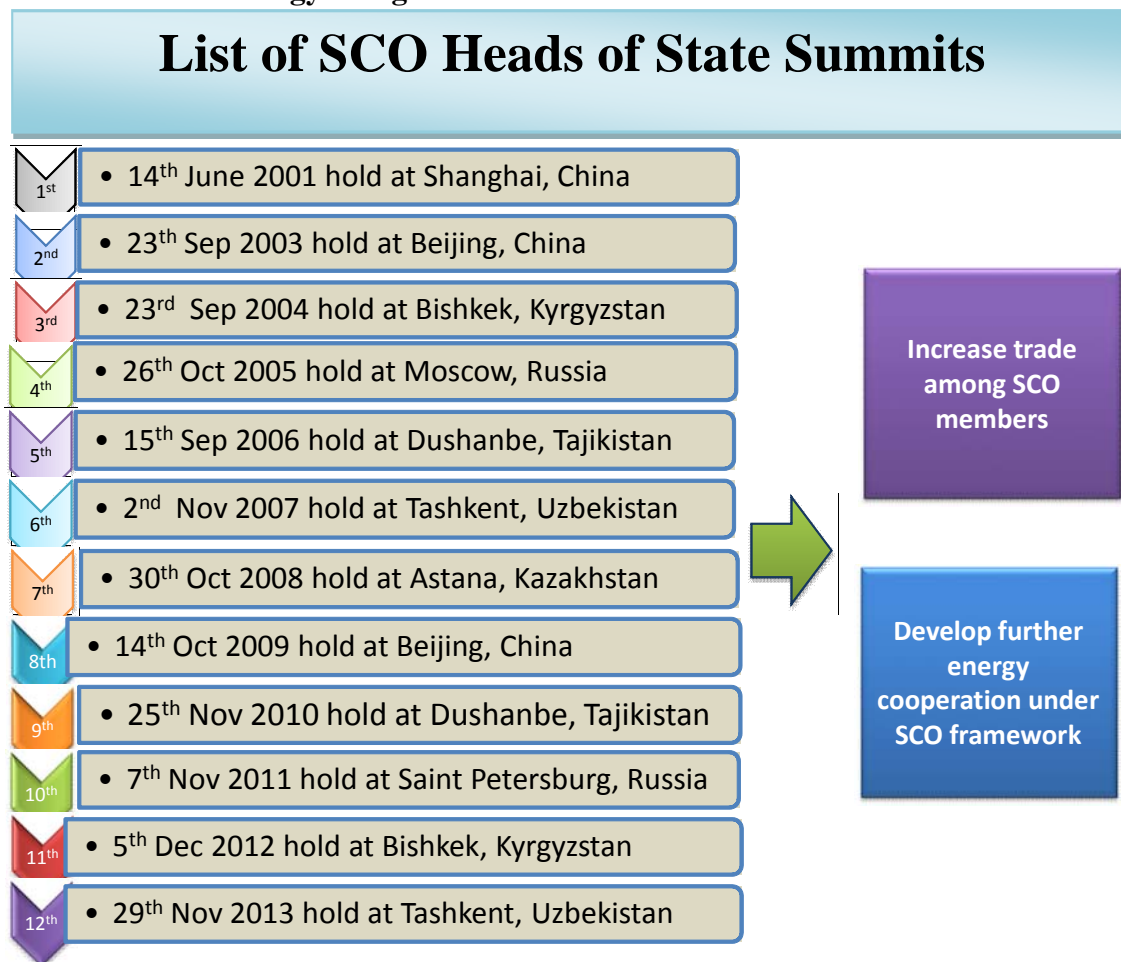
The 2005 Color Revolutions caused Russia and the Central Asian countries to have concerns about the United States, which is why the Shanghai Cooperation Organization allowed Iran, Pakistan and India to attend with Observer Status.

Due to its hostile policies towards Iran the U.S. State Department asserted in 2006, that it regards the Shanghai Cooperation Organization as having “goals are one thing and what they actually are doing is the opposite.” US State Dept. also expressed dissatisfaction with the withdrawal of its troops from Afghanistan, and criticized the SCO for allowing Iranian President Mahmoud Ahmadinejad to participate in the SCO summit, claiming that Iran is the

³¹⁹ 周耿生，「上海合作組織於全球社會經濟動盪下的地緣政治效應」，*中亞政經情勢與挑戰：2012年*（桃園：健行科技大學歐亞研究中心，2012年），頁69。[Chou, Kengsheng. *Shanghaihezuzuzhi Yu Quankiushehuijingjidongdang Xia De Diyuanzhengzhixiaoying* (Geopolitical efforts of the Shanghai Cooperation Organization in response to global socio-economic unrest), *Zhongya Zhengjingqingshi Yu Tiaozhan : 2012 Nian* (The Political and Economic Situation and Challenge of Central Asia 2012) (Taoyuan: Chien Hsin University of Science and Technology Graduate Institute of Central Asia Studies Publishing, 2012), pp. 69.]

‘world's largest or the most important state sponsor of terrorism.’ They claim that letting Iran join the Shanghai Cooperation Organization as an observer country in Central Asia is the opposite of the fight against terrorism, contrary to the purpose.



