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The West Alternative in Turkmenistan's Energy Security

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Abstract

It is indisputable that the concept of energy security developed and deepened in connection with the changing conditions of the period. It is possible to deal with the emergence of new threats that negatively affect energy security during the process or their transformation into another problem in this context. On the other hand, perhaps the only thing that has not changed is that energy security continues to be one of the main components of states' national security. Also, as in the past, energy security is one of the most vital elements in the continuation of the wheels of the global economy. At this point, it becomes mandatory for states to take measures within the scope of energy security. Considering that energy relations reflect almost all the elements of interdependence, diversification strategies come first among the measures to be taken. Diversification strategies are highly effective in minimizing, if not eliminating, the energy security problems of both producer and consumer parties. Considering the negative impact of sensitivities and vulnerabilities on bargaining power in an environment of interdependence, the importance of diversification strategies will be understood more clearly. In light of all these, the relationship between Turkmenistan's westward orientation to ensure energy security is analyzed.

Key Words: Energy Security, Interdependence, Sensitivity and Vulnerability, West, Turkmenistan

Türkmenistan'ın Enerji Güvenliğinde Bati Alternatifi

Öz

Enerji güvenliği konseptinin dönemin değişen koşullarıyla bağlantılı şekilde geliştiği ve derinleştiği tartışmasızdır. Süreç içerisinde enerji güvenliğini olumsuz etkileyen yeni tehditlerin ortaya çıkmasını ya da başka bir soruna dönüşmesini bu kapsamda ele almak mümkündür. Buna karşın belki de değişmeyen tek şey enerji güvenliğinin devletlerin ulusal güvenliklerinin ana bileşenlerinden birisi olmaya devam etmesidir. Ayrıca dün olduğu gibi bugün de enerji güvenliği küresel ekonominin çarklarının dönmeye devam etmesindeki en hayati unsurlardan birisi olarak karşımıza çıkmaktadır. Bu noktada devletlerin enerji güvenliği kapsamında önlemler alması zorunlu hale gelmektedir. Karşılıklı bağımlılığın hemen hemen tüm unsurlarını yansıttığı göz önüne alındığında alınacak önlemlerin başında çeşitlendirme stratejileri gelmektedir. Çeşitlendirme stratejileri hem üretici hem de tüketici tarafların enerji güvenliği sorunlarını tamamen ortadan kaldırmasa da en alt düzeye indirilmesinde son derece etkilidir. Enerji ilişkileri karşılıklı bağımlılık ortamında hassasiyet ve kırılganlıkların pazarlık gücü üzerindeki olumsuz etkisi göz önüne alındığında çeşitlendirme stratejilerinin önemi daha net anlaşılacaktır. Tüm bunlar ışığında çalışmada Türkmenistan'ın enerji güvenliğini sağlamak amacıyla batıya yönelimiyle arasındaki ilişki analiz edilmektedir.

Anahtar Kelimeler: Enerji Güvenliği, Karşılıklı Bağımlılık, Hassasiyet ve Kırılganlık, Batı, Türkmenistan

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Introduction

Energy has become one of the most vital components of sustainability on a global scale by going beyond the benefit at the individual level over time, in connection with the change in the conditions of the age. So much so that this development in the historical process has brought with it the characterization of some energy resources as "strategic." In this context, it is possible to state that there is a direct connection between the development and sustainability of societies and the strategic characterization of some energy resources. The content of the strategic resource concept also supports this idea. On the other hand, not all energy sources in nature have a strategic nature. Therefore, several criteria are decisive at this point. For example, the impossibility of socioeconomic development without them is just one of them.

One of the main characteristics of strategic energy resources is that they are the most vital element of socioeconomic development. In a way, the positive effects on socio-economic development are directly felt in all geographies where strategic energy resources are used as inputs. The linear relationship between the increase in consumption of strategic energy resources and economic growth is one of the indicators of this. On the other hand, it is possible to talk about some negative situations strategically related to energy resources. Although these negativities are caused by many reasons, the most basic factors appear under two headings. Undoubtedly, today's strategic energy resources are related to the asymmetrical distribution of the world's geography, while another is that they are scarce and require a very long time for renewal. In light of all these, it is possible to talk about a serious negative situation such as the problem of access related to strategic energy resources. Therefore, a security threat associated with strategic energy resources arises.

The vital importance of strategic energy resources has made energy security one of the main components of the national security of states. Over time, the energy issue has gained a unique quality within the scope of interactions between states and has evolved to a stage beyond mere commercial relations. It is possible to consider the characterization of energy relations as interdependence in the international arena in this context. However, the fact that it reflects interdependence, and the vital importance of energy security has made it compulsory for almost every state to take some measures. Considered within the framework of the link between interdependence and energy security, it is seen that the intersection point is diversification strategies. Because diversification strategies, which are one of the most effective strategies to ensure energy security, contribute positively to reducing sensitivities and vulnerabilities in an environment of interdependence. In addition, threats within the scope of energy security are shaped according to the conditions of the age. In this context, we can say that the threats in question adapt to the conditions of the age and that new ones may emerge. On the other hand, diversification strategies continue to be the most effective method given the importance of vulnerabilities.

Another change experienced about energy emerges in the formulation of the global energy equation and its related issues. In this context, it is possible to state that the reformulation of the global energy equation in line with the conditions of the age brings along some changes. When considered within the scope of energy relations carried out in an environment of interdependence, it is seen that the most important changes are related to the qualities of some actors. Therefore, it is possible to talk about the direct effect of the change in the energy equation in line with the conditions of age on the qualities of some actors. Undoubtedly, states are at the forefront of these actors. In this direction, some states become important in the global energy equation in line with the changing conditions of the age, while others may remain in the background. It is possible to reconcile this whole process with the diversification strategies they have adopted to reduce the vulnerability and vulnerability of both producer and consumer economies. In light of all these, the general aim of the study is to reveal the relationship between several factors, as well as the role of diversification strategies in reducing vulnerabilities, which are vital components of interdependence. In this direction, the developments within the framework of the Westward orientation process of Turkmenistan as an alternative to the east are analyzed in this study. Therefore, within the scope of the study, the negative effects of the developments in the process that emerged with the Covid-19 epidemic and the reflections of the ongoing conflicts between Ukraine and Russia on the global energy equation on the energy security of Turkmenistan and its westward orientation in this process are analyzed.

Development of Energy Resources in the Historical Process

In the historical process, it is possible to consider the development of energy resources in three main periods. The first of these periods is when muscle power is used as an energy source. The use of muscle power as an energy source is divided into two periods in itself. The first of these is the period when humans benefit from their muscle power, while the other is the period when the muscle power of other living groups other than a human is used. In this context, the turning point for energy resources is the use of human muscle power. Therefore, the first period of energy resources is the period when humanity benefits from its muscle power. As it is known, the use of human muscle power as an energy source covers a long period. So much so that about 1 million years ago, the first humans (Homo sapiens) emerged, and for a long time (about 990,000 years ago), they continued a lifestyle based on hunting, fishing, and food gathering by making use of their muscle strength. After such a long period, the transition to settled life in the history of humanity and civilization constitutes an important turning point in terms of the use of energy resources. In this context, it is possible to state that the second period of the history of using muscle power as an energy source started with the transition of humanity to settled life.

The domestication of plants and animals is an important stage in the history of humanity and its civilization, and the transition to settled life began in approximately BC. It was around 10,000. In addition to growing agricultural products, people who had settled down started to benefit from the muscle power of animals in hunting and gathering, which is a part of their lives (Çoban, 2017, p. 555). Therefore, in the second period of the history of using muscle power as an energy source, people who settled down used their muscle power as well as the power of domesticated animals in the third and fourth groups. So much so that the order of domestication for animals is generally thought to be as follows: Dogs were probably the first domesticated animals. Domesticated in the second group are animals such as nomadic sheep, goats, and reindeer that migrate seasonally like the wild human states. It is known that the third group is animals such as cattle, which are domesticated through agriculture and settled life, and the fourth group is animals such as horses, donkeys, and camels that benefit from transportation and muscle power (Coban, 2017, p. 554). When considered in terms of usage purposes, the animals in the mentioned group correspond to the second period. Because in the history of the domestication of animals, three different periods were taken as the basis according to the purpose of use. The first period of domestication was aimed at meeting the basic needs of people, such as nutrition, shelter, and clothing. During this period, animals such as dogs, sheep, goats, pigs, guinea pigs, and cattle were domesticated. In the second period after that, animals whose powers would be used more were domesticated. The animals in this group were cattle such as camel, llama, donkey, horse, buffalo, and cattle (Çoban, 2017, p. 555). When considered in the context of its qualities, it is possible to express the period in which humans and different animals benefit from muscle power as the period of primitive energy sources.

The second period of the history of energy resources emerges as the time when humanity benefits from the assets that are described as renewable energy resources today. One of the sources used during this period is wind energy. The earliest known use of wind energy in this direction is known to date back to the Egyptians in 5000-BC. They move their sailing boats, which they used for transportation on the Nile River between 4000 and B.C., by using wind energy. So much so that over time, the use of sailboats in this direction has brought about an increase in the use and effect of sailing boats. Therefore, with the advancements in sailboat construction in the next period, wind energy has become an energy source used for the flotation of larger ships. M.S. By 800, the Vikings had advanced in sailboat design, and wind energy became a part of globalization, world trade, and the exploration of unknown geographies for 1200 years (Yıldız & MacEachern, 2018, p. 27).

The effects of the widespread use of wind energy were not limited to the development process of energy resources. Therefore, it is possible to talk about the effect of wind energy on several other issues. In this context, one of the most important effects appears within the scope of the benefit it provides to the party that uses the energy source most effectively. In this context, it is possible to consider the effect of wind energy on the relative power increase. It is claimed that the widespread use of windmills played a vital role in the increase of Dutch influence in the international arena in the 17th century (Dolata, 2017, p. 47). At this point, we come across the fact that energy sources provide benefits to the user in different areas beyond mere consumption. Therefore, it is possible to characterize the positive contribution of the energy resources used in the said years, especially wind, to the relative power capacity of the owner in the international arena as one of the most important turning points in history. So much so that the second period of energy resources is an important turning point in terms of international politics. Therefore, in

the next historical process, energy resources went beyond being a merely consumed asset and started to turn into an important dynamic in determining the global powers of that period. In this context, it is possible to state that energy resources have started to become one of the main dynamics of world politics in the second period of energy history.

In the historical process, in line with the advances in the field of energy, the use of fossil resources brought about a transition to a new era. In this context, it is possible to state that the transition to the third period of energy history started with the availability of fossil energy sources. The period mentioned covers three different periods. In this direction, the first-time frame within the scope of fossil energy sources starts with the arrival of coal. Resembling a shiny black rock, coal contains a lot of energy. The release of a lot of energy it contains is possible by burning coal. The energy produced by the burning of coal is called heat and light energy. The individual use of coal in history dates back to the 1800s when people heated their homes. In the next stage, the use of coal in the vehicles of the period is witnessed. For example, in the 1800s, coal became used as a fuel for trains and ships as well as for domestic consumption. However, another usage area of coal at that time was the industry sector. It is known that factories use coal for iron and steel production, especially during the industrial revolution. Therefore, we can say that in the years when coal was first used, it served to obtain more heat and light energy and was not used in electricity production as it is today.

