CHAPTER – 5

ENERGY COOPERATION
Energy is China’s primary interest in Kazakhstan. After 1991 energy became Beijing’s primary strategic interest in the Central Asia and the core of its diplomatic concerns. This has been due to increase in China’s domestic energy demands and also due to change in the international situation after the collapse of the USSR. (Hausheng 2004:52) China is the second largest oil consuming country in the world after the US, and hence energy security is of paramount importance for sustaining its industries.

5.1 KAZAKHSTAN’S ENERGY RESOURCES

Kazakhstan possesses great supplies of oil and gas, but a careful determination of the quantum of these supplies is difficult. The Kazakhstan State Committee on Geology reported in 1996, that 160 deposits of oil and gas have been discovered on its territory accounting for 2.1 billion tons of oil and 0.7 billion tons of condensed gas. However, data published few years ago surpassed these figures. Industry sources, such as the British Petroleum (BP) statistical review of world energy, put total reserves at the end of 1996 at 8 billion barrels, or 0.8 percent of world reserves with a reserves production ratio of 47.7. Around 85 percent of oil wells in Kazakhstan are close to Caspian Sea. Proven and probable reserves of gas are put at around 1.84 trillion cubic meters, with estimated undiscovered reserves of 6.23 trillion cubic meters. Kazakhstan has 1.3 percent of world’s gas reserves, with a reserves-production ratio of 65.1.
TABLE 5.1
Oil and Gas production in Kazakhstan (In billion barrels/ trillion cubic meters.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (Mote)</th>
<th>Net Export (Mote)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Crude-Oil &amp;NGL (billion barrels)</td>
<td>Natural Gas (TCM)</td>
</tr>
<tr>
<td>1992</td>
<td>25.96</td>
<td>6.57</td>
</tr>
<tr>
<td>1993</td>
<td>23.08</td>
<td>5.42</td>
</tr>
<tr>
<td>1994</td>
<td>20.37</td>
<td>3.64</td>
</tr>
<tr>
<td>1995</td>
<td>20.73</td>
<td>4.79</td>
</tr>
<tr>
<td>1996</td>
<td>23.07</td>
<td>5.29</td>
</tr>
<tr>
<td>1997</td>
<td>25.90</td>
<td>6.57</td>
</tr>
<tr>
<td>1998</td>
<td>26.07</td>
<td>6.44</td>
</tr>
<tr>
<td>1999</td>
<td>30.27</td>
<td>8.63</td>
</tr>
<tr>
<td>2000</td>
<td>35.47</td>
<td>10.07</td>
</tr>
<tr>
<td>2001</td>
<td>40.28</td>
<td>10.14</td>
</tr>
<tr>
<td>2002</td>
<td>47.48</td>
<td>11.83</td>
</tr>
</tbody>
</table>

Note- NGL is Natural Gas liquid

Mote is a measurement of energy. It is equivalent to
1 mote =2.388x10000000 terajule (Tj)
1Tj =1000000000000joules

**Sources**: Energy Balance of Non-OECD Countries, 2002, pp.11.213, 223,255

Kazakhstan has a few very large oil and gas fields; the biggest being the Tenzig field with an estimated potential reserve (together with neighboring Korolev field) of 1 billion tons of oil. The Karachaganak field, the second in size, supplies an estimated 340 million tons of oil, 1.3 trillion cubic meters of natural gas and 1.2 billion tons of
condensed gas. Other substantial fields include Uzen, with proven supplies of 200 million tons of oil and Kumkol, with proven supplies of 80 million tons of oil and 75 billion cubic meters of gas. (Babak 1999:182-183)

**FIGURE 5.1**

![Per Capita Coal Reserves, Various Countries](image)

**Source:** Energy Balance of Non-OECD countries 2004pp.II-209, 214, 230.

### 5.1.1 Kazakhstan’s Hydrocarbons Exports

Kazakhstan with its vast reserves of oil and gas, and low consumption of energy, stands as a producing and exporting country to international markets. It has a number of problems such as a landlocked geography, which cause serious logistical barriers for the
transportation of goods and commodities, including energy. Besides, the long distance from major consumer centers, constraints of infrastructure, drilling equipment and climatic conditions complicate the development, exploration and transportation of energy. These are the reasons why projects in this region take a significantly longer time to develop. (Saurbek 2008:82)

5.2 CHINA’S ENERGY INTEREST

China has not been able to pump enough oil to satisfy its increasing demand since 1993 when it became a net-importer of oil. China’s dependence on import of gas and oil has to be seen in the context of Central Asia’s oil reserves that stand at about 200 billion barrels, second only to the Middle East. Similarly, Central Asia’s natural gas deposits are estimated at 8,000 billion cubic meters, only less than those of Russia and the Middle East. According to a US State Department Report released in 2007, the petroleum and natural gas resources in Central Asia and the Caspian Sea could be converted into $4 trillion, which is bound to attract foreign investors. Besides, this region is also rich in iron, copper, lead, chromium, gold and other non-ferrous and rare metals. For instance, uranium deposits in Kazakhstan account for one seventh of the total reserves in the world. The realities of demand and supply make both China and CARs mutually compatible and their cost-effective engagement shows signs of surviving all possible hurdles. Therefore, in addition to its energy requirements, this great power competition to seek access and influence amongst CARs will continue to dictate China’s indulgence and engagement with Central Asia (Singh 2000: 17).

Beijing’s focused on ensuring access to Central Asian energy resources. Despite being the world’s sixth largest producer of oil, China has not been able to produce enough oil to meet its increasing domestic demand since 1993, when it became a net oil importing country. But before 1997, the annual volume of oil import was less than 15 million tons, accounting for less than 10 percent of its annual oil demands. So the oil import during this period did not constitute a serious problem. In 1997, the volume of oil
import jumped to more than 35 million tons and it remained so till 1999. (Hausheng 2006: 52-53).

