

## THE ROLE OF KAZAKHSTAN IN THE ENERGY SECURITY OF CHINA

### ÇİN'İN ENERJİ GÜVENLİĞİNDE KAZAKİSTAN'IN YERİ

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#### ABSTRACT

This study aims to propose that how Kazakhstan plays a role in the context of China's energy security and in which situations the existing problems such as Kazakhstan's nationalization policy in the energy sector or the lack of mutual trust and rising interdependence in the direction of bilateral energy cooperation could be overcome and new opportunities could be provided. Although Kazakhstan has a very small import ratio in China's energy supply, the reason why it attracts multi-faceted investments from China will be highlighted.

This study firstly tries to clarify how China's energy security problem has emerged, and in this direction, and what kind of approaches has been adopted in its foreign policy is probed. Later, these approaches are tested and evaluated in the case of Kazakhstan. It is concluded that on the one hand Kazakhstan is a reliable location in terms of energy security as there are less geopolitical risks when compared to high seas and narrow passages; and on the other hand, China is aware that it cannot benefit enough from the energy sources without first achieving economic stability in the country. In this regard, it is also revealed how non-energy investments in the context of Belt and Road Initiative have a direct relationship with the energy security policy of China.

**Keywords:** China, Kazakhstan, Energy Security, Belt and Road Initiative, Eurasia.

#### ÖZ

Bu çalıřma, Kazakistan'ın Çin'in enerji güvenliđi bağlamında nasıl bir rol oynadıđını ve Kazakistan'ın enerji sektöründeki millileřtirme politikası veya karřılıklı güven eksikliđi ve karřılıklı bađımlılıđın artması gibi mevcut sorunların hangi durumlarda ikili enerji iř birliđi dođrultusunda ařılabileceđini ve yeni fırsatlar sunabileceđini sunmayı amaçlamaktadır. Kazakistan, Çin'in enerji arzında çok küçük bir ithalat oranına sahip olmasına rađmen, Çin'den çok yönlü yatırımları çekmesinin nedeni de ayrıca vurgulanacaktır.

Bu çalıřmada, öncelikle Çin'in enerji güvenliđi sorununun nasıl ortaya çıktıđına açıklık getirilmeye çalıřılmaktadır ve bu dođrultuda Çin'in dıř politikada ne tür yaklařımlar benimsediđi açıklanmaktadır. Bir taraftan açık denizlere ve dar geçitlere kıyasla jeopolitik risklerin daha az olması nedeniyle Kazakistan'ın enerji güvenliđi açısından güvenilir bir yer olduđu; diđer taraftan da Çin'in Kazakistan'da

ekonomik istikrarı sağlamadan bu ülkenin enerji kaynaklarından yeterince yararlanamayacağını farkında olduğu sonucuna varılmaktadır. Bu bağlamda Kuşak ve Yol İnisiyatifi kapsamındaki enerji dışı yatırımların aslında Çin'in enerji güvenliği politikası ile nasıl doğrudan bir ilişkisi olduğu da ortaya konmuştur.

**Anahtar Kelimeler:** Çin, Kazakistan, Enerji Güvenliği, Kuşak ve Yol İnisiyatifi, Avrasya

## **1. Introduction**

Energy is an important element that countries need both as a natural resource and as a strategic commodity that is tried to be controlled. Considering the decreasing market share and increasing competition in the globalizing world, energy has an extremely critical place in order to maintain a high standard of living. At this point, countries are also trying to provide uninterrupted supply of energy, which is directly related to foreign policy, and more importantly, maintaining energy security. In this respect, energy security has become one of the priorities of countries today. Ensuring energy security is not only related to meeting the energy needs, but also related to the economic priorities of countries, their struggle with the current account deficit, and gaining a wider field of action in foreign policy. For this reason, energy security is a factor that both determines the position of states in the international system and provides an advantage to the state in mutual dependence.

Like all other countries, perhaps a little more, as a state defined as the workshop of the global economy, energy security, for China, is an extremely important and priority issue. China, which started to transform especially with Deng Xiaoping's coming to power in 1978, experienced changes in foreign policy, economic policies and energy policies. With this transformation, China tried to resolve the border disputes, which it defined as domestic problems, with a peaceful foreign policy. The transformation of China into a trading state and its search for markets have also been effective in its peaceful foreign policy implementation. In this context, China, which has reached a significant trade capacity, is in need of more energy day by day in order to maintain its production level and to meet its own needs. At the same time, competition with the the USA, which controls most of the maritime trade routes, caused China to formulate various policies related to energy security. In this sense, three main policies regarding China's energy security come to the fore. These could be classified as renewable energy, diversification and non-energy investments. At this point, in order to guarantee its energy security, one of the geographies China has begun to be closely interested in the geography of the Caucasus. In the Caspian region, one of the countries that China has relations with is Kazakhstan. In this context, in this article, first of all, China's energy security will be discussed. Then, the Chinese presence in Kazakhstan, which is one of the important countries in terms of energy security and foreign policy of China, will be focused. In this sense, the significance of Kazakhstan in terms of energy security in particular and Chinese foreign policy in general and China's efforts to develop influence will be revealed.