Chart 5-1: A Chronology of Significant SCO Summits: Presidential Summits

Source: "Shanghai Cooperation Organisation," official SCO website, available at: <http://www.sectsco.org/EN123>
 (Compiled by author)

Chart 5-2: A Chronology of Significant SCO Summits: Prime Ministerial Meetings



Source: “Shanghai Cooperation Organisation,” official SCO website, available at: <http://www.secsco.org/EN123>
(Compiled by author)

5.2 The Influence of the SCO on China's Diplomacy Policy in Central Asia

5.2.1 The Guidance of the late Chinese leader Deng Xiaoping

Since 1978 China began its reform and opening up, the focus mainly being placed upon economic development, in regard to which China's diplomatic goals are consistent, that is pursuing a stable international environment in considering of its domestic development.³²⁰ When the Soviet Union collapsed in 1991 the U.S. obtained global hegemony which had some negative influence on China. In response to that, as well as to confirm China's future strategy, in 1992 late Chinese leader Deng Xiaoping mentioned that the possibility of direct military conflict was quite limited hence China's goal should be focused on its own economic development.³²¹

5.2.2 The New Security Concept

However, a Chinese defense white paper in 1998 pointed out that certain countries (alluding to the United States) with military superiority have posed threats to other countries and China will unremittingly put a new security concept into practice, which is opposed to all kinds of hegemonism, and combat terrorism in all its forms and manifestations.³²²

³²⁰ Gao, Fei. "Discussion Papers in Diplomacy-The Shanghai Cooperation Organization and China's New Diplomacy," Clingendael, available at: http://www.clingendael.nl/sites/default/files/20100700_The%20Shanghai%20Cooperation%20Organization%20and%20China's%20New%20Diplomacy.pdf, pp. 2 (accessed: 20140225).

³²¹ Bates, Gill. *Rising Star: China's New Security Diplomacy* (Washington, DC: Brookings Institution Press, 2010), pp. 2-3.

³²² "White Paper on China's National Defense," Center for Strategic and international Studies, Jul 27, 1998, available at: http://csis.org/files/media/isis/programs/taiwan/timeline/sums/timeline_docs/CSI_19980727.pdf, (accessed: 20140522).

In March 1999, the then Chinese Premier Jiang Zemin gave a speech in Geneva, where he referred to the core of this new security concept as being mutual trust, mutual benefit, equality, and coordination. Dialogues should be held among nations on the basis of equally as the only measure to solve disputes and ensure peace. Through practice of this new security concept, a win-win situation between countries can be achieved.³²³

The definition of mutual trust, mutual benefit, equality and cooperation can be found in Tuo Cai's text, "Chinese Perspectives on Globalization and Autonomy."³²⁴ These definitions are as follows:

Mutual Trust: "means that all countries should stand above the difference of ideologies and social systems abandon the cold war mentality and mindset of power politics, not be suspicious of and hostile to each other."

Mutual Benefit: "means all countries should respect security interests of each other in line with the objective need of social development in the era of globalization, and realize their own security while creating conditions for other's security to realize common security."

Equality: "means all countries, big or small, are a member of the international community, and they should respect each other and treat each other equally, not interfere in other countries' domestic issues and facilitate democratization of international relations."

Coordination: "means that all countries should solve disputes with peaceful means and conduct broad and comprehensive cooperation on security problems of common concerns to remove hidden dangers and preempt wars and conflicts."

Under the guidance of this new security concept, the Chinese government promotes regional cooperation mechanisms, especially focusing on the Shanghai Cooperation Organization. In 2001 after the Shanghai Cooperation Organization was founded, six member states vigorously participated in anti-terrorism programs and the promotion of regional

³²³ Takahara, Akio. "The Rise of China and Its Neighborhood Diplomacy: Implications for Japanese Foreign Policy," DSpace at Waseda University, available at: http://dspace.wul.waseda.ac.jp/dspace/bitstream/2065/38146/1/ContemporaryChinaStudies_1_1_Takahara.pdf (accessed: 20140225).

³²⁴ Cai, Tuo. *Chinese Perspectives on Globalization and Autonomy* (Leiden: Brill, 2012), p. 255.

economic cooperation, and developed joint military exercises with the principles of being non-aligned and non-confrontational.³²⁵

5.2.3 The SCO as a Means of Implementation of the New Security Concept

In a way, the SCO itself is a means of China's implementation of its New Security Concept, through developing partnerships with member states, so that they can coordinate with each other in a more loose regional cooperation platform. Under the framework of the SCO, through consensus-based procedures, each country has only one vote without concern for its relative national power. Some Central Asian member states of the SCO after their independence from the Soviet Union in 1991 found that their political and economic system was in transition; hence their priority was, and still is, to maintain regional security and develop their economies.³²⁶

In terms of energy resources, China and the countries of Central Asia have complementary advantages that offer the possibility of extensive cooperation. Central Asian countries are rich in oil, gas and other resources. Energy-exporting countries' national interest lies in selling their energy sources at a reasonable price to obtain stable income. Moreover, Central Asia's landlocked counties have no access to the sea, so their energy exports rely on transiting overland to ensure their interests. By constructing cross-border oil and gas pipelines in and from Central Asia as a means of exporting their energy resources, China is able to strengthen energy cooperation with Central Asian countries, in line with China's oil import diversification policies and risk diversification, in order to enforce national energy security, that is to say, the energy resources in Central Asia become

³²⁵ Cai, Tuo. *Chinese Perspectives on Globalization and Autonomy* (Leiden: Brill, 2012), p. 256.

³²⁶ Gao, Fei. "Discussion Papers in Diplomacy-The Shanghai Cooperation Organization and China's New Diplomacy," Clingendael, available at: http://www.clingendael.nl/sites/default/files/20100700_The%20Shanghai%20Cooperation%20Organization%20and%20China's%20New%20Diplomacy.pdf, (accessed: 20140225).

China's strategic asset when it comes to diversification of its oil import sources and energy.

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Via the SCO's cooperation program and the bilateral relations between China and Central Asian countries, China is able to give these countries economic aid. Especially those countries with energy resources, China is putting even more effort into strengthening bilateral economic cooperation, trade and investment. In addition to energy and economic cooperation, countries in this region within the SCO framework are able to develop various means of cooperation to deepen mutual political and economic relations and actively promote regional economic integration and regional political stability and social security.³²⁸

5.2.4 The Discrepancies in regard to the Energy Cooperation between China and Russia within the SCO framework³²⁹

In the field of energy cooperation within the Central Asian region, exploration and exploitation of oil and gas is more difficult, as these efforts require a certain level of capital and technology, therefore it is very difficult for any Central Asian countries to have this done alone. They must work together with other countries allowing participation in their development of those projects. Therefore, a cooperation model has formed, via joint development; negotiation of the equity ratio becomes the means of energy cooperation.