However, this period was one in which the international oil market was very stable for the buyers. The oil supply was ample and the price was cheap. The price per barrel fell to less than US$ 10 at the lowest. Under these circumstances, China’s basic thinking was to purchase the needed oil from the international market rather than to invest heavily in its own oil sources. Then China had investment in oil overseas, but it was mainly commercial, aiming basically at making profit rather than providing oil sources to China (Hausheng 2006:52-53).

China’s involvement in the exploration of Kazakhstan’s oil reserves is beneficial for both the parties. China can help Kazakhstan in the development of its economy by assisting it with advanced technology in the sector. Provided certain reforms are made in the domestic Chinese oil market, integration with the international oil market, large scale import of oil to coastal ports and transport; inland pipelines provide, the least cost strategy. However, the government feels that the coastline is sensitive to be blockaded and hence Kazakhstan’s oil resources are more attractive as an alternative source of supply mainly because of its geographical immediacy.

With the exception of the petroleum resources in the Middle East, the whole of oil and gas production could be delivered to consumers in central and east China via pipeline. For this reason, Chinese investment activity has focused on Central Asia and Russia. Oil from these regions could be shipped directly to China along a supply chain, which could be under Chinese management from start to finish. Together these pipelines and shipping routes would substantially reduce China’s exposure to disruption on the international markets and military blockade. A specific target has been set for the oil industry to secure supplies of 50 million tons per year from overseas production by 2010, but this plan is greatly dependent on the construction of an oil pipeline from Kazakhstan to China. (Speed 2002:35-36)
Kazakhstan has been interested in exploring oil to foreign market other then Russia has Cooperation with Beijing is beneficial for Astana as the neighbour has the potential to provide it with access to the sea and also act as a bridge across Asia to the Pacific Ocean. For Kazakhstan to realize its potential as an oil power, it must pursue multiple export routes, including through Turkey, Russia, China as well as Iran. China could be a major corridor by which Kazakh oil can flow to the east. The two neighbours signed an agreement for laying a 3000-kms pipeline from Kazakhstan to the Ala pass in the Chinese province of Xinjiang (Guancheng 2002: 127). Moreover, Chinese companies have the ability to construct a pipeline from Central Asia to the south and to the west. Given the Chinese energy demand and the high level of its oil technology, Chinese companies are in a position to compete for Central Asian oil and gas. In the energy field, China provides a balance between the United States and Russia (Ibid).

Kazakhstan’s seeks to find reliable access to the world market and alleviate heavy dependence on the Russian transportation system. In September 1997, Chinese Vice President Lee Pen visited Kazakhstan during which China promised to invest $9.5 billion in projects in Kazakhstan. The deal included an agreement by the CNPC to build the pipeline from the west of Kazakhstan to China (Babak 1999: 203). It was assumed that rapidly developing China can become a main importer of Kazakh oil due to the fact that its own hydrocarbon resources are not enough to meet domestic energy demand. The growth of Chinese oil industry from 1992 to 1996, on average, was only 1.5 percent per year, but the consumption of oil products increased by 7.5 percent per year (Ibid) China also wants to consolidate ties of economic and strategic significance in Central Asia.

By the end of 1997, China and Kazakhstan agreed to create a joint venture for realization of the Uzenmunaigaz project, which is dedicated to the building of a pipeline from the Uzen deposit in the west of Kazakhstan to the border with China and from there to western Chinese provinces. The period of pipeline construction was determined to be five years. By this time, in China’s opinion, the Uzen deposit would reach its maximum oil production, i.e., 6 to 7 million tons per year. The total cost of the project was estimated to be $ 4 billion, including the pipeline. China has thus been very active in its
participation in Kazakh company Aktobermunaigaz, which extracts 2.6 million tons of oil annually and is increasing its capacity further. (Babak 1999:2003-04) Kazakhstan’s energy resources are of great significance to China in the following aspects, first Central Asian energy occupies an important position in oil import. China’s annual oil import tops 100 million tons of which only about 2 million tons come from Central Asia. After the pipeline is put into operation, China would at least import about 10 million tons of oil per year from Central Asia. It hopes to import 20 million tons and more in the future. Thus Central Asian energy will account for 10 per cent or more in China’s oil import. Second, while Central Asian energy provides a new supply source to Beijing, it will improve China’s energy import structure and help realize the diversified energy import which is one of the objectives of China’s energy strategy. At present, about 50 per cent of its oil import comes from the Middle East and about 22 per cent from Africa. The degree of dependence on Middle Eastern and African oil exceeds 70 per cent. In view of the actual and potential instability in the Middle East and Africa and the security issue of long distance transport by sea, China’s excess dependence on the Middle Eastern and African energy is obviously not an ideal situation in which risks exist.

The main partner of China’s energy cooperation in Central Asia is Kazakhstan. Their energy cooperation includes two aspects -- China’s oil companies participate in energy exploration, development and infrastructure construction in Kazakhstan and laying of oil pipeline from Kazakhstan to China to deliver Kazakhstan and Russian oil to China.

Energy in China is a strategic issue. The finite oil resource in China, combined with high economic growth rates, stimulates the demand for diversifying energy supplies. In 1993, the first oil deficit appeared in China and since then Beijing has become a net importer of oil. By 2010, the oil deficit was expected to be more than 100 million tons annually and the gas deficit around 30 billion tons, which requires China to turn to foreign resources China’s energy security is thus tied to foreign affairs, and its increasing demand for foreign oil and gas will have a strong influence on the world-wide geopolitical energy situation (Guangchang 2002: 126).
The Chinese government has been moving to address the problem of oil and gas security. The US, since 1977, has maintained a strategic oil reserve; China too must create a diverse, secure oil and gas reserve. To do this China need to develop oil markets in Russia and Kazakhstan; concentrating on resources near at hand rather than pursuing those at greater distances. For example, China cannot compete with western countries in the Caspian Sea region. Its natural external energy base is Kazakhstan which is linked to China through energy development in Xinjiang.