## **2. Energy Security of China**

The People's Republic of China was established in 1949 as part of the Chinese civilization with a long history. The socialist state established under the leadership of Mao Zedong was shaped economically, socially and politically by the Communist Party of China. With Deng Xiaoping, who came to power in 1978, China started to experience radical changes in almost every field (Tunç and Kızıl, 2018: 52). The main motivation behind this change can be listed as follows:

- The loss of public support for the cultural revolution which Mao tried to realize.
- The inadequacy of the planned economy realized by the state, and the inability to produce solutions especially in times of famine,
- The rise in the free market-based economies of Taiwan, Hong Kong, Singapore and South Korea, defined as the four little dragons of Asia or Asian tigers (Saray and Gökdemir, 2007: 664).

In this context, the basic strategy of the transformation movement under Deng can be evaluated in three ways:

- Achieving a strong economy is the first stage of transformation.
- Within the framework of the One China policy, keeping Taiwan connected to the main continent and controlling energy resources as a regional power could be shown as the main objective of the second phase.
- In the last and third one, it is aimed to become a "superpower" in the international system and to reach the necessary military and economic power for this (Karaca, 2012: 95).

Considering these three basic strategies, the goal of being a regional and then a global power from a planned economy and a state-centered understanding is directly related to the energy issue. In addition, following the World Trade Organization (WTO) membership in 2001, increased foreign investment and production became vital for China, due to the structural changes that China made under the framework of WTO and inexpensive labor force (Yorulmaz, 2015: 285). At this point, China's energy security is one of the most important factors to be examined in this economic and structural transformation. Accordingly, China shapes its foreign policy through some reservations in connection with its energy security. The first of these reservations is that 80% of the maritime trade routes are controlled by the US Navy. Sea lanes are vital for China's raw material supply, energy transport and trade. For this reason, balancing the USA on sea routes is extremely important for China's energy security and trade priorities. In connection with this, the political or military tension in the South and East China Sea problems becomes much more critical for sovereignty, control of energy and trade routes. Secondly, China's effort to meet its ever-increasing energy needs in parallel with its growing economy and industrialization is one of the most crucial problems. In this respect, it strives to diversify its imported energy routes to meet energy needs and increase its effectiveness in areas where energy resources are available. However, the asymmetric of energy resources and scarcity of energy resources in the world, as well as the struggle to dominate these asymmetric energy resources might be considered as another issue in meeting China's energy needs. Apart from this, the fact that China does not have enough resources to meet its energy needs and that it is inability to determine energy prices makes it foreign-dependent and more fragile than the price-setting powers. The third situation that will negatively affect China's economic development is the international pressure it faces in the fight against climate change. One of the resources that China uses to ensure its energy security is still coal. Although it has made various moves in the field of renewable energy, China is still one of the two countries that pollute the world the most (Karaca, 2012: 99).

In this context, China accounts for 18% of the world's population, 16% of the world economy, and produces 20% of the world's energy resources and consumes 24%. In other words, China has again ranked first in the world in terms of annual increase in total energy production. China

continued to be the world's largest energy producer and largest energy consumer in 2019. In this sense, China continued to be the world's largest coal producer in 2019 as well. China produces about half of the world's coal. The energy that China derives from its total coal production is greater than that of the United States' oil, natural gas and coal production combined. The total amount of energy imported by China is more than the total energy consumption of Japan. While 17% of the energy consumed in the world is met by coal, China meets some 58% of its total energy consumption from coal. Despite using so much activated coal, China became the world's largest hydroelectric, wind and solar energy producer in 2019 (BP Energy Outlook 2020 Report, [dunyaenerji.org.tr](http://dunyaenerji.org.tr)). In other words, looking at 2019 data, China's energy consumption is 57.7% from coal, 18.9% from oil, 8.1% from natural gas (increased to 10% in 2020) ([stats.gov.cn](http://stats.gov.cn), 2019) and 15.3% from renewable energy and other sources ([chinapower.csis.org](http://chinapower.csis.org), 2021). Also, nuclear power contributed 4.9% of the total Chinese electricity production in 2019 ([world-nuclear-news.org](http://world-nuclear-news.org), 2020). In contrast, China imported 72.5% of oil, 40.6% of natural gas and 7.7% of coal in 2019 ([iea.org](http://iea.org), 2020).