In regard to the issues of energy cooperation, the SCO member states based on their individual conditions and needs are pursuing different interests. Russia hopes to control the energy resources as well as the oil and gas pipelines from Central Asia, thereby maintaining its traditional interests in the region. China focuses on the purchase of oil and gas. Other SCO

³²⁷ 李, 李建宏911淡江大學碩士論文, 「事件後中共對中亞外交政策之研究 (: 台北2010 年 6 月)頁, 134。[Lee, Chien hung. 911Shijian Hou Zhonggong Dui Zhongyawaijiaozhengce Zhi Yanjiu (China's foreign policy toward Central Asia after 911), unpublished thesis, Tamkang University, (Taipei: June 2010), pp. 134.]

³²⁸ 孫丕澄, 「俄中在中亞的能源競逐」, 清雲科技大學碩士論文 (桃園: 2010 年 6 月), 頁 97-99。[Sun, Picheng. *E Zhong Zai Zhongya De Nengyuan Jingzhu* (Russia and China's competition for Central Asia's energy), unpublished thesis, Ching Yun University, (Taoyuan: June 2010), pp. 97-99.]

³²⁹ 呂學猷, 「上海合作組織安全角色之研究」, 國立政治大學碩士論文 (台北: 2010 年 9 月), 頁 99。[Lu, Hsyue Yen. *Shanghaihezuo zuzhi Anquan jiaose Zhi Yanjiu* (Security role of the Shanghai cooperation

Member States hope to establish smooth energy transport mechanisms, and pursues stability of their energy resource exploitation to ensure their own energy security and prosperity.

With the increasing difficulty in oil exploration and exploitation in the Central Asian countries, as well as strengthening of joint development, China aims to promote multilateral energy cooperation with Central Asian countries within the SCO framework, making full use of their geo-strategic advantages, and establishing a regional energy cooperation mechanism. As China's economic strength has improved, energy diplomacy has become China's strategic chips. Via the SCO China has constantly strengthened its political, military and economic cooperation with Central Asian countries

5.3 Achievement of Cooperation between China and the SCO

5.3.1 Ensuring Energy Exports

Since 2005 China acquired a Kazakh oil company to facilitate its exploitation of oil fields in the construction of the China - Kazakhstan oil pipeline and the China - Central Asia gas pipeline. In 2005, PetroKazakhstan was acquired by the China National Petroleum Company and China's cooperation with SCO member states in the field of oil, natural gas and other energy commodities has achieved some significant results.³³⁰

5.3.1.1 The China - Kazakhstan Oil Pipeline³³¹

The construction of Kazakhstan oil pipeline was completed on the 11th of July, 2009. In its

organization studies), unpublished thesis, NCCU, (Taipei: September 2010), pp. 99.]

³³⁰ 國立政治大學碩士論文，「上海合作組織安全角色之研究」，呂學馥（：台北2010年9月）頁，89。[Lu, Hsyue Yen. *Shanghaihezuohezhi Anquanjiaose Zhi Yanjiu* (Security role of the Shanghai cooperation organization studies), unpublished thesis, NCCU, (Taipei: September 2010), pp. 89.]

³³¹ "Kazakhstan-China Crude Oil Pipeline, Kazakhstan," Hydrocarbons Technology, available at: <http://www.hydrocarbons-technology.com/projects/kazakhstan-china-crude-oil-pipeline>, (accessed: 20140522).

entirety the 2,228 kilometers long pipeline runs from Atyrau in Kazakhstan to Alashankou in China's Xinjiang province. So that China can effectively import oil from Kazakhstan.

5.3.1.2 The Central Asia–China Natural Gas Pipeline ³³²

The China-Central Asia Gas Pipeline has been gradually constructed segment by segment since 2009. It begins at Gedaim, on the Turkmenistan / Uzbekistan border, passes through Turkmenistan, Uzbekistan, and Kazakhstan and ends at Khorgos, in the Xinjiang province of China, measuring 1,833km in length. As such Turkmenistan now has a new alternative export route, enabling China to have effective access to natural gas from Turkmenistan.

5.3.2 Maintenance of Regional Security and Measures to deal with Terrorism, Extremism and Separatism

In order to deepen the cooperation between member states and to maintain regional security within the framework of the SCO, China has put forward three proposals: ³³³

- Establish mechanisms for defense and security consultation and dialogue such as SCO Defense and Security Forum, and hold bilateral strategic conversations in the sphere of regional security, non-traditional threat and economic cooperation.
- Defense ministerial-level meetings should be held at regular basis in the SCO, and hold several joint military anti-terrorism exercises.
- Exchanges and cooperation of various forms with countries and international organizations is encouraged (although the United States' 2005 application to join the SCO was rejected). ³³⁴

The Shanghai Cooperation Organization held a Special Conference in Moscow in March 2009. Altogether, 36 countries and relative organizations sent their Foreign Ministers

³³² “The two countries agreed to build the fourth route, Line D, of the Turkmenistan-China pipeline,” Xinhua, Sep 5, 2011, available at: http://news.xinhuanet.com/fortune/2013-09/05/c_117233209.htm, (accessed: 20131201).

³³³ Tang, S., Li, M., and Acharya, A., *Living with China: Regional states and China through crises and turning points* (New York: Palgrave Macmillan, 2009), p. 33-34.