In a joint declaration on strengthening cooperation in the twenty first century, signed in November 1999, the two sides underscored that “cooperation in the energy sphere has a decisive strategic significance for both countries. (Gaungcheng 2002:126)

5.2.1 Energy Need of China

**FIGURE 5.2**

*Total Energy Consumption in China, by Type (2008)*

- Coal: 71%
- Oil: 19%
- Hydroelectric: 6%
- Natural Gas: 3%
- Nuclear: 1%
- Other Renewables: 0.2%

*Source: EIA International Energy Statistics 2008*
5.2.2 Cooperation in Energy Sector

Energy sector cooperation remains the mainstay of China- Kazakhstan trade and economic relations; China is giving more stress on oil sector development in Kazakhstan in order to secure its own oil requirement. The International Energy Agency (IEA) projects a higher level of net oil imports for China, amounting some 4.0 million barrels per day by 2010, which could rise to 8.0 million by 2020. (Vinogradov and Speed; 2000:387-388)

Several agreements between Kazakhstan and China were signed to operationalise various energy projects. Among the first of the vital agreements was the common declaration about basis of friendly relationships between the Republic of Kazakhstan and People’s Republic of China (1993). This document defined the development of relations on the principles of mutual respect, sovereignty, territorial integrity and other general principles of international law. Specifically, trade-economy issues were denoted, the key ones being in the industry sectors, transport routes, energy (oil, gas and electricity) and space research. (Saurbek 2008: 87). Chinese pace of involvement in Kazakh oil sector is increasing and on the part of Kazakhstan, its need of a potential partner to develop and export its oil, encourages the country to join hands with China for cooperation in this sector.

5.2.3 New Pipelines

During 1997, China reaped the first fruits of its efforts to enter Kazakhstan’s energy market. The neighbours through CNPC (Chinese National Petroleum Corporation) signed their first co-operation agreement to jointly develop Kazakhstan’s refining capacity (Patnaik 2002:8). This agreement contemplates investment commitments of approximately US $9.5 billion by China as well as undertaking to commence operation within 5 years. The same year, CNPC won a tender giving it 60 percent stake in developing Kazakhstan’s second richest Novy Uzen oil field (first in Tenghiz oil field) by investing US $400 million. (Stobdan 1998:3) Out of the projected $ 1.1 billion, CNPC
won exclusive right to negotiate with Kazakh government for a contract to revitalize production of 2.7 -7 million tons at Uzbensk (or Novyuzen) oil field which is located in Aktobe oblast of western Kazakhstan for next 20 years (The Times of Central Asia 2001:6).

In September 1997, the CNPC signed an agreement on implementing the pipeline project with the Kazakhstan Government. The project was initially proposed by Astana. Between 1997 and 1999, the two sides completed the feasibility research report on the construction of the pipeline. According to the design, the pipeline was from Caspian Sea port city of Atyrau, Kazakhstan in the west to the Alataw Pass at the border between China and Kazakhstan via the Aktobe oil zone (including the Kankijak Oilfield) purchased by the CNPC and throughout Kazakhstan. The length of the pipeline is more than 3,000 kms. of which about 2,818 kms pass through Kazakhstan and the remaining 270 kms are in China. The total cost is estimated at US$ 3billion (Hausheng 2004:54-55).

In December 2002, during the official visit of state delegation of Kazakhstan to China, the two countries reached an agreement to construct a pipeline from western Kazakhstan to China (Times of Central Asia 2003:11) So, a pipeline from Caspian Sea to China that seemed to be a vague project is now expected to take shape in near future .

A subsidiary of CNPC in Kazakhstan owns 49 percent share in the northwest pipeline company Munai Gas, the operator of KenkiyaAtyrav pipeline project which will connect the Aktope and Atyrav oil producing regions in Western Kazakhstan. (The Times of Central Asia; 2002:12) By May 2003, 500 kms of Kenkiyak-Atyrav oil pipeline (the first phase) was constructed; and the Chinese side is committed to carry out further works gradually (Times of Central Asia; 2003:11). By January 2003 (i.e., even before completion of its first phase) the pipeline was filled with oil, mostly from CNPC Aktopemunaigaz company. Presently the KenkiyakAtyrav oil pipeline has a capacity of 6 million tons. (Transoil; 2003:10) As this pipeline depends much on oil from CNPC Aktobemunaigaz Company, of which CNPC owns more than 60 percent stakes (The Time of Central Asia 2003:11)
So, it is clear that China (mostly through CNPC) is actively engaged in Kazakhstan’s oil sector. President Nazarbayev, on the eve of new Chinese President Hu Jintao’s visit to Astana in June 2003, compound that CNPC had already invested $700 million into the Kazakh economy. (The Time of Central Asia 2003:11)

China had set targets to triple gas consumption by 2010. (Time of Central Asia; 2003:11) So, China has taken steps to ensure its future gas needs and it signed an ambitious project of laying a 5730 km long gas pipeline estimated at a cost of $11 billion.
Another ambitious gas pipeline project under consideration is close to 7000 km going east through China, from Turkmenistan to Japan. It would run along the route of an existing pipeline through Kazakhstan and a completely new line would have to be laid connecting China’s western Xinjiang and Tarim oil gas (Dorian 1997:82) But the feasibility of this pipeline, which is a part of the “Energy Route” concept, is very dim, at least in the near future.

China’s serious search for oil and gas to meet its growing energy needs in future is perfectly matched with the rich energy supplying potential of Kazakhstan. China is investing large amount of capital in Kazakhstan’s energy sector and helping the semi-landlocked country to export its oil and gas to world market. Besides energy, the neighbours are actively involved in other fields of economic cooperation as well.