In this context, China follows various policies to meet its high energy needs and to reduce its high foreign dependency. The first is renewable energy. China is the country that invests the most in renewable energy with its increasing interest every year to ensure energy security. Between 2013 and 2018, the country's investments in renewable energy reached an impressive peak of \$125 billion, from \$53.3 billion. China's investments in 2019 reached \$83.4 billion which roughly corresponds to 23 percent of global renewable energy investment ([chinapower.csis.org](http://chinapower.csis.org), 2021). Beyond that, China announced that it has set renewable energy subsidies for 2021 at \$905.7 million, an increase of 4.9 percent compared to 2020 ([temizenerji.org](http://temizenerji.org), 2020). China's turn to renewable energy is not just about energy security. At the same time, as one of the countries with the highest emissions, China has to give priority to the renewable energy transformation as a result of its commitment in the Paris Agreement in 2015. The second policy is diversification. Like all countries that need energy and try to provide energy security, China is trying to increase the number of the energy imported countries and to diversify the resources it uses. In this context, China is developing its relations with countries in the Middle East and Eurasia regions, which have  $\frac{3}{4}$  of the world's energy resources. Similarly, by developing alternative sea routes, it tries to implement projects that will bring energy to its country through a pipeline from the Indian Sea, with intermediate lines such as Myanmar, against a possible American obstruction (Turan, 2020: 80). Apart from this, it is known that while China is trying to meet its energy needs from almost all energy geopolitical centers from Congo to Colombia, from Libya to Venezuela, it also formulates foreign policy regarding the Arctic region as a new field of competition and struggle. The third policy developed by China to ensure energy security and protect its markets is non-energy investments. As a state of trade and the workshop of the global economy, China prefers a peaceful foreign policy ([fmprc.gov.cn](http://fmprc.gov.cn)). At the same time, China is trying to solve its border problems on the one hand, and on the other hand, it is trying to increase its sphere of influence with its foreign investments and supports. While doing this, the main objectives are to provide energy security, control trade routes and ensure the continuity of trade. The Belt and Road Initiative (BRI) might be shown as the most typical example of this policy. It continues its activities not only with the BRI but also as a state and with its companies around the world through investments, grants, infrastructure construction and low-interest loans.

Under these conditions, China needs energy uninterruptedly to protect both its production and its markets in order not to fall behind in the economic competition against the USA. At

this point, China is trying to be active in all energy geopolitical energy centers around the world, to supply energy from multiple points by diversifying, and to provide renewable energy transformation in order to ensure energy security. Apart from this, it is trying to ensure its economic security both with the projects like BRI and with non-energy investments to other countries. Kazakhstan is one of the places where China is trying to both ensure energy security and increase its effectiveness in the region with both energy and non-energy investments.

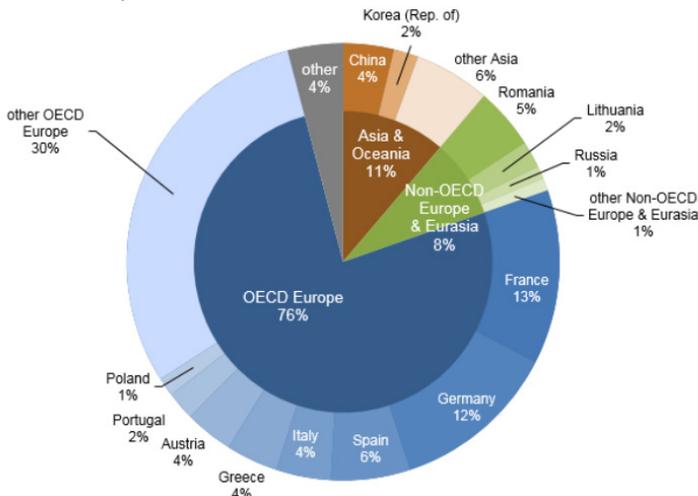
### 3. Kazakh - Chinese Cooperation for Energy Security

Kazakhstan is a self-sufficient country in the field of energy and also a net energy exporter in all energy sectors. Especially Tengiz oil field in Kazakhstan, which has more than 170 oil fields and its total production corresponds to 3% of the world, is the sixth largest production center in the world (Omeliicheva and Du, 2018: 95).

**Table 1.** 2019 Kazakhstan Natural Sources  
 (Bp Statistical Review of World Energy 2020, 2020: 10–45)

	<b>Total Proved Reserves</b>	<b>Production</b>	<b>Consumption</b>
Oil	30.0 (billion barrels)	91.4 (million tone)	16.4
Natural Gas	2.7 trillion cubic metres,	23.5 Bcm	17.9
Coal	25.605 million tone (MMst)	2.08	1.67

Although Kazakhstan does not have energy security problems due to its rich reserves and production to meet domestic demand, it has serious problems in its export energy market. Kazakhstan has not yet fully recovered from the export flow of the Union of Soviet Socialist Republics (USSR) era and in this context, today it remains dependent on Russia for the oil export to the West. As Kazakhstan uses mostly the historical USSR route in oil trade, China does not import much oil from Kazakhstan (Kanapiyanova, 2019: 26). As seen in the Figure 1, the share of China in Kazakhstan's total oil export is only 4%. This prevents Kazakh oil from being competitive in the international market and therefore Kazakhstan has to diversify its exports with new alternative routes and buyers.