³³⁴ Cohen, Ariel. “What to Do about the Shanghai Cooperation Organization's Rising Influence,” EurasiaNet.org, Sep 20, 2006, available at: <http://www.eurasianet.org/departments/insight/articles/eav092106.shtml>, (accessed:

and other officials to the conference. It was also the first time that senior officials from the U.S. and NATO were invited to an SCO meeting. The participants also noted that the SCO is an appropriate forum for a wide dialogue with participation of partners on Afghanistan-related issues in the context of the joint efforts of the international community and Afghanistan in fighting against terrorism, drug trafficking and organized crime.³³⁵

According to the doctrine that China advocates, the SCO member states are to combat the "three evils" of terrorism, separatism, and extremism (though in the eyes of Western scholars they believe it is a means for oppression of ethnic movements and democracy.) Under the framework of the SCO, during the period of 2003 to 2012, China, Russia, Kyrgyzstan, Tajikistan, Uzbekistan and Kazakhstan and other countries organized several joint military anti-terrorism exercises. The SCO established a permanent institution in Tashkent, the so-called Regional Anti-Terrorist Structure (RATS). The RATS possesses a list of terrorists and organizations that might endanger regional security.³³⁶ The director of RATS is China's Zhang Xinfeng who believes that it to have a significant role in China's determination to counter terrorism and gain influence in the SCO.³³⁷

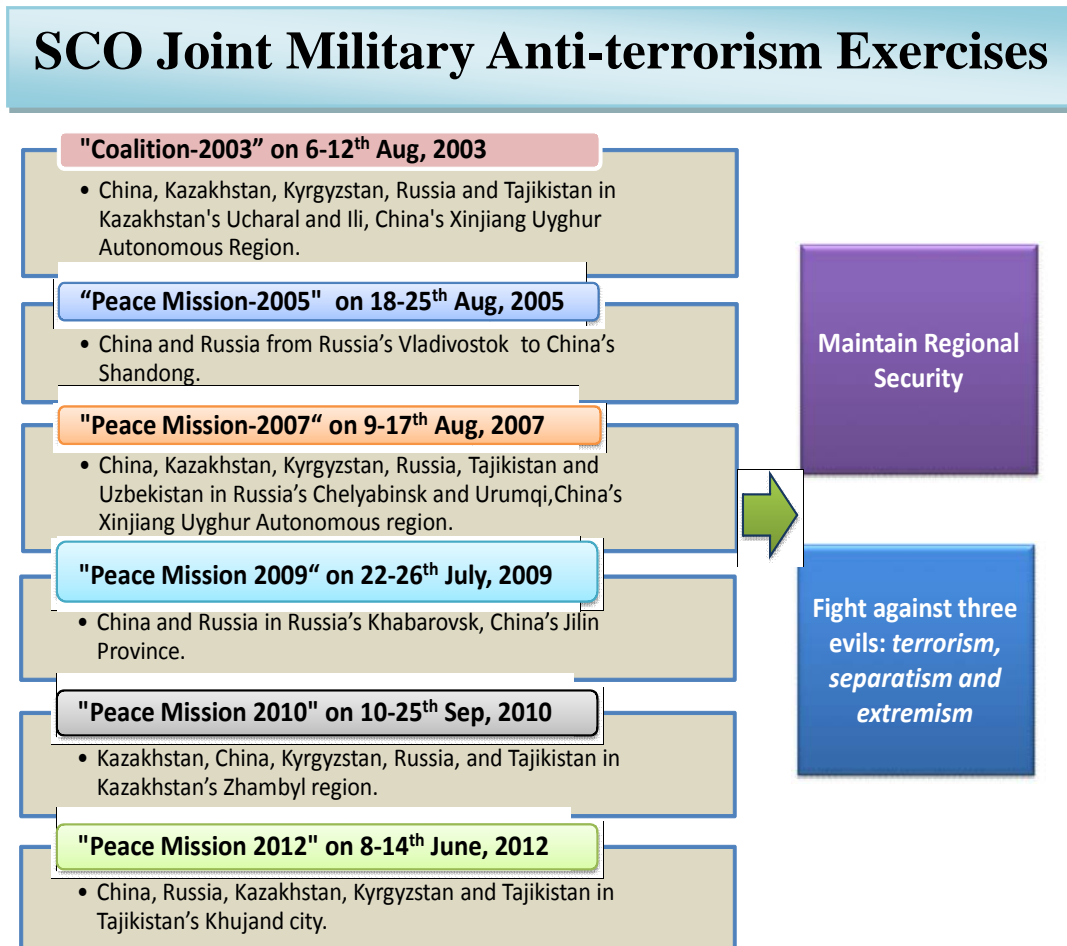
20140205).

³³⁵ Gao, Fei. "Discussion Papers in Diplomacy-The Shanghai Cooperation Organization and China's New Diplomacy," Clingendael, available at: http://www.clingendael.nl/sites/default/files/20100700_The%20Shanghai%20Cooperation%20Organization%20and%20China's%20New%20Diplomacy.pdf, (accessed: 20140225).

³³⁶ Kuo, Kendrick. "How China Develops Its Counterterrorism Capability," *The Diplomat*, Nov 11, 2013, available at: <http://thediplomat.com/2013/11/11/how-china-develops-its-counterterrorism-capability>, (accessed: 20140325).

³³⁷ "The Regional Anti-Terrorist Structure of Shanghai Cooperation Organization (RATS SCO)," *The Regional*

Chart 5-3: A Chronology of the SCO's Joint Military Anti-terrorism Exercises



Source: "Backgrounder: China-Russia joint military exercises since 2003," People's Daily Online, Jul 6, 2013, available at: <http://english.peopledaily.com.cn/90786/8313722.html> (Compiled by author)

Anti-Terrorist Structure of Shanghai Cooperation Organization, <http://ecrats.org/en>, (accessed: 20140325).