In the 1700s, the British discovered that coal was a clearer and hotter burning energy source than wood, which directly triggered the Industrial Revolution. Along with the industrial revolution, there had been some developments that paved the way for the widespread use of coal. For example, it is possible to consider James Watt's invention of the steam engine, which made it possible for machines to do work previously done by humans and animals. Therefore, the use of coal to obtain the steam needed to run the invented engine is an important turning point in the history of energy. In the next period, the use of coal began to spread beyond the European continent, and in the first half of the 1800s, the Industrial Revolution spread to the other side of the Atlantic, to the USA. In the USA, there was a transition to a different stage in the 1880s for coal, which was mainly used in transportation in the first stage. So much so that in the next period, coal started to be used in a field that can be considered to be new compared to its history. It is possible to consider the first use of coal in electricity generation for houses and factories in the 1880s in this context (Allen, 2013, p. 12).

The developments in the third period of the history of energy resources are certainly not limited to coal. The transition process to another stage emerged with the use of petroleum, which caused coal to remain in the background in the following years, which was the energy resource of the period in which fossil energy resources were predominantly consumed. The production of oil, the most consumed energy source today, was born in 1859 with the discovery of "Colonel" Edwin Drake near the small timber town of Titusville in northwestern Pennsylvania. Shortly thereafter, oil production spread to the hills and valleys surrounding Titusville. By the end of the 19th century, oil production centers other than Tituville began to emerge. The area around Baku, the Caspian and Caucasus seas, the Netherlands, the West Indies, and Galicia were the main production centers that emerged at that time. Despite its rapid spread, the production in these oil centers was carried out with primitive methods until about one hundred and seventy years ago. Therefore, it is impossible to talk about the existence of the modern oil industry in the first years (Yergin, 2014, p. 255). For example, it is possible to associate its use mainly for lighting in this period with the underdevelopment of the petroleum industry in those years. But this situation did not last long. In the following years, this use in lamps was used in many more areas, especially in transportation and increasingly as fuel for war vehicles, and this paved the way for oil to be the most used energy and struggle source in the world (Pamir, 2015, p. 69). In this context, the most important turning point was the British Navy Ministry II in 1901. Lord Admiral John Arbuthnot Fischer's declaration to Minister Lord SelBorne that all technical preparations for the navy to use oil as fuel were completed was the foresight that triggered the process of increasing the strategic importance of oil in the 20th century (Pamir, 2015, p. 70). Shortly after this, the British government made 3 different maritime programs in the period 1912-1914 and took the decision to work with oil for new ships and to convert coal-fired ones into oil (Pamir, 2015, p. 70). Such developments in the early 1900s caused the 20th century to become known as the "oil age."

Oil has started to become one of the main agenda items of international politics since the beginning of the 20th century. So much so that the current dominant actors of the international system, within the scope of interactions between states, went beyond oil, and commercial relations and became known with

independent concepts such as energy relations and energy diplomacy. In fact, after a while, it started to become evident that oil was somehow related to the events in the international arena, either in the center or around it. Therefore, it is possible to state that oil played a leading role or a secondary role in many events such as wars, conflicts, collaborations, and political instability in that period. In this context, we can say that with the increasing consumption of oil, it has become one of the focal points of international politics. The transformation of oil into a pressure tool in the energy crises of the 1970s is one of the indicators of this. The most important effect of the transformation of oil in this direction is undoubtedly the transformation of energy security problems into a vital threat to the national security of states. So much so that the threat in question became more understandable during the 1973 Global Oil Crisis.

The 1973 Global Oil Crisis is at the forefront of the examples in question, which can be considered within the framework of oil supply security in general. The fourth of the Arab-Israeli Wars, also known as the "Yom Kippur" or "Ramadan War," that broke out in October 1973 during the Global Oil Crisis, is a critical turning point. In other words, it is possible to state that the fourth Arab-Israeli War, which started on October 6, 1973, triggered the oil crisis, which had global effects. The development that paved the way for the use of oil as a weapon in 1973 was the result of the Arab countries that had reserves in oil production and export at that time. The first of these is the reduction of production and related exports; the second is the increase in prices. At this point, it was preferred to increase the prices as the most rational option. In this direction, the OPEC Committee, consisting of the relevant ministers of six countries that came together on October 16, 1973, announced that oil prices would be increased unilaterally in response to Israel's occupation. These prices, on the other hand, meant an increase of approximately 70 percent from \$3,011 to \$5,119 per barrel (Mabro, 2007, p. 56). However, what the world described as an "oil price shock" occurred, and the oil weapon was put on the battlefield. Therefore, in Kissinger's words, "oil was now a political blackmail weapon" (Yergin, 1995, p. 572).

The oil-based global energy crises experienced in the last quarter of the 20th century had two important effects in terms of energy history. The first of these is the realization of the importance of energy security through bitter experiences, while the other is the emergence of natural gas, which is seen as an alternative to oil in terms of energy resources. Therefore, a transition to a new era occurred in the history of energy within the scope of fossil energy sources. Since the 1970s, the orientation of natural gas has been adopted as the most rational option in the first stage. Because, first of all, natural gas is a substitute for oil, and besides, it is more environmentally friendly. Although natural gas is lighter than air in terms of density, it does not cause environmental pollution in the atmosphere because it does not contain sulfur and organic sulfur in its composition. In addition, although it contains carbon dioxide in its composition, its polluting effect is minimal when compared to other fossil fuels. Under these conditions, the rapidly increasing consumption of natural gas on a global scale becomes quite normal. However, in a short time, it was understood that the rapid turn to natural gas could not produce a permanent solution to the energy security problems as expected. The events since the first years of the 21st century clearly show and continue to show that the trend toward natural gas is not a permanent solution. Recent developments have demonstrated that natural gas can be used as a political tool or weapon even today and that it has more damaging potential in terms of impact when compared to oil and other energy sources.

In terms of the history of energy resources, especially the natural gas-based energy crises have brought the transition process to a new era on the agenda. The said new era is described as the "energy revolution" and aims to demolish the existing energy order and build a new one instead. In this respect, it is possible to talk about a transition process from a fossil-based energy system to a renewable-energy-based energy system. On the other hand, such a radical transformation in the energy order is impossible in the short term. Therefore, the transformation in question must first be realized by carrying out the process in a systematic and programmed manner together with a transition process. In light of all these, it is possible to talk about a transition to a new order within the scope of energy history.

Increasing Importance and Security of Strategic Energy Resources

It is possible to define strategic resources as assets that have a direct impact on human life in almost all areas, without which socio-economic development becomes impossible in any period. In the historical process, it is seen that some assets have acquired a strategic quality. For example, fertile lands especially pasture in primitive times, and after the Industrial Revolution, precious metals of the period such as iron and steel were among the strategic resources. In addition to these, another energy source that became strategic in the same period is coal. Therefore, the Industrial Revolution was an important turning point

for energy to become a strategic resource. So much so that the increasing mechanization with the Industrial Revolution revealed the need for a serious energy source, and as a result, coal started to take place among the strategic energy sources. In the next period, oil and natural gas followed, respectively, and coal had the characteristics of a strategic energy source. In this context, it is possible to state that the strategic energy resources that come to the fore today are oil, natural gas, and coal.

Not all energy sources have a strategic character. Therefore, it is extremely wrong to characterize all the energy resources in the world as strategic. In this context, it should be underlined that it is not the right approach to deal with the strategic energy resources only within the scope of increasing consumption. However, it would be more accurate to determine strategic energy resources within the scope of a systematic classification. Because strategic energy resources differ from others within the scope of certain criteria and qualities. The necessity of a systematic classification is undoubtedly related to these criteria and qualities, which we can combine into three items. In this direction, the first of the characteristics associated with strategic energy resources is the sine qua non for socio-economic development, the second is cumulative, and the third is politicization. Today, the main strategic energy sources with these qualities are indisputably oil, natural gas, and coal.

Within the scope of strategic energy resources, it is obvious that oil, natural gas, and coal are of vital importance for almost every state in the world. However, in the historical process, even the positive effects on socioeconomic development explain the importance of strategic energy resources. On the other hand, the effects of strategic energy resources are not unidirectional. In this context, it is possible to talk about positive as well as negative effects. Recent developments show that the negative effects of strategic energy resources have become threatening to global security, especially to states. It is possible to characterize these threats within the scope of energy security. In this context, we can say that in light of the importance of strategic energy resources, energy security has started to take place among the basic building blocks of stability on a global scale.

Threats within the scope of energy security arise for many reasons. Therefore, it is really difficult to make a precise classification of energy security threats. On the other hand, it is possible to talk about some intersection points that make almost every source of threat visible. The mentioned intersection points are helpful in terms of making a general inference about energy security threats. In this context, it is possible to state that the main source of energy security threats comes together at the point of access to strategic energy resources. Therefore, we can say that the most basic source of energy security threats has become evident at the point of access to the said assets.

The problem of accessing strategic energy resources is mainly due to two reasons. The first of these is the asymmetrical distribution of the assets in question across world geography, while the other is that oil and natural gas have become instruments of influence in international politics. These two factors are undoubtedly closely related to each other. So much so that being scarce and exhaustible is the most important disadvantage of today's strategic energy resources while turning them into weapons in the hands of states carries the already serious threat of energy security to a further stage.

Energy Relations from the Perspective of Interdependence

When the sources of energy crises and energy security threats that have been experienced since the 1970s are examined, the existence of a direct or indirect relationship with the use of energy as a leverage or a "weapon" in the interactions between actors in the international arena draws attention at the basis of almost every incident. Therefore, it is possible to state that the transformation of strategic energy resources into weapons in the hands of both producer and consumer states is one of the main sources of ongoing energy security threats since the last quarter of the 20th century. It is possible to explain the negativities that threaten energy security that emerged in this process from the perspective of interdependence in all its dimensions. The fact that energy relations are currently handled within the framework of interdependence and that they fully reflect its qualities also supports this statement.