**Figure 1.** Kazakhstan's Oil Exports by Country and Region, 2017  
 (U.S. Energy Information Administration, 2019: 3)

However, this is not as easy as it seems. Firstly, in the 90s the new-founded Kazakhstan's inability to utilize energy resources adequately paved the way for other oil companies to purchase assets at more reasonable prices and make more profitable investments in the country. Moreover, Kazakhstan is in a closed geography which has not access to open seas requires it to export oil or natural gas to/via its neighbors in the context of energy security. On the other hand, China, one of the most energy importing countries in the world, has the opportunity to export Turkmen or Russian gas or oil by bypassing Kazakhstan. Moreover, Kazakhstan's most important oil and gas fields such as Kashagan, Tengiz and Karachaganak are around the Caspian Sea and this means that the transportation of oil in these regions into China can be realized with a very long and costly pipeline. Taking into account all of these, Kazakhstan faces serious obstacles to attract new investments for alternative pipelines. In addition to unsatisfactory pipeline investments, Kazakhstan has difficulty in investing by relying on its own resources due to the irregular prices in the free energy market and this causes it to be dependent on foreign investments. For example, while Kazakhstan generated revenue \$56.4 billion from exports of 68.1 million tons in 2012; in 2016, it was only \$19.3 billion in revenue for 62.2 million exports (Ölmezoğulları and Aldibekova, 2018: 16). That is why there is a direct relationship between oil prices and Kazakhstan's energy revenues.

Kazakhstan is trying to increase its relations with China in line with all these difficulties in the energy field. In 2019, China imported 132.5 bcm natural gas and 47.7 bcm of it was imported by pipeline from Russia or other Turkic states in Central Asia (Bp Statistical Review of World Energy 2020, 2020: 40–43). China is supposed to import more natural gas and oil from Russia and Central Asia through pipelines to reduce or at least not to increase LNG and oil trade, which is very vital issue to China's energy security. Accordingly, China is increasing its shareholder value in exploration, extraction, and production processes in Kazakhstan with its national oil companies as well. The oil trade between Kazakhstan and China is of interest to both sides, as China imports oil reliably, while Kazakhstan can maintain price competition in oil it sells through Russia (Desouza, 2013: 26).



**Map 1.** KMG's Oil Pipeline Network (KazMunaiGaz, 2019, p. 56)

Kazakh-Chinese oil pipeline became operational in 2009 and has a capacity 20 mt per year. In 2019, 10.8 million t/y oil was exported from the Atasu - Alashankou oil pipeline, which has an

annual oil capacity of 20 million t/y between Kazakhstan and China ('Kazakhstan-China Pipeline – About', n.d.). it was constructed by Chinese and Kazakh national oil companies with 50% shares. The project came into operational in two steps to transfer oil from Atyrau on the Caspian Sea coast to Atasu. Atasu is a common distribution point where oil brought from the Caspian coast can be transported to both Russia and China. With the connection of the Kazakh Chinese oil pipeline to the Kazakh-Russian oil pipeline, China will be able to directly import oil from Russia when necessary (Turganbayeva, 2020: 234). Thus, it is possible for China to import much more oil at more affordable prices on the condition that Kazakhstan experiences an energy crisis similar to that of Turkmenistan with Russia in the 1990s.

Similar to the rate of oil imported from Kazakhstan, natural gas import to China is only 5%. In fact, China could import much more natural gas from Kazakhstan, but the difference between Kazakhstan's natural gas production and consumption is only 5.6 bcm. On the other hand, as stated in the data of BP 2020, since Kazakhstan uses 50% of coal in electricity generation, it might export more natural gas to China and other countries (Bp Statistical Review of World Energy 2020, 2020: 43). As a part of Central Asia–China gas pipeline, which has 55 bcm capacity, Kazakhstan–China section is 3,916 km length and China imported 7 bcm natural gas in 2019 as seen in the Table 2. Although it is a very small rate for China, this acquisition both strengthens the alternative route in energy security and contributes to the economic stability of Kazakhstan. Political and economic stability in Kazakhstan, which is next to the border of Xinjiang where separatist movements are active, will contribute to the security and continuous realization of energy imports above all.