5.3.3 Developing the Economy of China's Western Regions

Multilateral military cooperation within the SCO framework ensures the stability of Central Asia as well as the western regions of China. The SCO has become a vehicle for China's "go out" strategy and its "go west" development strategy to speed up the economic growth in the western regions of China. Via economic cooperation through the SCO mechanism, China treats Central Asia as an export hub for global market.³³⁸

China alleges the existence in the Xinjiang region of a group it calls the "East Turkestan Islamic movement" which it further alleges to have close contact with Salafi oriented fundamentalists and so-called al-Qaeda. Hence such allegations provide a justification for Chinese security oriented actions that square with prevailing worldwide trends such as America's so-called "War on Terror."³³⁹ More than 200 "terrorist" attacks were logged in Xinjiang in 2009. However, Western scholars suspect that if "East Turkestan Islamic movement" that China claims in Xinjiang even exists it is likely based in Pakistan, and having a very limited role in Xinjiang itself. Instead, they consider that the chaos results from oppression and a lack of religious freedom in Xinjiang, and ethnic conflict between the Han and Uyghur.³⁴⁰ Overall and case in point, China's strategic considerations are to maintain security and to create a stable environment for the development of its Western Regions.

According to the 2013 Report on the Development of Central Asian Countries, released by the Chinese Academy of Social Sciences (CASS), when the five Central Asian countries just gained their independence in 1992, trade volume between China and the five Central Asian countries totaled US \$464 million, accounting for 0.27 percent of China's total foreign trade. The SCO was established in 2001 and the volume of trade between China and Central

³³⁸ Aggarwal, Vinod K. and Kristi Govella, *Linking Trade and Security: Evolving Institutions and Strategies in Asia, Europe and the United States* (Heidelberg: Springer, 2013), p. 122.

³³⁹ "The East Turkestan Islamic Movement (ETIM)," Council on Foreign Relations, Dec 3, 2013, available at: <http://www.cfr.org/china/east-turkestan-islamic-movement-etim/p9179#p5>, (accessed: 20140522).

³⁴⁰ Juma, Mamatjan. "Counter-Terror' Policy Targets Uyghurs," Radio Free Asia, Apr 7, 2011, available at:

Asia reached \$1.509 billion. With the development of the SCO and the strengthening of economic cooperation, China – Central Asia trade volume showed rapid growth, the volume of trade between China and Central Asia amounted to \$ 30.822 billion in 2008. In 2009 affected by the international financial crisis, the trade volume fell to 23.744 billion U.S. dollars. In 2011 the bilateral trade volume rose to \$ 39.65 billion.³⁴¹ In 2012 the trade volume between China and Central Asian countries exceeded 40 billion U.S. dollars (Please see Table 5-1 below).³⁴²

Table 5-1: Trade Volume between China and the five Central Asian countries						
Year	1992	2001	2008	2009	2011	2012
Trade Volume (Billion U.S dollar)	0.464	1.509	30.822	23.744	39.65	40

Source: Mao, Yan-bing and Ching, Pon-lian, “Annual Report on Development of Central Asia (2013)”

(Compiled by author)

<http://www.rfa.org/english/news/uyghur/policy-04072011123330.html>, (accessed: 20140328).

³⁴¹) 中亞國家發展報告：中亞黃皮書，孫力2013，社會科學文獻出版社：北京）（2013 頁，（年255-257。[Sun, Li. *Zhongya Huangpishu : Zhongyagu jia Fazhan baogao (Annual Report on the Development of Central Asia (2013) (Chinese Edition))*: Social Science Academic Press, (Beijing, 2013), pp. 255-257.]

³⁴² Yang, Chun. “Chinese Academy of Social Sciences: China must have a clear strategy for Central Asia as soon as possible,” *epaper.nfdaily.cn*, Sep 12, 2013, available at: http://epaper.nfdaily.cn/html/2013-09/12/content_7225410.htm, (accessed: 20140315).

Except in 2009 when affected by the global financial crisis, the trade volume between China and Central Asia since 2001 and the average annual trade growth rate are very high, rising dramatically. It is obvious that the SCO is a great help to the economic growth of China's western region and promotion of trade with the Central Asia region (Please see Chart 5-4 below).

Chart 5-4: Trade Volume between China and the five Central Asian countries



Source: Mao, Yan-bing and Ching, Pon-lian, "Annual Report on Development of Central Asia (2013)"
(Compiled by author)

6 Conclusions

6.1 The Importance of Central Asia to ensuring China's Energy Security through Diversification of Routes of Energy Importation

Central Asia, with its substantial wealth of natural resources and crucial positioning within the geopolitical sphere, has unique attributes. Most countries within Central Asia have adopted a policy which is designed ideally to balance the interests of external forces vis-à-vis each nation; thereby these nations hope to gain the greatest benefits for their own national development and wealth from stronger interested powers. Since the Chinese economic reforms of 1987, China's national economy has advanced by leaps and bounds even as its demand for energy has also risen quite strongly. Since 1993, China has been an energy-importing country. However, risks are posed to its energy security due to the fact that China imports the vast bulk of its energy resources via maritime routes from the Middle East and elsewhere. These routes are exceptionally vulnerable to social and political upheaval, and potentially can be targeted when the oil tankers plying these routes pass through the Persian Gulf or the Straits of Malacca, where they may be easily attacked, intercepted, or face a blockade due to war or maritime piracy.

Such circumstances lead to a vulnerable position in which China could face catastrophic energy shortages in times of unrest. This vulnerability has become an important issue for China as have strategies to diversify its energy import channels so as to ensure its own energy security.

Fortunately, in neighboring Central Asia China has found and continues to develop means by which to alleviate these aforementioned vulnerabilities. Extracted oil and natural gas has now begun to be transported to China via its own pipelines overland, through the development of cooperation with its Central Asian neighbors. This trend is slated to be strengthened as well. Such sources of energy offer much greater energy security for China than the still predominating routes of energy importation via maritime transportation. China has developed amicable relations with these Central Asian countries through application of

strategy and energy diplomacy, and has begun substantive cooperation in the exploitation and importation of their energy resources, as well as a range of other mutually beneficial relations.