Despite the ambiguity regarding the definition and boundaries of interdependence in the international relations literature, the same is not true for the interdependence approach. Therefore, the 1977 book titled "Power and Interdependence," first published by Robert O. Keohane and Joseph S. Nye, continues to be the most important reference source. Because, as is known, the term "interdependence" and Nye and Keohane's approach mean completely different things. For example, Nye and Keohane explain interdependence by characterizing it as a state of interdependence between states or actors of

different states and stating that these effects are frequently transboundary. It claims that it is the result of international mobility such as money, goods, people, and messages (Esakova, 2012, p. 20). However, Nye and Keohane's characterization of the concept of interdependence and its explanation in terms of certain consequences do not make it intelligible. Because interdependence is also a fuzzy concept that is often used in contradictory meanings like nationalism, imperialism, globalization, and other political words (Nye and Welch, 2018, p. 410). It is seen that the assumptions of the approach to the explanations have been mentioned before. In this respect, first of all, the distinction between "interdependence" and "interconnectedness" is of great importance in terms of eliminating the aforementioned ambiguity. For Keohane and Nye, interconnectedness and interdependence are not the same thing. The effect of transactions on interdependence is related to pressure or costs (Nye & Keohane, 2012, p. 8). A country that imports all of its oil are more likely to be permanently dependent on the flow of oil than a country that imports furs, jewelry, and perfumes (though in monetary terms) will have uninterrupted access to these luxury goods. In this context, when the cost effects of transactions are mutual (not necessarily symmetrical), there is interdependence. However, when the cost effects of these interactions are not significant, there is simply interdependence.

According to Keohane and Nye, it cannot be guaranteed that interdependence will benefit the parties equally. Therefore, interdependence does not only mean mutual benefit. However, this situation will certainly impose costs on the parties and limit their autonomy. In this context, it is possible to conceptualize interdependence as the degree of autonomy present in the government's foreign policy actions (Dixon, 1984, p. 62). At this point, it is extremely important to mention the parties' gains. Taken in the context of gains, the benefits of interdependence can sometimes be expressed as zero-sum or non-zero-sum. However, regardless of the gains, this situation should not be perceived as an approach to optimism (Nye, 1976, p. 132). Because when it comes to sharing gains, the hoped-for optimism at the point of sharing them disappears and the possibility of conflict arises. In other words, it has the potential to create a conflict of interest in terms of who receives or will receive how much from the joint gain at the stage of distribution of earnings. Thus, there is always a certain political conflict in interdependence.

The connection between interdependence and cooperation is not something that happens automatically. Such a connection depends on the nature of interdependence and the relationship of interdependence and dependency with other elements of states' interactions (Kroll, 1993, p. 322). Therefore, interdependence does not imply a situation in which absolute interests are mutually balanced. The presence of asymmetries is also possible. Asymmetries in dependency are likely to be the source of influence required for one actor to overcome another. In this context, relatively less dependent actors often use the interdependence relationship as a source of bargaining power to affect possible problems in some other areas (Keohane & Nye, 2012, p. 9).

Keohane and Nye state that clear revealing of the relationship between power and interdependence requires some concepts that form the quality of the relations between the parties (Gürkaynak & Yalçıner, 2009, p. 76). The concepts in question are bargaining power, sensitivity, and vulnerability. In a mutual dependency relationship, the bargaining power of one of the parties over the other depends on the sensitivity and vulnerability of the other party to this relationship (Arı, 2008, p. 408). In this context, it is necessary to distinguish between two conceptual criteria in order to understand the role of power in interdependence: sensitivity and vulnerability (Keohane & Nye, 2012, p. 10). Sensitivity is the degree of responsiveness within the political framework. What is important here is that a country can make changes quickly and bear the costs and effects of these costs (Keohane & Nye, 2012, p. 10). In short, in cases of sensitivity, there is an avoidance of externally imposed costs by changing the policies of the relevant actors (Akçadağ Alagöz, 2016, p. 38). Vulnerability is measured not only by the volume of transactions across borders but also by the cost of the impact that changes in those transactions have had on societies and governments. In this context, sensitivity refers to the quantity and speed of the effects of addiction; that is, how fast does a change in one part of the system bring about a change in another?

According to Keohane and Nye (2012, p. 11), the use of the word "interdependence" to refer only to sensitivity hides its most important political aspects. At this point, it should also be considered what will happen if the framework of policies can be changed. That is, what would it cost to adapt to external change if more alternatives were available and various policies were currently available? For example, the important thing is that imported oil is not only the ratio of needs but also the cost of following these alternatives together with alternatives to imported energy. In other words, two countries, each of which imports 35 percent of their oil needs, may seem similar or equally sensitive to price increases, but if one of

them can switch to its national resources at a reasonable cost, the other does not have such an alternative. The state may be more vulnerable than the first. At this point, another dimension of interdependence, vulnerability, emerges, which is based on the availability and cost of alternatives faced by different actors (Keohane & Nye, 2012, p. 11).

The vulnerability dimension emerges as a concept that constitutes another of the main axes of interdependence. From a conceptual point of view, vulnerability is beyond the dimension of vulnerability, that is, an actor's liability to the costs and damage caused by external factors, even after changing his policies. The difference between vulnerability, defined in terms of reciprocal effects, and vulnerability, defined in terms of the opportunity cost of disrupting the relationship, has been widely accepted (Baldwin, 1980, p. 489-490). In this context, vulnerability interdependence is concerned with more enduring relationships that are costly to break or change. Because policies are generally difficult to change quickly, the immediate effects of external changes often reflect sentiment. Vulnerability, on the other hand, can only be measured by the cost of making effective adjustments in a changing environment over some time (Keohane & Nye, 2012, p. 11). However, fragility also depends on things other than overall measures. A society's capacity to respond quickly to change also determines its degree of vulnerability. At this point, it should be noted that the degree of vulnerability or criteria is not as simple as it seems at first glance (Nye & Welch, 2018, p. 416-417). The 1973 Oil Crisis is an important example of vulnerability interdependence, which means constant responsibility for costly influences from outside, even after efforts are made to change the situation or to escape (Esakova, 2012, p. 53). The rapid rise in domestic prices and long lines at gas stations during the oil crisis showed that the US was very sensitive to Arab embargoes. But the degree of their direct vulnerability was limited to the domestic production of 85 percent of the energy consumed. On the other hand, Japan, which relies almost entirely on imported energy, is both very sensitive and vulnerable to the Arab embargo (Nye, 1976, p. 133-134).

While Keohane and Nye emphasize that, after the events that have taken place since the 1970s, the issues and areas that make up the political agenda of the states have increased, they state that today, in addition to military and security-oriented issues, many topics are included in the scope of the discipline of international relations. In line with this statement, some of the most important contributions of interdependence, which brings dynamism and depth to the discipline, have been the attribution of different meanings to power and its positioning among theoretical approaches. In addition, while it is a radical proposition that asymmetrical interdependence stands out as an element of power and that interdependence interacts with potential power sources, breaking the connection between the functions and types of power is only one of its contributions in the context of dynamism. The factor that makes the interdependence approach, which positions itself between realism and liberalism and has an integrative understanding, is a useful thought that will guide the study of subjects such as energy that require complex and multidimensional analyses.

In the light of Keohane and Nye's studies, sensitivity and vulnerability play a critical role in dealing with the energy phenomenon in the context of politicization and securitization, along with the manipulation of energy-based interdependence in relations between actors. In this context, it is possible to state that the sensitivity and vulnerability dimensions of energy-based interdependence are closely related to the politicization and securitization of resources (Akbaş & Furuncu, 2016, p. 193).

The degree of sensitivity in the interdependence framework focuses on how quickly changes in the policy framework in one country bring about change in the other and how large the costs of these effects are. On the other hand, the vulnerability in interdependence is related to the affordability or suitability of alternatives given the cost of changes in a country (Ateşoğlu Güney & Korkmaz, 2014, p. 36). In this context, when we consider an energy-based interdependence in terms of sensitivity, vulnerability is measured by the number of resources imported from a single supplier, and vulnerability is measured by the availability of alternatives to imported energy and the cost of changes made to maintain the operability of the economy.

The politicization of energy is aware of the possibility of losing wealth as a result of changes in the interdependent relations of actors in the short term; the securitization of energy means that the actors are aware of the possibility of being an economically functioning unit when a change occurs (Ateşoğlu Güney & Korkmaz, 2014, p. 36). Therefore, the fact that the concepts of politicization and securitization are related to the dimensions of interdependence, as well as the fact that they are the main determinants of actor decisions regarding costs, requires consideration of the phenomena of vulnerability.

Within the scope of Keohane and Nye's interdependence approach, it is clear that today's energy resources represent an understanding beyond material power, which cannot be handled only within the framework of military power, and that the hierarchy of the agenda of international politics, which is adopted by the traditional understanding, has now changed, and that the energy in international relations is more economical, political, and commercial. It is possible to say that it has started to be considered in the framework. Today, the issues related to energy in international politics are predominantly dealt with within the framework of political economy, preparing the environment for the different dimensions of energy resources to be revealed. Therefore, in the light of the traditional view, while the importance of energy resources was emphasized in terms of the elements of material power in previous periods, today the importance of energy resources for countries has begun to be expressed in a new dimension, especially in the light of the changing subject hierarchy of international politics, as the most basic requirements of social and economic development.

The importance of energy resources by both traditionalist and modernist approaches is indisputable. The importance and consumption of energy resources are increasing along with all the fields to which they contribute. On the other hand, the asymmetry in its geographical distribution, especially with its scarcity and exhaustion, reveals a different dimension of the characteristics of strategic energy resources. In other words, strategic energy resources are a basic, but not easy-to-reach, requirement that has concluded that we can conceptualize as the "Needs-Access Dilemma," laying the groundwork for many events and phenomena. Therefore, it is possible to argue that the basis of many events and phenomena such as dependency, interdependence, conflict, crisis, cooperation, energy security, and energy diplomacy is based on the need-access dilemma (Erkan, 2021, p. 66).

Along with the need-access dilemma, various dynamics, such as facts and events, cause strategic energy resources to be prioritized hierarchically on the agendas of decision- and policymakers. The politicization or securitization of strategic energy resources by actors and units at almost all levels of international politics is one of the indicators of the place of the issue in the agenda hierarchy. Although controversial, the politicization or securitization of strategic energy resources, which are identified with concepts such as perceived, anticipated, or existing threat and danger, on the assumption that interdependence will encourage more cooperation, do not logically contradict each other. Assumptions such as the discussion of the place and consequences of energy interdependence between two extremes such as conflict and cooperation and the possibility of manipulating the symmetry and asymmetries in the relations between the parties are indicators that the logic of the approaches is not contradictory (Erkan, 2021, p. 66-67).

It is assumed that the analysis of asymmetrical interdependencies as a source of power among actors would be a useful start in the political analysis of international interdependence since an energy-based interdependence is a field that is specifically open to manipulation (Esakova, 2012, p. 52-53). In a way, it is possible to state that the manipulation of an energy-based interdependence relationship is closely related to the dimensions of vulnerability. First of all, it is possible to define the sensitivity dimension in the energy-based interdependence relationship simply as the acute reaction costs that arise when the rapid development in one country affects the other side (Crescenzi, 2005, p. 28). In this context, it is possible to relate the sensitivity dimension to immediate costs and short-term effects, as the affected country does not have enough time to respond to a dramatic policy change. The 1973-1974 oil shock is one of the examples of the high sensitivity of western economies to sudden oil price increases when the need for imported oil reached a level of dependency. However, although the degree of sensitivity that emerged as a result of this incident is generally described as high, it is not the correct approach to claim that this situation is valid for all western economies. At this stage, it is necessary to clarify the factors that determine the degree of severity of the sensitivity dimension caused by external influences. Because even though the incident causing the sensitivity dimension is the same, it is accepted that the costs caused by the effects may be at different levels in the target countries. Examples from the past tense also confirm this assumption. The fact that the USA, which is one of the leading Western economies, was relatively less affected by the 1973-1974 oil shock in terms of sensitivity compared to the Western European economies is an important example of the intelligibility of the assumption in question. The fact that the costs of the oil shock are less than the Western European economies is entirely due to the lower amount of oil imports from the USA compared to the others.