**Table 2.** Sales of Commercial Gas, Mln m3 (KazMunaiGaz, 2019, p. 64)

Gas sales by KazTransGas	2017	2018	2019
<b>Exports</b>	<b>4,949</b>	<b>8,917</b>	<b>8,806</b>
Russia	2,073	2,350	1,000
Kyrgyzstan	249	275	264
China	1,003	5,484	7,091
Uzbekistan	1,624	807	452
<b>Domestic market</b>	<b>12,793</b>	<b>13,999</b>	<b>14,028</b>
<b>Total gas sales</b>	<b>17,742</b>	<b>22,915</b>	<b>22,834</b>

As stated before, although Kazakhstan does not have a domestic energy security problem, it needs to strengthen its economy by increasing the production further in its existing reserves. Looking at Table 1, it is seen that the production capacity of Kazakhstan is quite low compared to its total reserves. It is very difficult for the current economic situation to undertake these highly costly investments and therefore Kazakhstan needs direct foreign investments. However, Kazakhstan wants other actors such as China to diversify and balance its national energy security because Kazakhstan's revenue from energy imports is 65% of the total income which necessitates multi-directional action in its foreign policy in the context of energy security (Turganbayeva, 2020, p. 227).

The main reason why the USA and EU countries attached such importance to energy investments in Kazakhstan after the Cold War was to break Russia's historical influence in the country (Turganbayeva, 2020, p. 236). Having entered a serious economic crisis during the post-Cold War independence period, Kazakhstan had to undergo a serious privatization especially in energy sector and thus it seems that it cannot fully benefit from energy production now. In this new period, the Western world has made a serious investment and acquisition in Kazakhstan under the leadership of the USA. Although Kazakhstan tried to implement a nationalization policy in energy production with KMG, which was established in 2002, it was too late because many of the oil and natural gas fields in the country were sold to foreign oil companies in the 1990s through privatization. Similarly, China is seen to be quite late in its investments in the country. As seen in the Table 3, Kazakhstan's national oil company KazMunaiGaz (KMG) produces 10% of the oil and natural gas produced in Karachaganak, 8.4% of that in Kashagan and 20% of that in Tengiz. This shows that approximately 90% of energy resources are operated by big foreign companies. Accordingly, the 80% share of Western companies in Kazakh oil assets ensures approximately 4/5 of the oil to be exported to European countries.

**Table 3.** The Main Oil Production Fields and Interests (KazMunaiGaz, 2019, pp. 46–50)

Oil & Gas Field	Production (oil) Mt	Gas production (bcm)	Interests %
Tengiz	29.791	16.3	<b>%20 KMG</b> %50 Chevron %25 Exxon Mobil %5 Lukoil
Kashagan	14.1	8.5	<b>%16.88 KMG</b> %16.81 ENI %16.81 Shell %16.81 Total <b>%8.3 CNPC</b> %7.56 INPEX
Karachaganak	10.1	18.6	<b>%10 KMG</b> %29.25 ENI %29.25 Shell %18.00 Chevron %13.5 Lukoil

Especially Kazakhstan's policy to balance the increasing energy investments of the Western world with China and other countries had the intention of preventing conflict of interest in the region. Not a single foreign state had a corner on the market would enable Kazakhstan to distribute future investments more evenly. As Kazakhstan realizes its energy exports through Russia, its dependence on Russia continues, albeit in a different way. If Kazakhstan could build a new alternative pipeline to Turkey and Europe via Caspian Sea and the Caucasus or construct a new one to China will allow it the capability to compete on oil prices.

Kazakhstan, which has the most important geostrategic central position in Central Asia for the transitional land between the EU and China, takes advantage of the investment opportunities offered by China (Saltybayev, 2018: 77). The serious investments of the Western states, especially

the USA, in the energy field of Kazakhstan triggered China to invest in this country as well. The main reasons for China's investments in the energy field in Kazakhstan are to help this new state established after the USSR to strengthen its inadequate energy infrastructure, to intend to reduce dependence on Russia by building new pipelines, and to buy assets easily through CNPC due to Kazakhstan's nationalization policy in strategic oil reserves over time (McCarthy, 2013: 272). Closely following the energy investments of Western countries in Kazakhstan, China started its first serious investment in Kazakhstan in 1997. In addition to the construction of an oil pipeline exceeding 300 km between Kazakhstan and China; In 2003, China National Oil and Gas Exploration and Development Corporation (CNODC) acquired 85% of Aktobemunaygaz (Liao, 2006: 40). China's energy investments continued to increase in the 2000s.