Traditionally, Kazakhstan has been an ally and more than a partner to Russia having the similar cultural, ethnic, linguistic and historic backgrounds. However, Kazakhstan has declared a “multivectoral” policy, which means a willingness to develop and improve strategic, diplomatic and economic relations with major geopolitical powers in the international arena, namely, China, Russia, the US, Europe and the Muslim world. Within that list, China ranks as one of the highest priorities to collaborate with for many reasons.

5.3 NEW GREAT POWER ENERGY GAME IN CENTRAL ASIA: ROLE OF CHINA

Since the beginning of the 21st century, competition among great powers over energy resources and pathways have become remarkably intense, promoting rapid growth in energy prices and geopolitical considerations involving energy security. Central Eurasia (CEA), forming the heart of the crescent Eurasian space, has been of particular interest to the great powers due to its vast energy resources and strategic location. Geographically, Central Asia is defined to include Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, whereas the CEA consists of the five Central Asian
countries plus the three South-Caucasus countries of Armenia, Azerbaijan and Georgia. The CEA states are located to the east and west of the oil and natural gas-rich Caspian Sea. Kazakhstan and Azerbaijan have the biggest oil-reserves and are the largest export countries, although Turkmenistan’s oil and gas exports have been growing rapidly in recent years as well.

As stated in a report by the U.S. National Intelligence Council: “Growing demands for energy — especially by the rising powers — through 2020 will have substantial impacts on geopolitical relations (NIC 2004: 59). Major powers have invested a lot of time, money and effort together with diplomatic and military muscle to win control over major foreign stockpiles and transits of energy. In this context, major oil and gas-importers like the U.S., Europe and China, and are paying close attention to the CEA region, particularly Kazakhstan, Turkmenistan, Iran and Azerbaijan, whereas other regional powers like Russia are striving to retain influence over these strategic resources.

According to the BP Statistical Review of World Energy (2004), proven oil reserves of the five Caspian littoral states total about 216.4 billion barrels, while gas reserves are estimated at 2819.2 trillion cubic feet. In terms of percentages, the five Caspian littoral states have about 18.8 percent of the world’s total proven oil reserves and 45 percent of the gas reserves. Officials and analysts from the U.S. Energy Information Agency stated in 2004 that the world’s unproven oil reserves are expected to double in the next two decades, where states located in the former Soviet space will account for a projected fourfold increase. As such, the total Caspian oil and gas reserves are set to be adjusted upwards in the coming years, where the major share of the increase will flow from Kazakhstan, Turkmenistan and Azerbaijan. In 2001, the five Caspian littoral states exported a total of about 9.2 trillion barrels of oil and 12.05 trillion cubic feet of natural gas to the international market, but exports are set to increase to 31.5 trillion barrels of oil and 41.5 trillion cubic feet of natural gas by 2010.12

Geopolitically, the CEA region belongs to what Mackinder designated as the “heartland” and is the center of Zbigniew Brzezinski’s “black hole” of power, equating to “the Eurasian Balkans” implying a major risk of ethnic conflicts and great-power regional rivalry (Zhao 2007). Despite this strategic significance, the U.S.’ geopolitical assessment of the CEA region in the late 1990s has been left basically unchanged since George W. Bush became the President in early 2001, although it has lately undergone major revisions, especially after September 11, 2001 when the World Trade Centre was destroyed in a terrorist attack by al Qaeda.

**FIGURE 5.3**

![Natural Gas: Proved Reserves in Central Asia](http://www.roubini.com/analystmonitor/252525/energy_power_play__courting_central_asia)

Source: http://www.roubini.com/analystmonitor/252525/energy_power_play__courting_central_asia

Svante E. Cornell argues: “With strategic access crucial to the prosecution of the war [on terror], the republics of Central Asia took center stage in the most important conflict to confront the United States in decades. Although less prominently covered in the media, the states of the South Caucasus were equally vital; situated between Iran and Russia, they were the only practical corridor connecting NATO territory with Central Asia and Afghanistan.” (Cornell 2006)
However, the emerging strategic landscape of the region has not only affected the interests of the U.S., but also the national interests of neighboring countries, such as Afghanistan, China, Iran, Pakistan, Turkey and even Ukraine, as well as outsiders like the European Union, India and Japan. This great-power rivalry has been described in terms of a “New Great Game”.

As Mehdi Parvizi Amineh, an expert on CEA energy security notes:

“With the end of Soviet control over CEA and Caspian region’s natural and human resources, there emerged a New Great Game amongst the many players interested in access to the region’s oil and gas reserves (...) This mixture of changing world politics suggest that the post-Soviet New Great Game for the influence and control of CEA and the Caspian resources is far more complex than the 19th century competitive colonization of the region by the Anglo-Russian Powers.”(Amineh 2003:209 )

This has sparked interest from Beijing to Washington, New Delhi to Moscow, and Tokyo to Brussels. Events such as the 1973 oil crisis, a rapidly growing world demand, increasing dependency on the Middle East and the collapse of the Soviet Union have intensified this race to secure alternative and diversified supplies. Indeed, following the end of the Cold War, U.S. strategists began to pay more attention to the CEA region, and the Clinton Administration showed particular interest in CEA’s energy and economic potential. The Bush government also promoted massive and active involvement in CEA affairs both to restrict China’s geopolitical rise and influence in the region while simultaneously coveting Russia’s Central Asia “backyard”. This was perhaps primarily seen in the United States’ support for the color revolutions that swept the region in the past few years, starting with the “Rose revolution” in Georgia in 2003, the “Orange revolution” in Ukraine in late 2004, and the “Tulip revolution” in Kyrgyzstan in early 2005. The domestic turmoil created by these revolutions also alerted the member states of the SCO (China, Russia, Kyrgyzstan, Kazakhstan, Tajikistan and Uzbekistan) which showed growing concern over these events.
In May 2005, violence struck the Uzbek town of Andijan as insurgents freed a group of businessmen from a prison. The violent suppression of the uprising led to massive condemnation from the U.S. and other Western powers, which ultimately led the Uzbek government to demand a forced U.S. withdrawal from the Karshi-Khanabad airbase which it used for its Afghanistan operation. Soon after, a SCO statement was also delivered demanding the U.S. to set a deadline for withdrawal of its bases from Central Asia as this event, combined with 2006 stalemate in the Iranian nuclear crisis, also illustrated a dilemma for American foreign policy vis-à-vis Central Eurasia. As one expert noted,