The fact that the effects of the costs caused by the events that will reveal the sensitivity dimension within the framework of energy-based interdependence differ according to the actors does not mean that

there is no standard in terms of measurability. Keohane and Nye also address this issue in their work. In this context, the sensitivity of importers in terms of energy can be measured by the higher costs of foreign oil and the total amount or ratio of imported oil (Keohane & Nye, 2012, p. 10). However, focusing only on the sensitivity aspect of energy-based interdependence causes some important points to be hidden, i.e., not fully clarified. The possible situations that will be encountered as a result of the change in the political framework are one of the points that can be hidden. This is one of the possible situations where we may encounter interdependence based on energy. For example, it is not only the ratio of imported needs that matters in oil. Alternatives to imported energy and the costs of tracking them are also important. In other words, the two countries that import 35 percent of their oil needs may seem equally sensitive to price increases. There is no difference so far. However, although one of these two countries has an alternative to domestic resources at a reasonable cost, the absence of such an alternative in the other can affect the second state more than the first and make it vulnerable. The vulnerability dimension of interdependence emerges at this stage (Keohane & Nye, 2012, p. 12).

Focusing only on the vulnerability dimension of interdependence will cause negative effects, as will focusing on the vulnerability dimension that emerges at this point. In this direction, it is possible to state that energy combines the sensitivity and vulnerability dimensions of interdependence (Gökçe, 2018, p. 56). It is possible to state that the vulnerability dimension of energy-based interdependence, which we can consider with sensitivity, is generally based on the relative availability and cost of corrective alternatives by various actors (Esakova, 2012, p. 54-55). The source of the vulnerability dimension is the supply of energy needs through imports, even if it is an ally (Nance & Boettcher, 2017, p. 2). Keohane and Nye state that vulnerability in energy-based interdependence also includes the strategic dimensions of vulnerability. However, according to them, this does not mean that the sensitivity dimension is not important. Although the two dimensions point to different aspects of interdependence, one may come to the forefront according to the subject and conditions. For example, while the dimension of vulnerability may be more important in terms of providing a power source, it may also be more important in terms of the political & and some energy relations that occur when certain rules and norms are guaranteed (Keohane & Nye, 2012, p. 12). Therefore, vulnerability and vulnerability constitute two dimensions of energy-based interdependence. Although one of them is ahead of the other from time to time according to the subject and conditions, the two dimensions are considered together based on energy. Considering two different dimensions together makes it possible to make some generalizations in the relationship of interdependence based on energy.

Energy Diplomacy and Bargaining Power

In a mutual dependency relationship, any event that may create a negative effect between the two states creates some costs for the parties. However, the said costs are not at the same level for the parties except in exceptional cases, and this is entirely due to the importance of the sustainability of the relationship, which differs according to the parties. Therefore, in the conditions of mutual dependency, the nature of the relationship between one of the parties reveals the bargaining power over the other party, while the effect or measurability of the said power depends on the sensitivity and vulnerability of the parties to this relationship. Because under the conditions of mutual dependency, the sensitivity and vulnerability of the actor on the more dependent side are higher than those of the subject, this situation directly weakens the bargaining power of the actor in question. In this context, bargaining power differs according to the sensitivity and vulnerability of the parties to the relationship under conditions of mutual dependency.

The power created by the asymmetries in the conditions of mutual dependency should not be directly regional or global in terms of energy demand and supply relations. In this context, energy diplomacy is responsible for a healthy energy flow, a stable international energy market, and efficient and environmentally friendly use of energy (Uludağ, Karagül & Baba, 2013, p. 103)

Energy diplomacy is also a set of tools used by actors in the international arena to avoid possible risks in their interactions in the energy market. Naturally, these tools are also different for each actor. Energy importers use these tools to access cheap and continuous energy flows, secure energy supply, maintain the diversity and efficiency of energy sources, and maintain the stability of the international energy market. Energy exporters, on the other hand, focus on developing reserves and using them more efficiently, investing in new reserves, and maximizing revenue from energy exports. Energy diplomacy helps governments carefully monitor each other's policies, particularly through negotiation and bargaining

processes that reduce the likelihood of open conflict or risk. At this point, a structure on a global scale emerges. The mentioned structure is expressed as the international energy regime (Uludağ, Karagül & Baba, 2013, p. 103). The international energy regime is generally the legal and institutional arrangements between energy importing and exporting countries. With this, the regime in question regulates the rules of international energy trade and transfer, as well as its mechanisms in this context. This regime also aims to maintain a balance in the competition between the various interests of governments and international energy organizations. On the other hand, such a regime does not operate as an organic entity while maintaining this balance; instead, it manoeuvres through the common interests of the great powers, namely the USA, the Russian Federation, China, Japan, India, and the European Union countries. However, this does not prevent other countries from having a say in this regime. Therefore, energy diplomacy comes into play at this stage to strengthen the bargaining power of countries in the international energy regime and to use the energy-related aspects of national values (Uludağ, Karagül & Baba, 2013, p. 103).

Energy diplomacy does not always follow a positive path as expected. On the other hand, especially for the continuation of the status quo, great powers resort to oppressive and non-transparent diplomacy practices against weak or fallen states. In other words, it would not be wrong to say that energy diplomacy does not have a positive or negative stance, since every government's energy diplomacy practice has a subjective value. So, there is no good or bad energy diplomacy, or positive or negative diplomacy, as each government aims to maximize its national energy policy interests, but there are differences in practice. Russia stands out as an important example at this point. As it is known, Moscow does not always peacefully use energy diplomacy. This is mainly because its strategic energy resources have helped Moscow regain much of the influence it lost at the end of the Cold War. In this context, it is possible to state that Moscow's use of energy resources as a means of pressure and threat in its diplomatic practice to maintain this influence is among the negative examples in terms of energy diplomacy.

In energy diplomacy, especially great energy powers can use their resources as tools or "weapons" in line with their abilities. In this direction, energy has been used as a diplomatic asset by monopolistic American and British oil companies since the 19th century. In this process, diplomacy practices were mostly carried out by companies through partnership agreements and cartel formation (Uludağ, Karagül, & Baba, 2013, p. 105). This directional behavior of global oil companies in energy diplomacy took a different turn in the last quarter of the 19th century. In this context, especially in the 1970s, the states that were in the position of having resources started to exclude private oil companies to a large extent and acted in line with an understanding to take control in such a strategic area. Therefore, in this process, it is possible to talk about a period in which the control of energy largely passed to the sovereignty of the state through national energy companies. In this context, it has become inevitable for states to become one of the main actors in energy diplomacy.

It is extremely effective that states become the most effective actors in energy diplomacy and that these resources are accepted as important diplomatic resources to carry out the necessary activities to achieve their political and security goals. In this understanding of diplomacy, strategic energy resources are adopted as a political card or weapon, which not only paves the way for the transformation of energy resources into leverage in foreign policy but also constitutes the framework for the practice of bargaining power created by asymmetries in an environment of interdependence. In this context, it is possible to express energy diplomacy as multi-dimensional practices that enable a state to achieve the goals it has determined in line with its strategies about power and help the sustainability of its current goals in foreign policy by developing it.

The effects of strategic energy resources on bargaining power in energy diplomacy have brought about the transformation of these assets into weapons. However, the contribution of these weapons goes beyond hard or soft power. It is possible to explain this contribution entirely with the concept of smart power. Therefore, it is possible to explain the contribution of strategic energy resources in terms of bargaining power in energy diplomacy within the scope of smart power.

The determining factors of the effect of the use of strategic energy resources as a smart power tool on the bargaining power in energy diplomacy are again sensitivity and vulnerabilities. Therefore, it is not possible to determine which side's relative superiority in terms of bargaining power in energy diplomacy is based only on having resources. So much so that the general understanding of energy diplomacy is that the actors with energy resources are in a more advantageous position in terms of bargaining power than

the actors in the consumer position. However, although it may seem like a correct proposition at first glance, this statement is no longer fully valid in the changing conditions of our age. While the consideration of the issue within the framework of the Oil crisis, Russia-EU relations, or Russia and Eastern European countries supports the correctness of the proposition in question, the current stage is now open to discussion makes it clear. Because it should not be forgotten that, just as consumers need energy resources, supplier economies that have resources also need a market and customers to generate income. Russia stands out as a very good example at this point. For example, Moscow, which had significant bargaining power in energy diplomacy thanks to its resources and the energy card in the past, is struggling with considerable negativity due to reasons such as its economy, which has become dependent on energy exports in today's conditions, investment in the sector, and a lack of technology. In its diplomacy, it loses its bargaining power to economies that are insufficient in terms of energy resources but are candidates for superpowers in areas such as economy and technology. This situation, which we can describe as a relative loss of power in Russia's energy diplomacy, has started to become visible with the sanctions imposed during the Ukraine Crisis. In this process, the negativities caused by the West's attitude towards itself caused Russia to turn to the eastern alternative. However, with the developments in the process, the east ceased to be an alternative in reducing Russia's sensitivities to the west, and Moscow's vulnerabilities began to emerge. In the context of the energy diplomacy contacts, where the negotiations between Moscow and Beijing are within the scope of natural gas projects that have been going on for years, it is possible to consider the transfer of control of the process from Russia's hands to China's. The fact that Russia, which was subjected to sanctions during the 2014 Ukraine Crisis, abandoned its insistence on the route and pricing of the Power of Siberia gas pipeline project and concluded the agreement in favor of China is one of the most obvious examples of the change of control between the parties in question.

Reducing Sensitivity and Vulnerability

The interdependence relationship based on energy has the potential to be manipulated at any time. This potential has been emphasized in the international relations literature, especially in studies related to energy security. The manipulation of the interdependence relationship between the EU and Russia from time to time is one such example. Manipulating the energy-based interdependence relationship is based on the factors caused by asymmetries, and this can have heavy costs for the parties. Although this is not a welcome situation for the party given the high level of sensitivity and vulnerability, the actors will undoubtedly make efforts to reduce the negative effects. Therefore, the efforts of the parties to avoid the negative effects of costs will be aimed at reducing the level of dependency in the first stage with the awareness of the factors affecting vulnerability and vulnerability. In this context, for example, according to the IEA, the factors affecting the vulnerability and vulnerability of a country's interdependence are a diversity of the primary fuel mix, import dependency, fuel substitutability, market concentration (the superiority of a small number of producing countries in the total trade of any fuel), and the share of politically unstable regions in imports (Esakova, 2012, p. 55). These factors, which affect the sensitivity and fragility of a country's interdependence, are important in terms of understanding the nature of the negativities arising from it and the framework of the policies to be implemented to solve them. At this point, it is necessary to reduce the levels of sensitivity and vulnerability to solve the problem, and it is observed that this requirement has been expressed by many experts in the literature. One of the examples of this is that the energy security literature defines a series of policies that can minimize the sensitivity and vulnerability of oil supply to consumer countries against external influences and limit the economic losses caused by supply disruption and subsequent price shocks (Esakova, 2012, p. 57).