**Figure 2:** Chinese Investments and Contracts in Kazakhstan (2005 - 2020)  
(China Global Investment Tracker, 2021)

It is seen that between 2005 and 2020, \$22.92 billion of China's total investment of \$34.12 billion in Kazakhstan was made only on energy investments. In addition, it is seen that more than \$6 billion has been invested in the chemistry and metal sector, which is needed for raw materials such as uranium. Therefore, it is understood that China has made serious investments to benefit from Kazakhstan, which is very rich in natural resources as well. China's investments in Kazakhstan were mostly in energy sector before the BRI announcement between 2005 and 2013. In other words, \$20 billion out of the total \$22 billion investment made by China in Kazakhstan at that time was in the energy sector. Even though Kazakhstan's share is thought to be quite low compared to the \$2.1 trillion investment made by China since 2005 all over the world, even this rate was relatively enough to develop the Kazakh economy. Thanks to China's entry into market, Kazakhstan, whose economy contracted by an average of 5% until 1997, has grown by an average of 5% since this year ('GDP Growth (Annual %) - Kazakhstan | Data', n.d.). McCarthy, who examines China's energy investments in Kazakhstan between 1997 and 2013, claims that China's energy investments in this country are realized with a mercantilist approach because China uses national oil companies in its strategy of "go out" in the energy sector (McCarthy, 2013, p. 259). By 2010, China's share in energy investments in Kazakhstan via its stated-owned oil companies reached 23% (Jiang & Sinton, 2011, p. 18). In addition to the fossil energy exported from Kazakhstan, China also managed to become a producer in this country. Thus, China clearly showed that it would be a serious player in global energy security by confronting the USA in

Kazakhstan just following its energy investments in Canada.

**Table 4:** Major Investments of China into Kazakhstan (1997-2013)  
(Jarosiewicz, Strachota, Matusiak, Wołowska, & Ośrodek Studiów Wschodnich Im. Marka Karpia, 2013, pp. 34–37)

	<b>Purchase date</b>	<b>Share</b>	<b>Owner</b>	<b>Capacity or Status</b>
AktobeMunaiGaz	1997-2003	%50	CNPC	6.1 million tonnes of oil, 3.7 billion m3 of gas
North Buzachi KAM Project	2003 2004	%50 %50	CNPC CNPC and China North Industries Corporation	
KarazhanbasMunai (Nations Energy)	2006	%50	CITIC	
Urikhtau field Emir Oil Caspian Investment Resources	2011	%50 %100 %100	CNPC MIE Holding Sinopec	
Shymkent refinery Kazakhstan-China oil pipeline (AtasuAlashankou and Kenkiyak-Kumkol Sections)	2005 1997-2009	%50 %50	CNPC CNPC	12 million tonnes (with the option to increase to 20 million tonnes)
The Kazakh section of the Central Asia-China gas pipeline (A, B and C lines) – the transit pipeline for gas from Turkmenistan, Uzbekistan and in the future Kazakhstan to China	2007	%50	CNPC	55 billion m <sup>3</sup> of gas
Section II of the Central Asia-China gas pipeline: the Kazakh section from Beyneu to Shymkent, where it will connect with section I of the Central Asia-China main pipeline	2008	%50	CNPC	10-15 billion m <sup>3</sup> of gas
Zaysan-Jeminay	2013	%100	Guanghui Energy	0.55 billion m <sup>3</sup> of gas

China's energy investments in Kazakhstan have continued with BRI but diversified by including different sectors such as transportation, chemistry, and metals. One of the main reasons for this was that transportation and infrastructure investments in Kazakhstan had to be accelerated in order to facilitate land trade between China and the West. As China was a shareholder in many oil,

natural gas, or mining companies in Kazakhstan through acquisition until 2013, it still manages these companies today. However, in this new period, China is increasing its effectiveness in the region by strengthening Kazakhstan's renewable energy investments in accordance with the spirit of the times. In this context, Janatas Wind Power Plant, which has the largest capacity with 100 MW wind energy in Central Asia, started its construction in 2019 thanks to Chinese investments (Yilmaz, 2020, p. 5284).

The fact that Chinese President Xi Jinping declared overland route of BRI in Kazakhstan in 2013, in fact, shows how important geostrategic importance Kazakhstan has for China. One of the most important issues in energy security is to increase the number of importing countries and to diversify the routes. Increasing tension and conflicts in the Middle East after 9/11 and the Arab Spring Events pushed China to benefit more from the resources in its near geography. In this respect, due to its geographical proximity, increasing the production capacity in Kazakhstan will be of vital importance for a possible energy supply problem. In addition, the fact that three different natural gas pipelines imported by China from Turkmenistan pass through Kazakhstan makes it even more valuable (Topcu, 2020: 58).

Considering Russia's military interventions in Ukraine and Georgia in recent history, Kazakhstan has managed to overcome the fear of a possible political or military intervention of Russia via its energy resources by following a very cautious foreign policy between two regional powers Russia and China (Omeličeva and Du, 2018: 96). Especially the landlocked position of Kazakhstan makes it necessary to manage this balance policy between two regional powers. Although Russia wants to be the only playmaker in the energy market in the region and the fact that China is dependent on imported energy, it prevents a possible tough Sino-Russian competition over Kazakhstan. Despite nationalization in energy investments, providing special facilities to the Chinese state owned companies has provided an important balance. On the other hand, the fact that Kazakhstan continues to export oil through Russia shows how this balance is carried out rationally in terms of energy security. As China increased its investments in the region, especially in the context of BRI, Kazakhstan has become an indispensable position in China's East-West trade. The high cost of investments in the phase of energy generation from exploration to production and the long construction duration not only increased the efficiency of China, which has a large capital, in the region especially after the 2008 global financial crisis but also broke the monopoly of Russia (Omeličeva and Du, 2018: 97). On the other hand, Russia is aware that possible revolutions or interventions could be prevented thanks to China's investments in the country which might both increase economic and political stability and partially prevent the factors preparing the environment for civil war or the strengthening of terrorist activities in the geography. So, Russia does not consider Chinese investments as a direct threat to itself.