“...in the space of 12 months, Russia and China have managed to move the pieces on the geopolitical chess board of Eurasia away from what had been an overwhelming U.S. strategic advantage, to the opposite, where the U.S. is increasingly isolated. It’s potentially the greatest strategic defeat for the U.S. power projection of the post-World War II period. (Engdahl 2006)

These geopolitical setbacks prompted a policy review in Washington. In October 2005, Secretary of State Condoleezza Rice visited the Central Asian capitals to assess the new direction of U.S. diplomacy. After her return, Rice ordered a revamping of the Central Asia desk in the State Department by merging it with the South Asia Bureau while simultaneously promoting the “Greater Central Asia” concept to avoid U.S. marginalization in the CEA region. Considering the unprecedented level of influence the U.S. had built up in South Asia, it was calculated that the South Asian countries would serve its interests positively if only they could be persuaded to play a proactive role in Central Asia. Similarly, it was assumed that the Central Asian states may also rethink their deepening involvement in the SCO if other options are provided. (Bhadrakumar 2006) Currently, the SCO members are pushing energy cooperation forward among themselves which will surely affect the U.S. geopolitical role in Central Asia. A notable feature of the 2005 SCO-Astana summit statement was that emphasis was also placed on resisting interference of outside forces by putting forward new geopolitical principles for CEA affairs. Moreover, at the 2006 SCO summit in Shanghai, all member states agreed
to give priority to cooperation in the fields of energy and to “play an independent role in safeguarding stability and security in this region”.

For centuries, Russia’s control of the CEA region has had long-term and profound geopolitical implications for other great powers. Even though Moscow used natural gas as leverage to exert pressure on Ukraine in the winter of 2005 and has put increasing emphasis on energy diplomacy, its foreign policy towards these countries is not driven primarily by hopes of recapturing great oil wealth, but by geopolitical influence. As some experts have noted:

“Russian interests in the region are both broader and simpler. At the minimum, Russia has an interest in preventing these newly independent countries from falling under the dominance of any other regional power, for example, Turkey and Iran, or becoming a new frontier for the so-called hegemony of the United States. At the maximum, Russia would seek dominant influence over these countries’ domestic as well as foreign policies. ....Energy is a means, not an end. Russia also has many cards to play short of military action.”

Former Russian President Vladimir Putin carried out diplomatic, economic and military measures to counterbalance the U.S. growing geopolitical role in CEA through continuous strengthening of cooperation within the SCO.

China has gradually given CEA increased geo-strategic significance since the end of the Cold War. As the U.S. established a military presence in Central Asia and it strengthened the U.S.-Japan alliance, deploying more strategic submarines and other deterrent weapons, Beijing’s leadership has faced tougher geopolitical competition over Central Asia. Considering that China shares 3000 kms of borders with the three Central Asian countries of Kazakhstan, Kyrgyzstan and Tajikistan, their significance in China’s

---

stability should not be underestimated. Besides, China’s thirst for oil and natural gas to support its booming economic growth requires Beijing to develop close and stable relations with these countries, especially in terms of energy cooperation.

As reported by Chinese Xinhua News Agency, China Petrochemical Corp (Sinopec) and ONGC also hold a 51 percent and 29 percent stake respectively in the development of the Yadavaran oil field in Iran. The CNPC is also negotiating with ONGC over joint investment in specific third-country oil projects. In 2006, before the Chinese lunar new-year, India's oil minister Mani Shankar Aiyer signed an agreement to collaborate with China in securing crude oil resources overseas, the aim of which is to prevent fierce competition over oil to drive up prices. In the second round of the Sino-Indian “strategic dialogue” held in Beijing in February 2006, both countries also agreed to cooperate rather than compete for global energy resources. (Xinhua 2006)

The increasing competition among the great powers over energy resources and their pathways will have major implications for foreign policy formulation, and especially so in Eurasia. The close relationship between economic growth and energy supply makes developed countries worry about losing influence when challenged by rising developing countries, such as China and India.
FIGURE 5.4

<table>
<thead>
<tr>
<th>Top Ten Net Oil Importers, 2009*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
</tr>
<tr>
<td>China</td>
</tr>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>Germany</td>
</tr>
<tr>
<td>India</td>
</tr>
<tr>
<td>South Korea</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>Spain</td>
</tr>
<tr>
<td>Italy</td>
</tr>
<tr>
<td>Taiwan</td>
</tr>
</tbody>
</table>

Source: EIA Short-Term Energy Outlook (September 2010)
*Estimates of production and consumption. Does not include stockbuild.

5.4 OIL PIPELINE OR “POWER” PIPELINE

Due to the lack of pipeline access and options besides the Russian one, it is very important for the land-locked countries of CEA to find new transportation networks for their oil and natural gas exports. Kazakhstan and Russia are directed toward Russia. The Central Asia and Caspian republics “seek multiple pipeline options to distance themselves from Russia and to gain access to different markets and consumers in Europe, the U.S. and Asia.” There is fierce competition over pipelines, ownership, and their further stretches in CEA, and there have been numerous proposals by countries concerned to build east-or-west directed pipelines in their pipeline diplomacies. In the words of one analyst: “In a sense, to control oil and gas pipeline is more important than to possess oil and gas resources.” Whoever controls the lifeline of oil transportation controls
the oil resources of Central Asia, and by extension will dominate the politics of the CEA states as well.