To reduce the effects of possible costs that may arise as a result of the manipulation of the energy-based interdependence relationship, the sensitivity and vulnerability levels need to be reduced. While the factors affecting sensitivity and vulnerability are guiding in this direction, it is thought that practices aimed at ensuring energy security, in general, will be effective in this regard. In this respect, it is possible to group policies that can reduce sensitivity and vulnerability and thus ensure energy security as short-term and long-term. Spare Capacity, emergency stocks, redirected supply flows, and demand side management is among the short-term policies aimed at reducing the vulnerability in the energy-based interdependence relationship. At the beginning of the long-term policies aimed at reducing the sensitivity and fragility of the relationship of interdependence based on energy, there were policies to increase energy efficiency, policies to diversify sources and suppliers, policies to encourage the use of domestic energy resources, policies to diversify transmission lines and routes, investments in the energy sector, policies for the

functioning of the energy market, policies for environmental protection, policies for the compartmentalization of energy resources, and policies for other factors that may pose a risk.

Turkmenistan and Energy Security

Turkmenistan is one of the states that gained its independence after the collapse of the Union of Soviet Socialist Republics (USSR). With the disintegration of the USSR, it is seen that Turkmenistan began to take place at the center of many global powers, especially western countries. In this context, it is possible to say that the natural resources it possesses undoubtedly contributed to this increase in interest in Turkmenistan, one of the states that gained its independence after the collapse of the USSR. In addition, Turkmenistan is one of the five countries with a coast on the Caspian Sea, which is one of the geographies with large oil and natural gas reserves (U.S. Energy Information Administration (EIA), 2016). It is seen that Turkmenistan, which is rich in energy resources, stands out in terms of oil and natural gas reserves. As of the end of 2021, Turkmenistan's oil reserves were announced at 600 million barrels (bbl). While oil consumption in the same period was 153,400 bbl/day, its production was recorded at 235,300 bbl/day. However, Turkmenistan's exports in terms of crude oil and derivatives are expressed as 59,600 bbl/day (CIA Factbook, 2022). In terms of natural gas, according to BP data, Turkmenistan; After Russia (38 trillion cubic meters (tcm)), Iran (32 tcm), and Qatar (25 tcm), is the fourth in the world with its proven natural gas reserves of approximately 20 tcm with discoveries on land (Devletabad, Osman, Yolatan) and sea (Celeken). It is a large gas country. About 10 percent of the world's proven natural gas reserves are in Turkmenistan (Pala, 2022). In addition to its reserves, some of the world's largest natural gas production fields are located in Turkmenistan. Among them, for example, is Galkin, the world's second-largest natural gas production site (November 2021, p. 948). However, it is seen that Turkmenistan has produced 79.3 billion cubic meters (bcm) of natural gas by the end of 2021. The production of Turkmenistan in the mentioned period corresponds to 2 percent of the world's total. Turkmenistan's natural gas consumption in the same period was 36.7 bcm, while its exports were expressed at 42.1 bcm. 31.5 bcm of Turkmenistan's exports were made with China, and 10.5 bcm with Russia (BP, 2022, p. 29-37).

Having borders with countries such as Iran, Uzbekistan, Azerbaijan, Kazakhstan, and Afghanistan, Turkmenistan has an important geopolitical and geostrategic position in the center of Eurasia. In connection with its geographical location, Turkmenistan has become a rising value in terms of energy geopolitics, especially in the last period. It is possible to state that Turkmenistan, which holds some of the world's richest natural gas resources, has become one of the countries of vital importance in terms of global energy security, especially in light of recent developments (Turan, 2021, p. 337). Compared to other countries that gain energy and export energy, it is striking that Turkmenistan remained out of the race until the 1990s. For example, among the countries that export energy resources, Russia uses its resources as a tool of big state policy, while Azerbaijan and Kazakhstan are trying to both secure their independence and provide resources for economic development breakthroughs by using their natural resources and making agreements with other countries and big oil companies. On the other hand, it remained out of the energy race in the 1990s due to the fact that the reserves of its natural resources could not be fully determined and the neutrality policy of Niyazov, who ruled the country until his death in December 2006 (Sarı, 2016, p. 154).

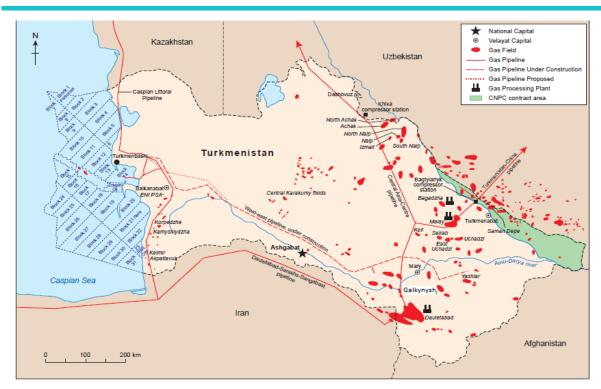


Figure 1. Turkmenistan Gas Infrastructure (Pirani, 2019, p. 3)

It is extremely wrong to consider the fact that Turkmenistan is relatively out of the energy race compared to other countries in the region in the context of purely political preferences. However, it is possible to talk about the effect of some structural dynamics. So much so that in the first years when Turkmenistan gained its independence, it faced some difficulties in making the necessary investments for the development of the sector for energy export, and it was kind of beheaded by the energy transmission lines inherited from the USSR. Although Turkmenistan's natural gas production reached its highest point during the Soviet period, it is possible to consider the decline in natural gas production after independence in this context. To put it more clearly, natural gas production, which reached 80 bcm in the USSR period, reached these figures 17 years after it gained its independence. Undoubtedly, the main reason for this decrease in production is the lack of necessary infrastructure and equipment to export the produced natural gas to international markets (Sarı, 2016, p. 159).

Chart 1. Turkmenistan Natural Gas Production (bcm)(1992-1998) (Sari, 2016, p. 159)

	1992	2-1993			1994-199)4		1997-1998				
60					30-33			15-16				
	Chart 2. Turkmenistan Natural Gas Production (bcm/year) (2011-2021) (BP, 2022, p. 29)											
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
56,3	59	59	63,5	65,9	63,2	58,7	61,5	63,2	66	79,3		

Another factor in Turkmenistan's relative backwardness in the energy race is undoubtedly related to energy transmission lines. As it is known, even though Turkmenistan declared its independence, it had to face the disadvantages caused by some elements that we can describe as the legacy of the USSR in the first years. This situation has been the main problem with Turkmenistan's energy production until recently. In this context, it is possible to state that Turkmenistan had to face the main energy problem in the first years of its independence, in terms of energy production and exporting the infrastructure, which was the legacy of the Soviet era, to international markets. Therefore, we can say that in the first years, Russia became the only option for Turkmenistan. However, although Ukraine, Iran, and Armenia, to which Turkmenistan exports natural gas, seem to be other alternatives, Russia still plays the leading role at this point. The fact

that Turkmenistan's natural gas exports to countries other than Iran in those years were carried out through Russia is one of the indicators of this. In this context, it is possible to talk about a serious vulnerability problem for Turkmenistan. The fact that Russia became the only export route under the conditions of that period gives clues about the bargaining power of Turkmenistan in energy diplomacy. In this context, it is possible to consider the 2003 signing of the "Gas Sector Cooperation Agreement," which will last until 2028, 2003, with the Russian company Gazprom, of Turkmenistan, which has become fragile against Russia (Zhuldyz, 2022).

Russia has been an important buyer of Turkmen natural gas since 1991 until the mid-2000s. In this process, Russia made a significant profit by exporting Turkmen gas, which it procured at significantly lower prices compared to international markets, to Europe. The Gas Sector and Cooperation Agreement, which envisages increasing the natural gas shipments between Russia and Turkmenistan by 70-80 bcm per year, which was 5 bcm per year in the first stage, was consolidated between the two in 2003 for a period of 25 years. However, with the agreement, natural gas shipments from Turkmenistan to Russia were carried out through the Central Asia-Central natural gas pipeline has an annual transport capacity of 45 bcm. However, the shipment in question became a serious problem after a short period of six years due to important events. So much so that in 2009, Russia decided to stop natural gas imports from Turkmenistan due to reasons such as the explosion in the natural gas pipeline carrying Turkmen gas to Russia, the Russian-Ukrainian natural gas crisis, and the decrease in gas supply to European countries. This decision by Russia brought about a serious decrease in the natural gas production of Turkmenistan over a period of more than six months. For example, it is possible to consider Turkmenistan's suspension of production at approximately 150 wells in this context (Zhuldyz, 2022). This situation is extremely important for Turkmenistan in terms of revealing a serious energy security problem. Because energy exports account for 85% of Turkmenistan's economic development. Therefore, with this interruption, the economy of Turkmenistan was seriously affected. In relation to this, highly explanatory data stand out in Fig. 1 in terms of the effects of the incident that took place in 2009 related to Turkmenistan's foreign trade. In this context, in the first stage, Turkmenistan's increasing natural gas exports to Russia were reflected as income in the country's economy. On the other hand, with Russia's decision to stop imports, it is possible to talk about a regression in 2009-2010 (Pirani, 2019, p. 3).

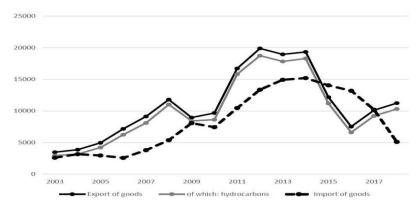


Figure 2. Turkmenistan's Exports and Imports Of Goods (Million Dollars 2003-2018) (IMF, 2019)

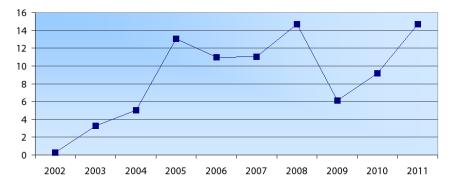


Figure 3. Turkmenistan's GDP Growth (in %) (Bendini, 2013)

The emergence of some problems between the parties before Russia stopped its natural gas imports, in a way, heralded the trend of Turkmenistan towards an energy security threat. Although the agreement between the two parties created an optimistic atmosphere of rapprochement and cooperation, this situation was not long-term. Therefore, despite the agreement that brought the two countries, whose historical ties are thought to be ancient, closer together, many problems arose between Gazprom and Turkmenistan in the following period. The first of these problems was the disagreement regarding natural gas prices. Because, although an agreement was reached under the conditions of that period, after a short time Turkmenistan began to openly express that it was seriously uncomfortable with Gazprom's payment, which was far below the natural gas market. In fact, it has been witnessed many times that Turkmenistan periodically raises this issue on different platforms. However, with the explosion of a pipeline near the Turkmen-Uzbek border, where natural gas was shipped to Russia in 2009, the disagreements between the parties, which have been expressed from time to time, have reached a different dimension. Because of the developments in that period, the Turkmenistan side showed Gazprom for the explosion. Therefore, it is possible to characterize this event as a turning point in Russia-Turkmenistan energy relations. So much so that even though natural gas flow from Turkmenistan to Russia started again in 2010, nothing was exactly located in Turkmenistan, 529 kilometers in Uzbekistan, 1,300 kilometers in Kazakhstan, or approximately 5,000 kilometers in China. Undoubtedly, since the commissioning of the line, Turkmenistan has eliminated Russia, which aims to have a monopoly in energy distribution in Eurasia (Çalışkan, 2017).