#### **4. Conclusion**

In the international system, states try to develop solutions in foreign policy that will eliminate energy security problem so that they can increase their competitiveness and achieve a sustainable development. Adopting the "go out" strategy in international markets, China both has realized a rapid economic growth and has started to experience energy supply problem in a similar way. In this context, China has begun to import oil and natural gas from many different parts of the world to realize reliable, sustainable, and affordable energy supply. In addition to energy security, both the public's expectation for a cleaner environment thanks to increasing prosperity in China and the commitment to the Paris Agreement requiring to reduce the share of coal in total energy

are gained official acceptance. Taking into account all of these, the anticipated deficit needs to be met with more natural gas and renewable energy, which causes more natural gas to be imported and this dilemma deepens the existing energy security problem. Although China is the state that invests the most in renewable energy in 2019 with 23% of global renewable energy investment, it is insufficient to meet the rapidly increasing energy supply.

The main reason why China gives priority to direct investments on energy sector in its near abroad is that about 80% of the energy and goods imports in the high seas is under US control and there are too many regional threats and geopolitical risks that might cause this trade flow to be interrupted. Especially with the dissolution of the Soviet Union, the fact that the new-founded states in Central Asia are rich in energy resources and that they do not have sufficient economic power to finance the compulsory energy investments such as discovery, extraction or transfer has increased China's interest in this region. China, which aims to benefit directly or indirectly from energy resources by following a peaceful path in its foreign policy by creating a kind of mutual interdependence, has also started to support infrastructure investments to provide an economic development and stability in the region. Otherwise, China could not establish the security of energy pipelines that start directly from Kazakhstan or Turkmenistan.

The fact that Central Asia has historically been a field of constant competition and the great powers carried out policies to increase their national interests on these lands naturally has caused the region to be economically backward and politically unstable. For example, Kazakhstan's dependence on Russia for oil imports both damages its playmaker role in energy policy and causes it to not be able to generate enough profit from its mostly privatized resources. In this respect, as seen in the BRI projects, China primarily aims to develop economic stabilization policies in the region so that Kazakhstan and other states does not turn into a land of terrorist activities or instability. And this directs China to focus on non-energy investments in Kazakhstan as well. Between 2005 and 2020, 67% of China's direct investments in Kazakhstan (\$22.9 billion) are in the energy sector. As a matter of the fact that Kazakhstan is a strategic transportation route in China's land corridor opening to the West enables it to receive sizeable number of investments. In this study, as seen in the example of Kazakhstan, it is elucidated that the establishment of energy security is not possible only with investments or loans in energy resources. In other words, even if China does not import a single cubic meter of natural gas in Kazakhstan, it could have to contribute to the economic development of Kazakhstan for the energy supply it needs to import from other countries as Kazakhstan also serves as an energy transition state.

Although Kazakhstan has significant oil and natural gas reserves, it needs huge budgets to implement its energy policy which requires energy sources to be operational. The inability to realize this with its own resources causes Kazakhstan to establish partnerships with foreign oil companies. However, the lack of sufficient production despite the foreign partnerships that it rapidly realized in the 1990s could make China a serious energy investor. However, Kazakhstan's partial energy nationalization policy in 2002 because of rapid privatization in energy resources in the 1990s is one of the biggest obstacles to China's energy investments in Kazakhstan. The fact that China lags behind Western countries in privatization makes it difficult to increase its influence in the region. Especially many oil fields, where energy could be extracted at relevant costs, have been operated by Western energy companies necessitates China to make more energy investments in other energy discoveries. In terms of profit/loss analysis, this means less profit despite more costs regardless of the importance of energy security.

On the other hand, in line with the increasing mutual relations, new oil and natural gas pipelines could be built between China and Kazakhstan, if China's national energy companies get privileged and price compatibility in the construction of new gas/oil fields. The oil imported by China from Kazakhstan corresponds to only 4% of its total imports. In this context, reaching full capacity of the existing oil pipeline seems to be the primary target. Natural gas exported by China from Russia and other Turkic countries in Central Asia has exceeded 35%. It is also concluded in the study that in order to achieve a similar rate in oil imports in the whole region, China tends to invest in exploring and extracting new oil fields in Kazakhstan and as well as in pipeline construction. Otherwise, neither side will be able to benefit from the rich oil reserves, and Kazakhstan's dependence on Russian route and Western companies will continue.