For Central Asian countries, their plentiful energy can be exported to China where there is high demand even as they gain assistance in developing the infrastructure and economy of their own nations. China's financial resources and technological expertise allow these nations, particularly Kazakhstan and Turkmenistan, but also to some extent Uzbekistan, and even Kyrgyzstan and Tajikistan, to be aided in their development.

Therefore, these nations and China look to strengthen their future energy cooperation via bilateral and multilateral agreements made through the framework of the Shanghai Cooperation Organization, which is a Chinese initiative, as there are many opportunities for all parties to benefit especially in that the economies of Central Asia and China are mutually complementary in a great number of fields. And though Turkmenistan and Kazakhstan are the only two truly energy-rich countries in Central Asia, the other countries also have a place in this energy security network in their roles as transit hubs for both supplier and consumer. Hence, these nations not only cannot be diplomatically and/or strategically ignored by China, but rather form an important and crucial plank in the platform of China's international relations.

One exemplary example of the aforementioned importance of Sino-Central Asian relations is the China-Kazakhstan Oil Pipeline which was completed in July 2009. Another is the multilateral cooperative effort that brings natural gas from Turkmenistan via the China-Central Asia Gas Pipeline whose Lines A and B start from Turkmenistan and pump extracted natural gas to China via Uzbekistan and Kazakhstan; a project which was completed in June 2012.

6.1.1 The Establishment of the Shanghai Cooperation Organization (SCO)

As mentioned just prior China established and promoted the framework of the Shanghai Cooperation Organization with the cooperation of the five Central Asian nations and Russia in

2001. For China, the SCO is an excellent mechanism for engaging in multilateral dialogues and cooperation, and it has strengthened China's influence vis-à-vis the Central Asian countries and their neighbors significantly and is likely to continue to do so into the foreseeable future. Of particular benefit is the fact that Russia is also an SCO member nation which allows China a means to deepen its relations and cooperation with Russia. Initially the SCO was established merely as a forum for security issues that led to several joint counterterrorism military drills. However as each year that the SCO summit was held, China, the Central Asian countries and their neighbors have extended their discussions to economic, trade, and energy cooperation issues among others. Though SCO member states have different perspectives on a variety of issues, nonetheless energy cooperation did advance significantly through this mechanism, though mainly restricted to bilateral agreements. Most importantly in the future China has strong potential to deepen its energy cooperation with Central Asian countries via the SCO's framework.

6.2 Research Findings

6.2.1 Authoritarian Nature of Central Asian States Helps to Strengthen Relations with China

There is an important example that illustrates Central Asian governments' greater affinity with the PRC; that of Uzbekistan's deep flirtation with an alliance with the West, particularly the US, which ended in a complete reversal of policies and gravitation towards a supportive PRC in the aftermath of the Andijan Massacre in 2005. It is natural for the Central Asian countries to forge friendly ties with China due to the fact that these nations and China share similar authoritarian structures of governance, as well as a similar foundation in Communist and post-Communist ideology infused with strong nationalistic elements. Moreover they share an existential threat in the form of political Islam. Due to the anathematic polarity of the beliefs of Islam, which are also pan-nationalistic, with those of atheistic Communism, the socio-economic elites of these countries perceive their own populations and that of neighboring peoples and minorities in China such as the Uyghurs as an enemy to be

suppressed. Hence these authoritarian nations are quite volatile because of subsequent unrest and the advent of terrorism in response to the authoritarian means by which the elites maintain their monopoly on socio-economic power. One of the only ways to alleviate this social pressure cooker is to provide material advantages through raising standards of living of their citizens even as China has made great strides in doing so.

6.2.2 China uses the SCO to interact with Great Powers in the Region

Russia has in the past had great influence (even sovereignty) in Central Asia, and America has also stepped into this arena via its explicit agenda to fight against terrorism following the Events of 911, and implicitly to profit from exploitation of resources and geopolitical advantage. Fearing Russia might be substituted by the United States of America in its influence in Central Asia; China now uses the SCO as a means to further reinforce its relations with Russia as well as other regional members. Moreover, the SCO offers a means by which China's international stature vis-à-vis Western powers can be heightened.

6.2.3 The SCO plays a Key Role to China's Strategy in Central Asia

The SCO is the mechanism by which China plays a very important role in the region of Central Asia through strengthening its relations with member nations, improving energy cooperation, and last but not least, providing a framework for the following initiatives:

- China's New Silk Road policy: Aside from offering it a means by which to exploit the plentiful energy resources of Central Asia, China has high hopes that the region will come to serve as a hub and a route that will link China's trade in goods to the rest of the world, which would greatly enhance China's commerce and economy.
- Secure China's strategic interests: China seeks to build strong relations with the nations adjacent to its most vulnerable region domestically. Pursuant of this goal, China has entered into security cooperation with its neighbors in the form of joint counter-terrorism exercises and other military exchanges.