The East as an Alternative to Turkmenistan and Russia

The pipeline explosion, which interrupted the Turkmenistan-Russia natural gas trade in 2009, and the conflicts experienced in the previous period brought along a transition to a new era. In this context, it is possible to characterize Turkmenistan's trend towards the Chinese alternative, which acts with the awareness of the negative effects of export dependence on Russia on energy security, as the beginning of a new era for the country. One of the main factors in Turkmenistan's orientation towards China in energy trade is the change in the understanding of the country's government towards energy security and increasing awareness. As it is known, Gurbanguly Berdimuhamedov, who came to power after Niyazov's death in 2006, continued his "policy of impartiality". However, Turkmenistan has entered a more active period in foreign policy. Therefore, although the totalitarian political regime continued in the Berdimuhamedov period after Niyazov, real reform or change took place on the path of liberalization. In this direction, the biggest change in Turkmenistan's foreign policy under Berdimuhamedov has been experienced in the energy sector. First of all, Turkmenistan continued not to join the Shanghai Cooperation Organization (SCO) due to its neutrality status, while it started to develop its multifaceted relations with SCO member China, especially in the energy sector. Recent events have clearly shown that it has become a necessity for Turkmenistan to increase the number of countries to which it will sell natural gas to break the monopoly of Russia in the context of energy security (Turan, 2021, p. 338). In this direction, the energy agreement signed with China in 2009 is indisputably an important milestone. Because Russia, to which 85 percent of natural gas was exported until 2009, has now been replaced by China (Sarı, 2016, p. 158).

With the transition from Russia to China within the scope of Turkmenistan's main export target, two important changes have occurred in the country's natural gas sector. First of all, Turkmenistan, which stays away from international oil companies and is reluctant to work with foreign investors, has started to carry out its activities in cooperation with two foreign companies (China National Petroleum Company and Petronas) for more than a quarter of its natural gas production with the transition. Secondly, after many years of planning, Turkmenistan established a petrochemical plant in Kıyanlı in 2018, which is thought to contribute significantly to its economy (Vepayev & Deniz, 2020, p. 240).

With Turkmenistan's eastward orientation, the natural gas produced mainly by the state energy company Turkmengaz was separated from the domestic market and exported to China, and the remaining part began to be transmitted to Russia, Kazakhstan, and Iran. In the first stage of this process, the Galkynysh field became the main source of exports to China. So much so that when its exports to the east began in 2010, gas production was not yet realized in the Galkynysh field. In this context, it is possible to state that exports to China were made from the second largest field of Turkmenistan, Devletabad, and the fields in the southeast of the country until the production of the field in question (Vepayev & Deniz, 2020, p. 242).

With Turkmenistan's orientation towards China, Beijing seems to have made significant investments in the country's energy sector. In this context, one of the most important developments is the signing of a 30-year PSA between Turkmenistan and China National Petroleum Corporation (CNPC) on 17 July 2017. The project, which was decided to be carried out within the framework of the agreement between the parties, covers important fields such as Samantepe, which consists of 100 bcm of gas and 5 million tons of gas condensate. Within the scope of the project, Chinese companies took action in a short time in order to activate dozens of old and new production wells in "Samantepe" and to ensure a significant natural gas flow from here. In this context, it is known that CNPC has invested approximately 4 billion USD in the project to date (Ibrahimov, 2017, p. 143).

The effects of Turkmenistan's orientation to China are not limited to the increase in investments in the energy sector. Undoubtedly, the purpose of creating the necessary infrastructure to ensure the flow of energy resources, especially natural gas, from Turkmenistan to China lies behind the increasing investments in the energy sector. The start of natural gas exports from Turkmenistan to China with the investments and the serious increases in these flow amounts with the developments in the process are the indicators of this. In this context, the formation of the Turkmen-Chinese Cooperation Committee (TCCC) is an extremely important development. Within the scope of TCCC, it is aimed to provide an important strategic output for the deepening of China's energy cooperation with Turkmenistan. Therefore, it is possible to state that the main feature of TCCC is based on meeting and supporting the energy needs of the parties. One of the most important projects realized within the scope of the TCCC is undoubtedly the construction of the Central Asia Natural Gas Pipeline. The fact that the project, which was planned to consist of three transmission lines in the first stage, had a great impact on world public opinion when it was implemented, is one of the indicators of this. So much so that within the scope of the project, TCCC not only built the world's largest natural gas pipeline at that time, but also Turkmenistan became one of the largest natural gas suppliers to the energy-scarce Chinese economy (Ministry of Foreign Affairs of Turkmenistan, 2021). In the light of all this, it is possible to talk about the formation of the necessary structure for the coming together of Turkmenistan, which aims to diversify export routes, develop its reserves, and also build infrastructure, and China, which needs uninterrupted hydrocarbon supply from the country's largest oil and gas fields.

It can be seen that the rapprochement of Turkmenistan and China within the scope of energy relations is completely shaped based on mutual dependence. The fact that Turkmenistan, which has the world's fourth largest natural gas reserves, has become China's largest supplier of energy is one of the most fundamental factors in shaping the energy relations between the two sides based on mutual dependence. In this process, while China has provided a very important advantage in ensuring energy supply security, Turkmenistan has had the opportunity to attract significant investments to its country while generating significant income from three natural gas pipelines with a combined length of 1883 km and an annual capacity of 55 bcm. However, the process of turning to China is also of great importance in terms of ensuring energy security for Turkmenistan, which is trying to get rid of the monopoly of Russia in the context of energy exports (Erkan, 2021, p. 314). In this process, natural gas flow from Turkmenistan to China started in 2009, the B line was put into operation in 2010, and then the C line with 25 bcm capacity was put into operation (Erkan, 2021, p. 314).

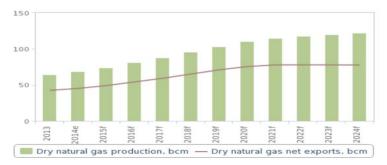


Figure 4. Turkmenistan Gas Production and Exports (bcm) (Tabatska, 2015)

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Bcm	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Production	40.1	56.3	59	59	63.5	65.9	63.2	58.7	61.5	63.2	66	79.2
(sales gas)												
Total Gas	40.1	56.3	<u>59</u>	<u>59</u>	63.5	65.9	63.2	<u>58.7</u>	61.5	63.2	<u>66</u>	79.2
Balance												
Domestic	18.9	20.7	17.6	18.7	20	27	25.5	22.9	24.5	31.5	29.6	36.7
Consumption												
Export (Total)	21.2	<u>35.6</u>	<u>41.4</u>	40.3	43.5	38.9	<u>37.7</u>	35.8	<u>37</u>	31.6	42.1	<u>0</u>
To/Through	10.7	11.2	10.9	10.9	11	3.1	0	0	0	0	2.8	10.5
Russia												
To Iran	7	10	9	5	6	7	7	0	0	0	0	0
To Azerbaijan	0	0	0	0	0	0	0	1	1	0	0.5	0
(Swap via Iran)												
To Kazakhstan	0	0.3	0	0.3	1	1	1.3	1.5	1.5	0	0.1	0
To China	3.5	14.1	21.5	24.1	25.5	27.8	29.4	33.3	34.5	31.6	27.2	31.5

Chart 3. Turkmenistan Gas Balance (2010-2021) (Generated by Author via BP Statistical Review Reports)

Turkmenistan has made an extremely important breakthrough in the context of energy security with its orientation toward China. Turkmenistan's rapprochement with China, which we can describe as an eastward orientation, gives it an advantage in two main points in terms of energy security. While the first of these is undoubtedly Russia's relatively increasing bargaining power in energy diplomacy, which stems from its monopoly and its card towards China, the other is that it attracts foreign investments, which are inevitable to contribute positively to both the country's energy sector and socio-economic development. On the other hand, it is an important question mark that its orientation toward China will provide permanent stability to Turkmenistan's energy security for the coming periods. So much so that only China constitutes an important 40 percent share of Turkmenistan's total natural gas exports. This situation means a serious energy security gap for Turkmenistan when compared to China, which has quite a rich portfolio in terms of energy suppliers. Therefore, it is possible to talk about Turkmenistan's apparent sensitivities and vulnerabilities towards China. This undoubtedly means both weakness in terms of bargaining power in bilateral relations and a serious energy security threat for Turkmenistan. The decline in exports caused by the temporary suspension of natural gas agreements with Turkmenistan by PetroChina, one of the Chinese-originated energy companies, due to force majeure in 2020 and the negative effects on the country's economy support the said statement. Therefore, for a country whose economy is based on energy exports to the tune of 85%, dependency on a limited number of importers is likely to turn into a vital energy security threat at any time. In this context, it is possible to state that the diversification of export routes and countries is of vital importance in terms of both Turkmenistan's national security and energy security. In light of all these, we can say that the orientation to the western market is the most rational option for Turkmenistan.

Turkmenistan and the West as an Alternative to the East

The Stackelberg model applied to Turkmenistan reveals that the country has a very fragile position compared to the other two links of the chain. However, Ashgabat's geopolitical importance in the Central Asian gas market may increase, but the absence of other export alternatives and the growing need to export these raw materials - and possible fluctuations in demand - leave Ashgabat at the mercy of its customers. In terms of sequence theory, Turkmenistan tends to be the weak link in the chain compared to transition countries and end users (Stackelberg, 1934). This situation undoubtedly means a serious threat to the national security of the country. Considering that it has become one of the vital components of the national security of the states, it is possible to talk about the existence of the same threats in the context of energy security. However, when the decline in the economy of Turkmenistan in the last few years is analyzed by considering the share of energy exports, the dimensions of the said threats become more evident.