MAP 5.2

PetroKazakhstan Operations

Source: http://www.eia.doe.gov/cabs/China/Full.html
To weaken Russian and Iranian control of Caspian oil and gas, the US has heavily promoted the newly inaugurated BTC oil pipeline running from Baku, Azerbaijan to Ceyhan, Turkey, as well as a trans-Afghan natural gas pipeline running from Turkmenistan to Pakistan through Afghanistan, both bypassing Russian and Iranian territories. Moreover, the US opposes India's plans to strengthen energy cooperation with Iran through the projected Iran-Pakistan-India gas pipeline as regards Japan, it does not only compete with China over the Far East Siberian oil pipeline today, but it has also emerged as a player over Caspian oil and gas in recent years.
5.5 KAZAKH-CHINESE COLLABORATION IN SECURING DURABLE ENERGY SECURITY

First of all, the two countries have a common physical border and therefore, they are compelled to maintain relations and cooperate over a host of issues of mutual interest. As Chinese economy grows at a break-neck pace, its consumption and demand for energy grows accordingly.

The closest energy rich region for China is Kazakhstan Caspian Sea and Russia with its energy resources in the eastern part of the country. China’s demand for oil is expected to more than double by 2030. Beijing actively seeks new sources of supply and this has been recognized as the main priority in its energy security policy\textsuperscript{14}, which also includes electricity, coal and gas. In this respect, energy resources from Russia, Kazakhstan and Turkmenistan are very important for the Chinese economy because as Christoffersen puts it,

\begin{quote}
“pipelines through China from Central Asia and Russia would help to diversify Northeast Asian energy supply – reducing the region’s dependence on supplies from the Middle East”. (Christoffersen 1998, 3)
\end{quote}

In addressing its energy shortages, Chinese strategy is to bid for and buy all energy infrastructures from other countries and become a new, key strategic player in the international arena. In the early 1990s, in 1997 Chinese national oil company CNPC made significant commitments to the oil sector of Kazakhstan. In 2004, the Chinese signed deals in Chad, Saudi Arabia, Cuba, Yemen, Morocco, Kazakhstan, Peru, Egypt and Gabon. In 2005, contracts were signed in Uzbekistan, Azerbaijan, Kazakhstan, Canada, Mongolia, the Philippines and Venezuela, while the Chinese failed in their takeover bids for a South Korean refining company and Unocal. (Andrews-Speed 2005,1) China’s energy interests and operations are broad and extend all over the world.
5.6 KAZAKHSTAN’S HYDROCARBONS EXPORTS

The abundance of oil produced and the extremely small population of Kazakhstan combined with relatively undeveloped refineries have forced Kazakhstan to seek new, alternative ways to reach potential consumers. (BP statistical review 2005)

At the same time, the Caspian region, and Kazakhstan, in particular, has a number of problems such as a landlocked geography, which cause serious logistical barriers for the transportation of goods and commodities, including energy. Besides that, the far distance from major consumer centers, constraints of infrastructure, drilling equipment and climatic conditions complicates the development, exploration and transportation of energy. These are the reasons why projects in this region take a significantly longer time to develop. (Baker Institute Study 1998, 2) The hydrocarbons are usually exported in a number of ways – via pipelines, by rail and by marine transport. Almost the whole oil and gas pipeline network of Kazakhstan was built during the Soviet era and was mainly designed for export through the territory of the Russian Federation (Refer to the Map cited below).

FIGURE 5.7

China's Crude Oil Imports by Source, 2009
(000 barrels per day)

- Saudi Arabia, 839
- Angola, 644
- Iran, 463
- Russia, 306
- Oman, 233
- Sudan, 244
- Iraq, 143
- Kuwait, 142
- Libya, 127
- Kazakhstan, 120
- Venezuela, 105
- Others, 711

Source: FACTS Global Energy
FIGURE 5.8


MAP 5.3

Kazakhstan decided to seek alternative routes for its hydrocarbons export, bypassing Russia. Which requires the conclusion of new interstate governmental agreements, construction of new infrastructure and perhaps changes to domestic legislation. There are various directions along which Kazakh hydrocarbons can be exported.
transported, as stated in Kazakhstan’s Strategy 2030\textsuperscript{15}, including through Iran, China and by bypassing Russia into Europe. Pipelines are the most economically effective means for the transportation of hydrocarbons\textsuperscript{16}. Thus, the construction of pipelines has been under consideration for long time.

\section*{5.7 ENERGY AND TRADE BETWEEN KAZAKHSTAN AND CHINA}

As mentioned previously, one of those potential routes is towards China. Both Kazakhstan and China are actively developing mutual relations in a number of sectors. According to the Kazakhstanskaya Pravda, a Kazakh newspaper, a total of 105 bilateral agreements and treaties have been signed between the two countries, of which, more than 30 were aimed at regulating trade relations. Among the Eastern European countries and the Commonwealth of Independent States (CIS) members, Kazakhstan is the second largest trade partner to China and there is still a lot of potential for further growth in this sector. (Pravda 2004) The trade balance between the countries was about US$ 3.3 billion in 2003. However, it increased rapidly and by 2006, bilateral trade reached US$8.36 billion, and during first half of 2007, the estimated figure was US $5.97 billion; reflecting fruitful cooperation in the economic, trade and transportation sectors. (Kazakh embassy in USA and Canada 2008)

China has been paid attention Astana’s energy resources by purchasing a production company, a refinery in the south of Kazakhstan, and the construction of two oil pipelines. According to P. Andrews-Speed, such energy collaboration has many specific characteristics which distinguish it from other economic sectors. Key among them: (1) the primary energy resources are state-owned; (2) energy is regarded as a vital

\textsuperscript{15} Strategy 2030 or Message of the President of the country to the people of Kazakhstan "Kazakhstan - 2030": Prosperity, Security And Ever Growing Welfare Of All The Kazakhstanis is a conceptual strategy which covers practically all aspects of political, economic and social aspects of Kazakhstan until 2030. This document can be read at the official site of the President of the Republic of Kazakhstan: www.akorda.kz.