Through the SCO, it can be observed that China gains the following significant benefits:

- **Guaranteed, secure energy imports:** Particularly following the completion of the China-Central Asia Gas Pipeline and the China-Kazakhstan Oil Pipeline China's energy security is greatly enhanced.
- **Maintenance of regional security and assistance in countering the so-called "Three Evils"** that the PRC identifies as "Terrorism, Extremism and Separatism." According to the security doctrine adopted by China's ruling CCP, one of the main functions of the SCO is to counter threats to the territorial integrity of the People's Republic of China and areas of strategic interest as embodied by the "Three Evils of terrorism, separatism and extremism." Within the SCO framework, China, Russia, Kyrgyzstan, Tajikistan, Uzbekistan and Kazakhstan, have held several joint military anti-terrorism drills in the period between 2003 and 2012. China engages in security cooperation with Central Asian nations through the SCO. As such China now enjoys a degree of security and strategic depth not only through joint maintenance in the region, but also domestically through prevention of the development of separatism and unrest in its Xinjiang Province.
- **An economic boost for western China:** The SCO has hastened the economic development of western China. China's western provinces and autonomous regions can expect further benefits in the future through continued economic cooperation via the SCO with Central Asia. The region can now be regarded as an export gateway to the global market, particularly for merchandise produced in the western region. The bilateral trade between China and Central Asian countries accounted for only US\$464 million prior to the establishment of the SCO, and after its establishment in 2001 that trade rose immediately to US\$1.509 billion. As the SCO continued to develop further and economic cooperation strengthened, the trade between China and the Central Asian countries reached over US\$40 billion in 2012.

6.3 Policy Ramifications based upon the Findings of this Study

Given the findings of this study just related previously herein. This researcher would like to offer some suggestions in regard to the ramifications of these findings towards policies China might consider taking in the near future.³⁴³

6.3.1 China could develop a deep and lasting partnership with Russia to develop greater energy cooperation in the Central Asia region under SCO's framework

Russia traditionally has had great influence in Central Asia. Since the end of the Soviet Era, Russia has maintained strong control amounting to a near energy monopoly, exported energy to Europe and the world markets by its pipelines to earn high profits. Even after the breakup of the USSR and the independence of Central Asian countries, Russia still has tremendous influence in the region due to its existing energy pipelines and through the establishment of the CSTO.

China can use the SCO as a platform to gradually build mutual trust with Russia particularly, in addition to the Central Asian members of the SCO themselves. In fact the SCO offers many benefits towards regional integration but especially in constructing a win-win partnership with Russia the reigning power still in the region. Given recent events and the gravitation of Russia and China towards ever greater cooperation, this policy course should prove easier than one might have deemed it so prior to America's "Pivot to Asia" policy and encroachment on Russia's own borders.

Through the SCO's framework China can, not only build mutual trust and ensure

³⁴³ 郭凱，「金融危機以來中亞格局的新變化以及中國的戰略選擇」，*中國商界* 12 (北京: 2009)。[Guo, Kai. *Jinrongweiji Yilai Zhongya Geju De Xin Bianhua Yiji Zhongguo De Zhanlue Xuanze* (The new pattern of changes in Central Asia since the financial crisis and China's strategic choices) *Zhongguo Shangjie (Business China)* 12 (Beijing: 2009).]

regional security through joint military exercises, but also cooperate economically to a much greater degree, via trade, energy imports, and so on thus achieving a win-win situation. When China has built a solid basis of trust for cooperation between China and Russia, China can communicate its needs and ensure mutual benefits for all parties within the framework of SCO. China then can freely commence full energy cooperation in the Central Asian region, and seek to achieve economic integration among the SCO member states; it can extend its cooperation with multiple countries based on mutual cooperation with Central Asian countries, once Russia is certain that China does not pose a threat to its own interests but can be an ally against mutual external geopolitical threats.

Moreover, China can more proactively engage in exchanges and discussions with great powers, such as the US, the EU and Japan, and overcome differences and seek common ground to pursue good economic conditions in the Central Asian region.

6.3.2 China could work to further integrate economically and politically with the Nations of the Central Asian region

China could further these aims by:

- Building a non-national and transnational energy cooperation mechanism with the participation of energy producing countries, energy transit countries, oil and gas prospecting powers, such as Russia's President Putin has suggested for an Energy Club based on the SCO.
- Expanding the influence of the SCO, and strengthening its functions in energy cooperation.
- Strengthening economic cooperation, refining and processing of oil and raw materials, and making loans to Chinese enterprises investing in Central Asia.
- Using the SCO as a means to leverage China's ability to carry out dialogue and negotiations with the US, the EU, etc.

6.4 Future Prospects for Research

6.4.1 Research on the Impact on Geopolitical Circumstances in Eurasia and Central Asia arising from the still developing Ukraine Crisis

Currently the U.S. still retains hegemony in the world. Russia is facing the threat of greater sanctions and a form of economic attack from the West (U.S. and Europe) in the aftermath of the ongoing Ukraine Crisis of 2014. According to Hans J. Morgenthau's theory of Realism, when states are facing an external threat, it will find alliances to fight against it that threat for its own survival. Russia's current geopolitical circumstances are exactly those just aforementioned. Hence, Russia will find a suitable, reliant and strong partner to form an alliance. China is the ideal potential partner for Russia. China is not only a powerful nation, but also it already has close ties with Russia through the SCO's mechanisms.

As recent events indicate, Russia and China possess the mutual good will to sign a landmark gas deal on the 21st of May, 2014, which may well serve to cement a bond between the two nations. That same gas deal had remained unresolved in discussions and delayed for many years, thus this is a major step between China and Russia towards aligning their economic and potentially political interests. According to the deal, from 2018, Russia will start to supply 38 billion cubic meters natural gas to China. That volume not only goes a long way towards ensuring China's energy security even as China's energy demands are continuing to increase sharply, but also serves as a precedent in superb relations and as a symbol showing deeper mutual trust between Russia and China.

Though the ongoing Ukrainian Crisis will likely allow China to obtain a long term reliable source of natural gas from Russia, however it remains for further observation if China and Russia can work out a deeper partnership and alliance in Central Asia, such that China will be allowed full access to Russia's Central Asia regional cooperation mechanisms (such as the CSTO and the Eurasian Economic Union, etc.) or if that further develops via a new multilateral framework such as that proposed at the CICA in Shanghai recently by China's president Xi Jinping and which was discussed with Kazakhstan's president Nursultan Nazarbayev on the 19th of May 2014. These are profound consideration that will be the source and body of future research on this crucially important geopolitical and economic region.