It is possible to talk about many developments that explain the impact of energy export figures on the economy of Turkmenistan. For example, due to Gazprom's failure to purchase Turkmen gas and low worldwide gas prices, the country's GDP growth has "halved" from 13.12 percent in 2015 to 5.36 percent in 2016, according to Country watch. The main reason for this is undoubtedly gas exports to Russia, which fell from 40 bcm in 2008 to 4 bcm in 2015 and stopped altogether at the beginning of 2016. However, even the fact that gas exports to China, which were 25.9 bcm in 2014, were 30 bcm in 2016, were insufficient to reverse the recession in the economy. In the context of the said inadequacy, the

statements of the Russian news agency TASS are highly instructive. According to TASS, the contract price is quite low at \$185/1000m3. This means insufficient profits for Turkmenistan. The revenues generated here are insufficient even to pay the debt to China due to the huge investments in Turkmen gas infrastructure and the development of gas fields in the region. However, although Turkmenistan doubled its gas exports to Iran, which reached 9 bcm in the same period, this amount remained well below 12 bcm. When it comes to 2017, as the negotiations carried out within the framework of the 1.5-billion-dollar debt of Iran to Turkmenistan dating back to the winter of 2007-2008 were interrupted due to the price dispute, the long-term contracted exportation between the parties appeared as another negativity (Bossuyt, 2018, p. 3). All these developments are extremely important in that Turkmenistan has already lost a limited number of export partners, causing China to become the country's only major importer. Therefore, the level of vulnerability towards China in Turkmenistan's energy diplomacy has become very high. This undoubtedly means a serious loss of bargaining power for Turkmenistan in bilateral relations.

Energy export is of vital importance for the economy of Turkmenistan. The fact that the share of energy revenues in total exports is 85% is one of the indicators of this. In this context, it is possible to state that energy is one of the most vital components of the national security of Turkmenistan. However, Turkmenistan's high income from the export of energy resources does not mean that there are no threats to energy security. Therefore, in the light of current developments, it is obvious that it is only a matter of time before Turkmenistan faces serious energy security threats. So much so that even when the events that negatively affect the energy security of the country are ignored, it is possible to talk about the existence of the same threats. The main reason for this situation in Turkmenistan is undoubtedly the lack of alternatives. However, almost every one of Turkmenistan's current export partners is capable of threatening the country's energy security. For example, while Iran, one of the aforementioned partners, is a country that has been marginalized by the West in the international arena and is the target of sanctions one after another, Russia is the source of the energy crises of the last period. Therefore, only China and Azerbaijan remain. However, the suspension of export contracts by PetroChina with Turkmenistan in 2020 makes China a potential energy security threat. In this context, Azerbaijan stands out as the most rational export partner for Turkmenistan. However, considering that the gas trade with this country is not significant, a serious energy security threat emerges for Turkmenistan. Therefore, at this point, the westward orientation is a kind of lifeline for Turkmenistan in the establishment of energy security.

Recent events have clearly shown that the Turkmen economy is vulnerable to fluctuations in energy prices and limited export markets. Turkmenistan, which is observed to act with awareness of this, has started to give great importance to the diversification of export routes in recent years in order to be less vulnerable in its history of independence, to prevent possible political instability in its country, and to reduce the burden of its landlocked nature. Turkmenistan has been facing economic difficulties since 2015, mainly due to a combination of factors such as falling oil prices and worsening relations with Russia and Iran, two of its three main export markets. So much so that the economic problems that started to emerge in Turkmenistan started to create serious problems for foreign companies that had difficulty making sales and collections (Raimondi, 2019, p. 43). In this process, it is seen that initiatives have been accelerated within the scope of westward orientation for Turkmenistan to the point of eliminating the problems.

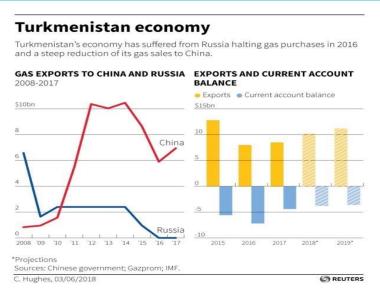


Figure 5. Turkmenistan Economy (Raimondi, 2019, p. 44)

Turkmenistan's attempts to turn toward the west have been witnessed from time to time. However, we can say that no concrete steps have been taken in this process. It is possible to explain the inability to take concrete steps in Turkmenistan's contact with the West with a general approach and the conditions of the period. However, we can say that some things started to change with the annexation of Crimea in 2014. So much so that another step was taken with the Ashgabat Declaration signed in 2015 between Turkey, Azerbaijan, Turkmenistan, and the EU, expressing the commitment to improve energy cooperation between the parties.

On the other hand, a few problems related to the projects within the scope of the agreement caused the parties to not be able to go very far. It is possible to deal with the problems, such as Russia's and Iran's strong opposition to the agreed projects and the inability to finalize the status of the Caspian at that time. As a matter of fact, in those years, Russia saw European countries as the most lucrative main market for gas exports. As a natural consequence of this, Russia is acting in a way that hinders the serious attempts of Central Asian countries to export their natural resources to Europe. In fact, in the same years, Russia started to build many projects such as Turk Stream and Nord Stream 2 in order to consolidate its share in the European market. However, the long-standing legal dispute about the legal status of the Caspian Sea, which was resolved at the 5th Caspian summit held in Aktau on 12 August 2018, was not enough to remove the political and commercial obstacles in front of the Trans-Caspian pipeline (Raimondi, 2019, p. 57). Therefore, it is possible to state that the most important progress in this process is the implementation of the TANAP project.

The Ukraine Crisis, which turned into a military conflict between Moscow and Kyiv, has shown again with bitter experiences that the revision of the energy policies implemented by the countries is a matter of economic security. It has been seen once again that it poses a threat to its economic security. While this issue is currently being discussed extensively on the world agenda, on the other hand, considering the countries that export strategic energy resources, diversification of existing markets and export routes continues to be a strategy of vital importance in terms of establishing economic security. This is undoubtedly true for Turkmenistan as well. Turkmenistan, which has consolidated its role in the global energy market in the process, is an important alternative for the European market, which needs a stable natural gas supply. In this context, we can say that the European market is an important alternative for Turkmenistan, which is trying to diversify its existing export routes and partners (Sancarbaba, 2022, p. 14).

In light of the recent developments, especially the Ukraine Crisis and the COVID-19 pandemic, it is not surprising that Turkmenistan is attempting to turn to the European market through the Southern Gas Corridor, in which Azerbaijan and Turkey play an active role. However, the energy crisis that emerged with the start of the armed conflicts between Ukraine and Russia has clearly shown that the orientation of Turkmenistan to the European market is a very rational initiative. Therefore, it is possible to characterize Turkmenistan's recent attempts to move toward Europe as an extremely normal situation. On the other hand, it should be underlined that Turkmenistan's contacts with the West are not a new development.

Therefore, it is possible to talk about the interaction of the parties on different platforms in previous periods. However, it is seen that Turkmenistan is more willing this time due to the recent developments. Although the methods by which Turkmenistan's natural gas will be transmitted to Europe within the scope of the Southern Gas Corridor have not yet been clarified, it is possible to consider taking concrete steps in the evaluation of some options within this scope. For example, one of the options in question is the transmission of Turkmen gas to Azerbaijan through Iranian geography. The approach that underlies this idea is the "natural gas swap agreement" signed between Turkmenistan, Iran, and Azerbaijan in November 2021, which provides natural gas transfers between the three countries. Within the scope of the agreement, it was decided to transmit up to 2 bcm of natural gas annually from Turkmenistan to Iran. The purpose of the swap agreement is to supply natural gas to the northern regions of Iran, especially in winter. In return for this, it was decided within the scope of the agreement for Iran to transmit natural gas equivalent to the volume transmitted from Turkmenistan to Azerbaijan (Sancarbaba, 2022, p. 15).

Undoubtedly, the swap agreement signed between the parties is not sufficient for the transmission of Turkmenistan's natural gas to Europe. On the other hand, it is possible to characterize the said agreement as a concrete step that reveals the possibility of the realization of a grand plan. Because the Southern Gas Corridor Initiative is a project with long-term interests, it is possible to complete it gradually. Therefore, we can say that the parties acted more cautiously this time in order not to make mistakes in the Nabucco Project in previous years. It can even be claimed that the situation this time may progress more easily than in previous years. Because currently, investments within the scope of the Southern Gas Corridor have reached a certain stage. In this direction, it is possible to state that at the last stage reached, the possibility of satisfactory results in the transportation of Turkmenistan's natural gas to Europe is extremely high. Because, in case of additional investments, the infrastructure necessary for the transportation of natural gas flow from Turkmenistan to Europe can be activated to a large extent. In this context, it is possible to state that gas flow from Turkmenistan to Europe can be realized with additional investments to be made in TANAP and TAP. Therefore, as a result of these additional investments, the Southern Gas Corridor will be able to reach more than sufficient capacity for the transmission of Turkmen gas to Europe (Sancarbaba, 2022, p. 16).

In the last days of 2022, active developments will be witnessed in the establishment of the connection between Europe and Turkmenistan. In this context, it is possible to characterize the natural gas agreement signed between the EU and Azerbaijan as one of the important developments in terms of finalizing the process. Because the agreement signed between Azerbaijan and the EU is also of great importance for Turkmenistan, the importance of the agreement for Turkmenistan is manifested in the fact that Azerbaijan is currently insufficient to meet the needs of the EU. The available data indicate that although the natural gas agreement signed by the EU with Azerbaijan is important for the West to diversify its suppliers, production in Azerbaijan at a level that can meet the EU's needs is not foreseen before the 2030s. In this context, supporting Azerbaijani natural gas with Turkmenistan natural gas comes to the fore as the most reasonable solution, and Ashgabat becomes one of the main actors in this new energy equation (Pala, 2022).

It is obvious that Turkmenistan's becoming a full participant in Southern Gas Corridor initiatives will contribute positively to the energy security of all parties. In this direction, intense contact with the leading actors of the region has been witnessed in recent days. The most important of these actors are undoubtedly Turkey and Azerbaijan. So much so that in this process, Turkey and Azerbaijan have taken important initiatives within the scope of main issues such as the transmission of Turkmen gas to Europe and the deepening of cooperation between the parties. It is possible to consider the Turkey-Azerbaijan-Turkmenistan Heads of State Summit held in Turkmenistan on 14 December 2022, in this context. While the summit in question is of great importance in many respects, it is an extremely critical development that the parties declared their will and will to take concrete steps in the field of energy. In this context, it is possible to consider the 25-item joint statement regarding the First Summit of the Presidents of Turkey, Turkmenistan, and Azerbaijan, held in Turkmenistan on 14 December, within the framework of these concrete steps. Therefore, in the joint declaration published by the parties, Turkey, Turkmenistan, and Azerbaijan's commitment to developing interstate relations based on the principles of equality of rights, mutual respect, and benefit is based on the desire to develop and deepen comprehensive ties based on their closeness in terms of common history, language, culture, and civilization. We can describe it as an extremely important development in terms of the course of the process. In the joint statement, "The Parties emphasized the importance of developing cooperation in the field of energy and emphasized the special importance of natural gas supply." To this end, the parties support joint activities and projects, including possible investments, the development of a stable and reliable supply, and the transit of energy resources.