\textsuperscript{16} For a description of oil and gas pipelines cost-effectiveness compared to other means of transportation, please see the publication of P. Stevens, Cross-border oil and gas pipelines: problems and prospects, (Washington, D.C.: ESMAP, 2003).
input to any modern economy and thus, the security of supply is a serious concern to the government; (3) the energy sector dominates the economy with large-scale, capital intensive projects, through a relatively small number of domestic and international companies; (4) the financing of such projects requires the new approach of preparing complicated and developed legal documentation for the parties; (5) the long-distance transportation of energy by pipeline or by wire (for electricity) is a “natural monopoly which gives disproportionate power to the commercial operator, to the supplier of the energy and to any transit state and therefore, such transportation infrastructure is commonly governed by an international treaty”.*(Andrews-Speed 2003)*

The Agreement on Collaboration in Oil and Gas Sector was concluded between Kazakhstan and China on 24 September 1997. It stated that development of mutual collaboration in oil and gas sector would result in further improvement of friendly and neighborly relations, and that it would meet the interests of the people of both the States. It was also stated that the governments will undertake all necessary measures and actions to support and encourage the establishment of direct engagements between corresponding agencies, enterprises and companies; and will research further approaches to develop the sector and extend its scope. In this document, the parties supported the construction of a pipeline which would connect the Western part of Kazakhstan with the Western region of China. Beijing approved CNPC as responsible for the construction of the pipeline, the financing arrangements and the preparation of the Technical- Economical Justification of the project. In return, Kazakhstan agreed to provide land lots and construction sites for laying the pipeline, guaranteed security, and stabilized the export duties for oil and import taxes for the necessary construction equipment. *(This agreement was signed on September 24, 1997).*

These agreements created a strong legislative basis to realize the project. These treaties expressed the political will of the two countries and defined the general principles and rules of construction of such a pipeline. Later, the project was realized at governmental and national oil companies’ level. Subsequent agreements were based on the abovementioned documents and developed established principles further. Later, a
whole set of relevant documents were signed, the most notable being The Common Declaration between Kazakhstan and China was signed in Beijing on November 23, 1999 for further improvement of all-round collaboration in 21st century (1999). This Declaration confirmed the dynamism in the relationship between the states in different sectors and expressed the wish to improve strategic coordination in all sectors. The collaboration in energy sector was mentioned as: “Parties aspiring to use the huge potential abilities of a mutual coordination in the energy sector will take common measures to precipitate the preparation of the Technical-Economical Justification of a Kazakh-China pipeline with the purpose of improving collaboration between the countries.” (Clause 4 of the Declaration.)

Another very important document regulating bilateral relations in the sector is the Programme of Collaboration between the Kazakhstan and China for the years 2003-2008. This document was signed by the President of Kazakhstan, Mr. N. Nazarbayev, and his Chinese counterpart, Mr. Hu Jintao on 3 June 2003. The document declared the strategic importance of collaboration in the energy sector for both the States. In particular, it stated the necessity to strengthen the process of collaboration in the oil and gas sectors, and also to make efforts to support and realize the project. In it, it was also stated that the parties will continue to determine the expediency of constructing a pipeline which will connect Kazakhstan with China. In addition, the parties reached agreement to encourage and support Chinese companies who participate in the development of Kazakh oil resources in the Caspian region.

From a legal perspective, energy agreements between the two countries were signed at the governmental level during the visit of the Kazakh President, Mr. N. Nazarbayev, to Beijing in 2004. Among them are documents relating to trade economy, energy, and agricultural relations, as well as the establishment of a Kazakh-Chinese Collaboration Committee to be co-chaired by the Deputy Prime Ministers from each country were signed. These energy sector agreements related to the construction of the Atasu-Alashankou oil pipeline from Western Kazakhstan to the Western part of China,
access of Chinese oil companies to Caspian oil development and the participation of Kazakh oil companies in Chinese oilfields in the South China Sea.

The recent construction of the Atasu-Alashankou pipeline is one of the most discussed projects in Central Asia. As reflected the following, it forms part of the chain of a longer and ambitious “Kazakhstan-China” pipeline, which would run from the Western part of Kazakhstan to the Western part of China upon completion.

MAP.5.5
Kazakhstan-China Pipeline Project

Source: www.petroleum-economist.com/maps
5.8 THE KAZAKHSTAN-CHINA PIPELINE PROJECT IS SIGNIFICANT FOR MANY REASONS\textsuperscript{17}

- It highlights the observance of the bilateral agreements
- It has contributed to the diversification of Kazakhstan’s hydrocarbon resources through alternative routes resulting in the extension of its supplies directly to the consumer without transit through a third country.
- In the long-term, it will contribute to the transit potential of Kazakhstan
- It has bolstered the regional integration of Central Asia
- It has stimulated the Kazakh economy in terms of development of local infrastructure and the creation of new jobs, etc.,
- It has strengthened Kazakh-Sino economic relations,
- It has improved the investment climate in Kazakhstan.

Chinese experts see three benefits in building the China-Kazakhstan pipeline and improving its energy ties with Kazakhstan: First, it lessens Beijing’s dependence on oil from the Persian Gulf, greatly decreasing the risk of Middle Eastern turbulence to China’s energy security. Second, the location in the inland of Eurasia makes China’s oil supply route safer. And third, it provides China with a long-term and stable land-based oil supply alternative. (Xinhua 2006)

This project has significant geopolitical and economic sense for both Kazakhstan and China. For Astana, it is a great achievement to manage such a strategic and significant project independently, without the involvement of third parties, international companies or institutions. As for China, it learnt valuable lessons from carrying out such a trans-boundary project and it would be useful when it engages Russia in the construction of pipelines between the two countries.