In this study, it is concluded that taking steps to increase the political and economic cooperation between Kazakhstan and China could have a positive impact on the energy sector, and thus both countries might benefit from this situation. So, the increased investment in the energy sector within the scope of BRI is in the interests of both countries. In this context, it has been deduced that both countries more likely to adopt energy agreements and approaches that will increase the national interests of both sides and to meet their demands. China also aims to ensure economic and political stability in the country as it is aware that its huge energy investments might be at risk without economic and political stability. Thus, China could reliably import energy from its neighboring countries in the region and Kazakhstan will both diversify its energy imports and increase its energy revenues.

### **Ethics Statement**

No human studies are presented in this manuscript.

### **Author Contributions**

The authors confirm being the sole contributor of this work and has approved it for publication.

### **Conflict of Interest**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

### **References**

- BP ENERJİ GÖRÜNÜMÜ 2020 RAPORU ÖZET, Retrieved from <https://www.dunyaenerji.org.tr/wp-content/uploads/2020/09/BP-Enerji-Gorunumu-2020-Raporu-Ozeti.pdf>, Accessed: 28.06.2021.
- BP. (2020). BP Statistical Review of World Energy 2020. 68.
- China Global Investment Tracker. (n.d.). Retrieved 13 March 2021, from American Enterprise Institute—AEI website: <https://www.aei.org/china-global-investment-tracker/>
- China's Initiation of the Five Principles of Peaceful Co-Existence, Retrieved from [https://www.fmprc.gov.cn/mfa\\_eng/ziliao\\_665539/3602\\_665543/3604\\_665547/t18053.shtml](https://www.fmprc.gov.cn/mfa_eng/ziliao_665539/3602_665543/3604_665547/t18053.shtml), Accessed: 25.06.2021.
- Desouza, P. (2013). The Hydrocarbon Sector: A review of India and China's strategy.

- GDP growth (annual %)—Kazakhstan | Data. (n.d.). Retrieved 14 March 2021, from <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=KZ>
- Jarosiewicz, A., Strachota, K., Matusiak, M., Wołowska, A., & Ośrodek Studiów Wschodnich Im. Marka Karpia. (2013). *China vs. Central Asia: The achievements of the past two decades*. Warsaw: Centre for Eastern Studies.
- Jiang, J., & Sinton, J. (2011). *Overseas Investments by Chinese National Oil Companies*. Paris: International Energy Agency.
- Kanapiyanova, Z. (2019). History of the Energy Sector Development and Kazakhstan's Energy Potential. *Eurasian Research Journal*, 1(2), 25–38.
- Kazakhstan-China Pipeline – About. (n.d.). Retrieved 13 March 2021, from <http://www.kcp.kz/company/about?language=en>
- KazMunaiGaz. (2019). *NC KazMunayGas JSC Annual Report 2019*.
- Liao, J. X. (2006). A Silk Road for Oil: Sino-Kazakh Energy Diplomacy. *The Brown Journal of World Affairs*, 12(2), 39–51.
- McCarthy, J. (2013). Crude 'Oil Mercantilism'? Chinese Oil Engagement in Kazakhstan. *Pacific Affairs*, 86(2), 257–280.
- Ölmezoğulları, N., & Aldibekova, G. (2018). Kazakistan Ekonomisi'nde Petrolün Rolü. *Uludağ Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi*, 669–705. <https://doi.org/10.21550/sosbilder.413646>
- Omeliçeva, M. Y., & Du, R. (2018). Kazakhstan's Multi-Vectorism and Sino-Russian Relations. *Insight Turkey*, 20(4), 95–110.
- Saltybayev, Y. (2018). BRI and Kazakhstan: Challenges and Outlooks of China's Grand Strategy in Central Asia. *Horizons: Journal of International Relations and Sustainable Development*, (10), 76–85.
- Topcu, N. (2020). *Çin'in Enerji Güvenliği Politikaları: Kazakistan, Myanmar ve Pakistan Örnekleri*. İstanbul: Cinius Yayınları.
- Turbanbayeva, T. (2020). The Impact of Oil and Natural Gas to the Foreign Policy of Kazakhstan. *ESAM Ekonomik ve Sosyal Araştırmalar Dergisi*, 1(2), 225–244.
- U.S. Energy Information Administration. (2019). *Country Analysis Executive Summary: Kazakhstan*. Retrieved from <https://www.eia.gov/international/analysis/country/KAZ>
- Yılmaz, S. (2020). Bir Kuşak Bir Yol Projesinin Azerbaycan, Kazakistan ve Türkiye'ye Etkisi. *OPUS Uluslararası Toplum Araştırmaları Dergisi*, 16(32), 5274–5301. <https://doi.org/10.26466/opus.774914>
- YORULMAZ, M. (2015). *Çin'in Enerji Güvenliği ve Arz Sorunu in Hasret Çomak, Caner Sancaktar, Zafer Yıldırım, eds. Enerji Diplomasisi*. İstanbul: Beta, 285-301.