Conclusion

The vital importance of energy security has been underscored once again with the recent energy crisis. In this context, it is possible to state that energy security continues to be one of the main components of states' national security. However, another issue that is understood to be related to energy security is that the threats in this scope have a quality that adapts to the changing conditions of the age, so they have become a chronic security problem on a global scale, especially in states. Therefore, it is not possible to eliminate the threats within the scope of energy security at present. However, it is possible to minimize its negative effects. In this context, revealing the root causes of energy security problems can be an extremely important starting point.

When we evaluate the recent developments within the scope of international politics, it is obvious that strategic energy resources have become a lever in foreign policy and are at the root of energy security problems. There are two main reasons for this. The first of these is that strategic energy resources can turn into a tool of manipulation in interstate interactions at any time, while the other, related to this, is that energy relations are shaped based on interdependence. The formation of energy relations based on interdependence explains all aspects of the transformation of these assets into manipulation tools. In energy relations shaped based on mutual dependency, it is possible to explain how strategic energy resources become a tool of manipulation and the positive and negative effects they create with three concepts. These concepts are also of great importance in terms of being the basic elements of the interdependence approach. In this context, it is possible to express these concepts, which are critical for energy relations shaped based on interdependence, such as sensitivity, fragility, and bargaining power. Such that, within the scope of energy relations shaped based on interdependence, the influence of one state on the other is described as "bargaining power." The determining factors of the effect of bargaining power are sensitivity and vulnerabilities. In this context, it is possible to state that the increase in sensitivity and vulnerabilities within the scope of energy diplomacy directly affect bargaining power negatively. Therefore, under these conditions, the relative ineffectiveness in terms of bargaining power turns into an energy security threat for this party. In the context of the effect of bargaining power on energy diplomacy, the most well-known example in the international relations literature is undoubtedly the events between the EU and Russia. However, it is possible to say similar things for many states, especially in the last period. Turkmenistan is one of these states.

Although Turkmenistan is extremely valuable in terms of energy resources, it is among the countries where energy security has started to become a threat, especially in recent years. In this context, it is possible to state that the threats faced by Turkmenistan in the context of energy security are not experienced based on supply, contrary to the traditional understanding, but in the context of demand and energy diplomacy. So much so that Turkmenistan, where the export of energy resources has a significant share in the country's economy, is a country that is fragile and sensitive to both China and Russia, especially since it reaches a limited number of customers in energy relations shaped based on interdependence. Therefore, although it is rich in energy resources, this situation reveals an ineffectiveness in terms of bargaining power, and at this point, the energy security of the country is seriously adversely affected. The cessation of natural gas exports to Russia and the effects of PetroChina's suspension of export contracts in 2020 on the country's economy clearly showed that Turkmenistan's national security and energy security are likely to face adversity at any moment. Therefore, if the current conditions continue, it is obvious that any negative impact on the energy security of Turkmenistan is a serious threat. Under these circumstances, Turkmenistan has no choice but to reduce its sensitivities and vulnerabilities.

For Turkmenistan, orientation toward alternative markets and consumers is the most rational option for reducing its vulnerability. In this context, it is possible to state that the westward orientation as an alternative to Russia and China will contribute positively to reducing the energy security threats of Turkmenistan. Both internal and external dynamics have already created the necessary environment for Turkmenistan's westward orientation. For example, with the recent developments, it is possible to evaluate the European market. Turkmenistan's readiness for this orientation within the scope of external dynamics and Ashgabat's search for alternatives within the scope of internal dynamics. In other words, the energy crisis triggered by the armed conflicts between Ukraine and Russia for a while, when considered

together with its internal dynamics, is seen as creating conditions that are viable for both Turkmenistan and Europe. In this context, it is possible to talk about the full integration of Turkmenistan into the Southern Gas Corridor in the near future under the leadership of Turkey and Azerbaijan.

Ethical Declaration

During the writing process of the study titled "The West Alternative in Turkmenistan's Energy Security", scientific rules, ethical and citation rules were respected; no falsification was made on the collected data and this study was not submitted to any other academic publication platform for evaluation. The ethics committee approval required for the research was obtained from Kyrgyzstan-Turkey Manas University Rectorate Ethics Committee dated 28/02/2022 and numbered 2022-2/47. Participants were notified in advance that the data would be used only for scientific purposes and voluntariness was adopted as a basis.

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TÜRKÇE GENİŞ ÖZET

Enerji, insanlığın kendi kas gücünden yararlanmasıyla birlikte yaşamımıza dâhil olmuş ve çağın koşullarındaki değişimle bağlantılı olarak zaman içerisinde birey düzeyinde faydanın ötesine geçerek küresel ölçekte sürdürülebilirliğin en hayati bileşenlerinden birisi haline gelmiştir. Öyle ki tarihsel süreçteki bu gelişim, zamanla bir takım enerji kaynaklarının "stratejik" olarak nitelendirilmesini de beraberinde getirmiştir. Bu bağlamda bir takım enerji kaynaklarının stratejik olarak nitelendirilmesinde toplumların gelişimi ve sürdürülebilirlikleri arasında doğrudan bağlantı olduğunu ifade etmek mümkündür. Stratejik kaynaklar konseptinin içeriği de söz konusu düşünceyi desteklemektedir. Buna karşın doğadaki bütün enerji kaynaklarının stratejik nitelik taşımadığı aşikârdır. Dolayısıyla bu noktada bir takım kriterler belirleyici olmaktadır. Örneğin sosyo-ekonomik gelişimin o/onlar olmadan imkânsızlığı bunlardan sadece bir tanesidir.

Stratejik enerji kaynaklarının başlıca niteliklerinden birisi, sosyo-ekonomik gelişimin en hayati unsuru olmasıdır. Bir bakıma stratejik enerji kaynaklarının girdi olarak kullanıldığı istisnasız tüm coğrafyalarda, sosyo-ekonomik gelişim üzerindeki olumlu yöndeki etkileri doğrudan hissedilir olmaktadır. Stratejik enerji kaynaklarının tüketim artışı ve ekonomik büyüme arasındaki doğrusal ilişki bunun göstergelerindendir. Buna karşın günümüzde stratejik olarak enerji kaynaklarıyla ilişkili bazı olumsuz durumlardan söz etmek mümkündür. Söz konusu olumsuzluklar birçok nedenden kaynaklanmakla birlikte en temel faktörler iki baslıkta karsımıza çıkmaktadır. Bunlardan süphesiz günümüz stratejik enerji kaynaklarının dünya coğrafyasına asimetrik dağılmış olmasıyla ilişkiliyken bir diğeri kıt ve yenilenme sürelerinin çok uzun zaman gerektirmesidir. Tüm bunlar ışığında stratejik enerji kaynaklarıyla ilişkili erişim sorunu gibi ciddi bir olumsuzluk durumundan söz etmek mümkündür. Dolayısıyla stratejik enerji kaynaklarıyla ilişkili bir güvenlik tehdidi ortaya çıkmaktadır.

Karşılıklı bağımlılık, özellikle 1960'lı yıllardan bu yana devletler arasındaki enerji ilişkileri kapsamındaki etkileşimlerin genel çerçevesini şekillendirmektedir. Ancak her ilişki türünün karşılıklı bağımlılığın özelliklerini yansıtmadığının da altını çizmek gerekmektedir. Dolayısıyla devletler arasındaki olağan bir mal veya hizmet transferini karşılıklı bağımlılık olarak nitelendirmek son derece yanlıştır. Örneğin, değerli bir meta olmasına rağmen, devletler arasındaki elmas ticareti karşılıklı bağımlılığa dayalı olarak yürütülen bir faaliyet değildir. Bu bağlamda diğer türlerden karşılıklı bağımlılık nedeniyle etkileşimlerin ayırt edici özelliklerinden bahsetmek mümkündür. Bunlardan en önemlisi, ilişkinin olası kesintiye uğraması ya da sona ermesinin her iki tarafa maliyetler yüklemesi gibi bir şekilde olumsuz etkisinin olmasıdır. Bu noktada devletlerin olumsuz etkilendiğinin temel göstergelerinden birisi ise ilişkilerin kopmasına gösterdikleri reaksiyonun hızı ya da kalitesidir. Dolayısıyla alternatiflere yönelmenin önemi bu noktada en belirleyici kriter olarak karşımıza çıkmaktadır. Bütün bunlar dikkate alındığında enerji ilişkilerinin tam bir karşılıklı bağımlılık özelliği taşıdığını söylemek mümkündür. Şu anda karşılıklı bağımlılık teorisyenlerinin açıklamaları da söz konusu düşünceyi desteklemektedir.

1970'li yıllardan bu yana yaşanan enerji krizleri ve enerji güvenliği tehditlerinin kaynakları irdelendiğinde hemen hemen her bir hadisenin temelinde enerjinin uluslararası arenada kapsamındaki aktörler arası etkileşimlerde kaldıraç güç ya da "silah" olarak kullanılmasıyla doğrudan ya da dolaylı ilişkinin varlığı göze çarpmaktadır. Dolayısıyla stratejik enerji kaynaklarının gerek üretici gerekse tüketici konumdaki devletlerin elinde silaha dönüşmesinin 20. yy'ın son çeyreğinden bu yana süregelen enerji güvenliği tehditlerinin başlıca kaynaklarından birisi olduğunu ifade etmek mümkündür. Bu süreçte ortaya çıkan enerji güvenliğini tehdit eden olumsuzlukları tüm boyutlarıyla karşılıklı bağımlılık perspektifinden açıklamak mümkündür.

Enerji güvenliği konseptinin dönemin değişen koşullarına bağlı olarak geliştiği ve derinleştiği tartışmasıdır. Süreç içerisinde enerji güvenliğini olumsuz etkileyen yeni tehditlerin ortaya çıkması veya başka bir sorunlara dönüşmesini bu kapsamda ele almak mümkündür. Öte yandan belki de değişmeyen tek şey, enerji güvenliğinin devletlerin ulusal güvenliğinin temel bileşenlerinden biri olmaya devam etmesidir. Enerji ilişkilerinin karşılıklı bağımlılığın hemen hemen tüm unsurlarını yansıttığı göz önüne alındığında çeşitlendirme stratejileri söz konusu önlemlerin başında gelmektedir. Çeşitlendirme stratejileri hem üretici hem de tüketici tarafların enerji güvenliği sorunlarını tamamen ortadan kaldırmasa da en alt düzeye indirilmesinde son derece etkilidir. Karşılıklı bağımlılık ortamında hassasiyet ve kırılganlıkların pazarlık gücü üzerindeki olumsuz etkisi göz önüne alındığında çeşitlendirme stratejilerinin önemi daha net anlaşılacaktır. Tüm bunlar ışığında çalışmada Türkmenistan'ın enerji güvenliğini sağlamak amacıyla batıya yönelimiyle arasındaki ilişki analiz edilmektedir.