\textsuperscript{17} Here it is worth noting the idea of transport corridor Western Europe –Western China, where Kazakhstan will use its transit potential. Please refer to the article “The Prime- Minister gave two months to make a decision for financing transport corridor Western Europe-Western China” available at <http://www.kztoday.kz> (February 1 2008).
A milestone in energy transportation relations was the visit of Nazarbayev, to China in 2004. This visit activated the processes within the energy sector and set in motion existing agreements through practical steps. At the same time, agreements were signed between the governments and national oil companies of both countries. These agreements provided a concrete set of actions for the realization of the project, for instance, the establishment of a Project Company, definition of shareholders and their shares in the project, finance, construction, tariffs, etc. When analyzing the aforementioned set of legal instruments, it should be noted that a legal framework and basis for this particular project, the Atasu-Alashankou pipeline, was created.

It should be noted that while the first commitments were made in 1997, the practical realization of the project began only after the 2004 visit. However, the period of realization of such a project was long as the first joint group of Kazakh and Chinese experts\(^{18}\) produced an unsuccessful report about the feasibility of the project in 1998 because of undefined proven reserves of oil and gas onshore in the Caspian region and low prices for oil in the international market. However, many factors changed, resulting in accelerated efforts on both sides to cooperate in the sphere of energy: oil prices soared in the international markets, the Chinese demand for energy has been growing rapidly and the failure of a similar project between China and Russia meant that China paid more attention to make this project succeed\(^{19}\). Various potential investors (China, the US and Turkey) visited Kazakhstan and many of them were ready to finance energy projects in Caspian region to acknowledge their “strategic” interests by assuming the political risks, costs of pipeline infrastructure and other impediments (Ogutchu 2006).

All these agreements established the right of China to operate in Kazakhstan and develop production fields and transportation area (construction of pipelines) for the projects. In return, there were no specific terms relating to Kazakh companies’ activities

\(^{18}\) The Chinese National Oil Development Company (CNODC) and the Kazakh National Oil transportation Company “Kaztransoil” (KTO) signed an “Agreement about mutual preparation of technical-economical justification of a Western Kazakhstan-China pipeline” in June, 13 1998 in Almaty. The result was unsuccessful at that stage, which was perhaps why this project was postponed.

\(^{19}\) The ambitious project Angarsk-Dajin (Russia-China) with Petrochina and Yukos as main parties has not been realized as planned.
within China. This shows that China is an importer, a consumer with increasing demand for energy; Kazakhstan, is a producer and is considering a partner only for the purpose of diversifying transport options for its hydrocarbons.

Hence, their approach to collaboration and objectives for such a partnership is completely opposite. For instance, the Kazakh energy policy established a priority to diversify the resources, search and launch new alternatives of transportation, whereas China’s main objective is to provide security of supply and feed its growing economy with all possible options. Though the two countries are pursuing diametrically opposed goals, goals are complementary to each other, which also explain why the project was able to develop in a relatively smooth manner. However, all common energy projects in this region have another important geopolitical component, that the involvement of Russia.

Political cooperation and the geopolitical interests of both Kazakhstan and China intersect through economic pragmatism and profit-gaining. Mutual cooperation has great potential particularly in the energy sector. The Turkmenistan-Kazakhstan-China gas pipeline project is evidence of energy cooperation in Central Asia and the energy rich states’ diversification strategy. For Kazakhstan, it is important to develop and improve relations with China in a wider multilateral context. Kazakh-Chinese energy relations have evolved from one dimensional trade and energy based affair into a complex partnership that combines growing inter-dependence in various sectors of the economy with the active involvement of border countries. In essence, this means that these states need to harmonize and synchronize their legislation, particularly, tax, customs, investment and civil laws, and modify national and international policies.

The greater momentum of economic ties between the two countries also lies in the fact that Kazakhstan is rich in energy resources which can fulfil the energy hunger Chinese counterpart. Also in the era of globalisation where economic issues matter along with security issues on deciding the strength of a nation in the world arena, the Central Asian states and China want to enhance the complementarities in their economics by forging strong economic linkages.
Future cooperation needs to create a sensible, regulatory, institutional framework governing cross-border energy flows across Caspian states and China, based on a consensus among the stakeholders. A good example of such cooperation could be the Energy Charter Treaty, which provides a balanced and efficient framework for international cooperation and standards of international rules and principles between the net exporters of energy and importers. It is a more effective form of cooperation rather than bilateral agreements between the countries. This initiative plays an important role in the modern energy industry and “makes a significant contribution to build a legal foundation for energy security, based on principle of open, competitive markets and sustainable development”. Secondly the issues of cooperation can be tackled by specific multilateral organizations such as SCO and others. The SCO, a promising trans-regional organization, can act as a platform to mitigate rivalry and distrust by entrenching interdependent links between member states.

Kazakh-Chinese energy relations and the construction of the Kazakh-Chinese pipeline in particular, provide a strong for collaboration between Kazakhstan and China. Successful energy relations are evidence of economic effectiveness and political cooperation between them. These relations are the result of successful cooperation through well-elaborated projects like Aktobemunaigas, Petro Kazakhstan, and the Kazakhstan-China pipeline.

The basis for future collaboration has been established which is not limited only to the oil and gas projects, but is also extended to various other areas. Among these prospective issues are international terrorism, trade, trans-border issues, regional integration, migration, environmental regulations, narco trafficking, money laundering etc. Ultimately, all coordinated actions between the two countries contribute to economic prosperity and a balanced legal and political policy for regional peace and security.