In addition, there are further factors which will be considered by policy-makers and academia alike, such as China's future relationship with Iran, one of observed states of the SCO and also one nation which has experienced a deeply negative relationship with the U.S since the 1980s. Iran is already figuring into China's calculations³⁴⁴ and could be considered strongly as a potential candidate to establish an alliance along with China, Russia and the five Central Asian states. The passage of only another year or so will require further research into the changing circumstances of the "New Great Game" and China's role in it.

6.4.2 A Further Analysis of China's Future Energy Supplies

An important starting point for further inquiries into China's energy security would be an in-depth quantitative analysis of China's energy supplies.

According to the BP Statistical Review of World Energy 2013, in 2012 China's oil consumption was 10,221 thousand barrels daily, while oil imports amounted to 5,430 thousand barrels daily, including 2,900 thousand barrels daily from the Middle East and 1,215 thousand barrels daily from states of the former Soviet Union (including Kazakhstan, Turkmenistan, Uzbekistan, Kyrgyzstan and Tajikistan). Currently China's oil production and import is keeping pace with its oil demands. However, according to the forecast of the Chinese Academy of Engineering, by 2030, China's oil consumption is estimated to reach 12,931 thousand barrels daily, meaning that its dependency rate will exceed 70% at that time. Will China be able to find additional alternative oil suppliers and routes such that it may satisfy its fuel demands? In order to prevent any future shortfalls in fuel supplies, further study and observation will definitely be in order.

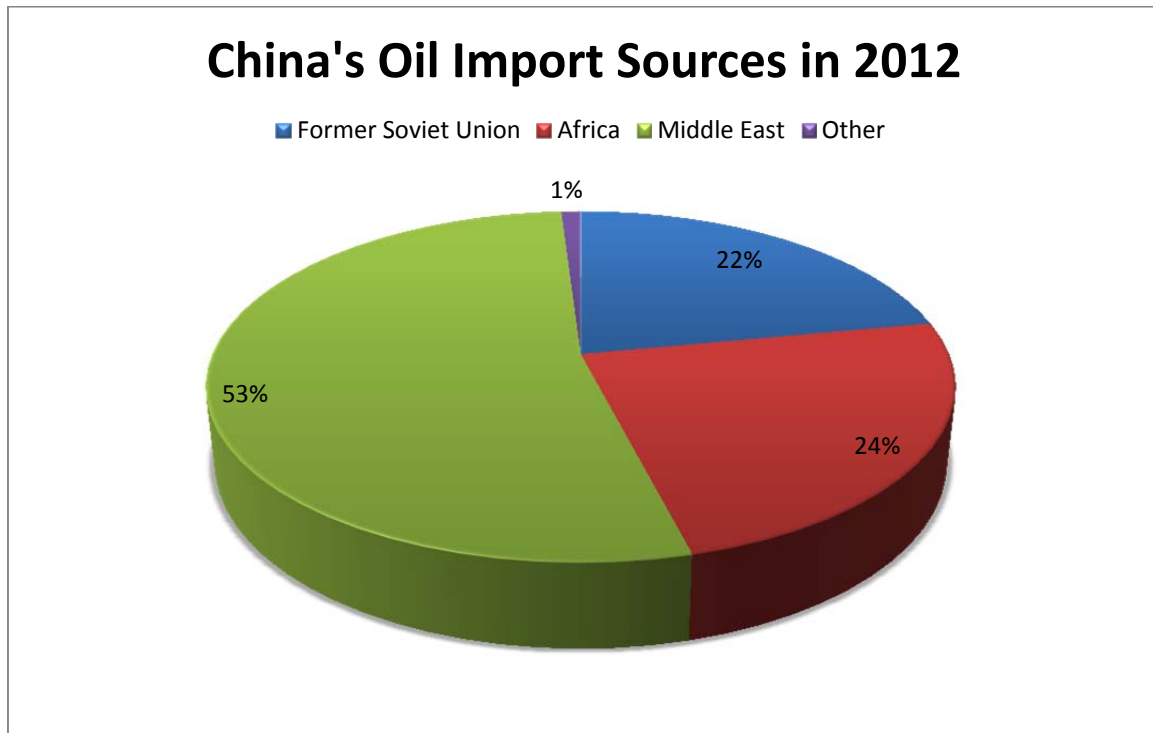
³⁴⁴ "New Chinese plan sees a rail link via Siberia from Beijing to the US and Canada...at bullet speed," The Siberian Times, May 18, 2014, available at: <http://siberiantimes.com/business/casestudy/news/new-chinese-plan-sees-a-rail-link-via-siberia-from-beijing-rail-way-to-the-us-and-canada-at-bullet-speed>, (accessed: 20140601).

Table 6-1: A Brief Analysis of China's Oil Supplies

thousand barrels daily/Year	2012	2030 Forecast
Consumption	10,221	12,931 (by the Chinese Academy of Engineering)
Production	4,155	might remain at 2012 scale
Middle East	2,900	might remain at 2012 scale
Africa	1,313	might remain at 2012 scale
Former Soviet Union (including Kazakhstan, Turkmenistan, Uzbekistan, Kyrgyzstan and Tajikistan)	1,215	might remain at 2012 scale
Total Oil Import (thousand barrels daily)	5,430	should be larger than 8,776 to fit China's Oil Demand

Source: BP Statistical Review of World Energy 2013

Chart 6-1: China's Oil Import Sources in 2012



(Compiled by author)

6.5 Final Comments

It is hoped that the preceding study has proven informative and enlightening to any reader. Certainly it cannot be argued otherwise that the region of Central Asia is one of key importance to not only China but the world as a whole. This study has proven to be an education at least to the author and has been a great pleasure to research. It is hoped that this study can contribute in some small measure to the field of areal studies of Central Asia and academic research on China's foreign policies.

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