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CHANGING ENERGY GEOPOLITICS AND AFGHANISTAN

Anıl Çağlar ERKAN¹

Abstract

Conjuncture where geography is the determining factor, various countries come to the fore. For example, Afghanistan has been one of the important agenda items of international politics, especially since recent history. Undoubtedly, the qualities of the country are effective in keeping Afghanistan always on the agenda. However, it is seen that the most important features that make Afghanistan one of the parts of the agenda of global politics are related to its geography. The main purpose of the study is to analyze the dynamics that are effective in the characterization of Afghanistan as a failed state or a destroyed state within the scope of energy geopolitics. In this context, Afghanistan's prominent features in terms of energy geopolitics and their effects are discussed. Within the scope of the study, it is seen that a number of new situations have begun to emerge beyond the country's characteristics such as the transit location that will be associated with the geography until recently. It is possible to consider the resources that the country has in terms of vital inputs of the future energy order in this context. In the light of all these, the reflections of the changing conditions of the age and energy geopolitics on Afghanistan are analyzed in this study.

Keywords: Afghanistan, Energy Geopolitics, Geography, Energy, Energy Security Renewable Energy Resources.

¹ Doç. Dr. Burdur Mehmet Akif Ersoy Üniversitesi. anilcaglarerkan@gmail.com ORCID: 0000-0001-9693-6556

DEĞİŞEN ENERJİ JEOPOLİTİĞİ VE AFGANİSTAN

Öz

Coğrafyanın belirleyici olduğu konjonktürde çeşitli ülkeler ön plana çıkmaktadır. Örneğin Afganistan özellikle yakın tarihten itibaren bir şekilde uluslararası siyasetin önemli gündem maddelerinden birisidir. Şüphesiz ülkenin taşıdığı nitelikleri Afganistan'ın her daim gündemde olmasında etkilidir. Bununla birlikte Afganistan'ı küresel siyasetin gündeminin parçalarından biri haline getiren en önemli niteliklerinin coğrafyasıyla ilişkili olduğu görülmektedir. Çalışmanın temel amacı Afganistan'ın başarısız devlet ya da tahrip edilmiş devlet olarak nitelendirilmesinde etkili olan dinamiklerin enerji jeopolitiği kapsamında analiz edilmesidir. Bu bağlamda Afganistan'ın enerji jeopolitiği açısından ön plana çıkan nitelikleri ve bunların etkileri ele alınmaktadır. Çalışma kapsamında yakın tarihe kadar ülkenin coğrafya ile ilişkilendirilecek transit konum gibi niteliklerinden ötesinde bir takım yeni durumların ortaya çıkmaya başladığı görülmektedir. Ülkenin gelecek enerji düzeninin hayati girdileri bakımından sahip olduğu kaynakları bu kapsamda ele almak mümkündür. Tüm bunlar ışığında çalışmada çağın ve enerji jeopolitiğinin değişen şartlarının Afganistan'a yansımaları analiz edilmektedir.

Anahtar Kelimeler: Afganistan, Enerji Jeopolitiği, Coğrafya, Enerji, Enerji Güvenliği, Yenilenebilir Enerji Kaynakları.

Introduction

The world public opinion witnesses Afghanistan being depicted by associating it with terrorism, radical Islam, and invasions. In this context, it is possible to express that Afghanistan has a negative image in the minds, particularly in the field of international relations. However, it is also a reality that this negative situation regarding Afghanistan does not entirely reflect the truth. Even the rapid negative transformation of Afghanistan, which could be considered as one of the significant modern societies of the early 20th century, supports these expressions. Therefore, it is possible to state that the transformation of Afghanistan in the historical process, influenced by both internal and external dynamics, has an impact on the perceptions of the international public.

Especially since recent history, Afghanistan has become an important agenda item in international politics in one way or another. Undoubtedly, the qualities that the country possesses are influential in keeping Afghanistan in the agenda at all times. Moreover, the most significant qualities that have made Afghanistan a part of the global political agenda are related to its geography. Therefore, we can say that its geographical qualities are to some extent the most important determinants of Afghanistan's destiny. In this context, it is possible to describe the situation in which Afghanistan finds itself as a kind of geographical curse. The fact that

Afghanistan, with its geopolitical and geostrategic importance, has turned into a chessboard for external powers is indicated by its association with the thesis of a “destructured state.”

The main aim of the study is to analyze the dynamics that are effective in describing Afghanistan as a failed state or a destructed state within the scope of energy geopolitics. In this context, the qualities that stand out in Afghanistan’s energy geopolitics and their effects are discussed. Within the scope of the study, it is observed that beyond the country’s qualities, such as its geographical location related to transit, new situations have begun to emerge until recent history. It is possible to consider the resources that the country possesses in terms of vital inputs for the future energy order in this context. In light of all this, the study analyzes the reflections of the changing conditions of the era and energy geopolitics on Afghanistan.

1. Changes in Energy Geopolitics and Their Effects

Throughout history, it is possible to discuss the impact of energy geopolitics in almost every event, particularly crises, with an energy-based focus. Considering the increasing importance of geopolitics in the analysis of international relations literature, examining the geographical interactions and power struggles arising from these interactions, it has become inevitable for energy to be associated with geopolitics (Sevim, 2012, p.4379). In this context, the impact of energy-based crises that emerged from the 1970s is notable in making energy an integral part of geopolitics. However, energy geopolitics, which became a part of geopolitical analyses during this period and gradually gained prominence in the discipline of international relations, encompasses not only the areas where energy resources are located but also the supply-demand relationship, which can be evaluated under the dimension of actors related to energy, covering all geographical elements (Sevim, 2012, p.4380). Therefore, the scope of energy geopolitics includes all events that can be related to global geopolitics beyond just geographical elements (Sevim, 2012, p.4380). In this context, it is possible to talk about the interaction of global geopolitics with energy geopolitics, especially evident in recent developments. The rapid adaptation of energy geopolitics to the fast-changing structure of global geopolitics is undoubtedly the result of their interaction. Changes in one are directly reflected in the other, with energy geopolitics being the field where geopolitical changes are most pronounced (Sevim, 2012, p.4380).

The rapidly changing dynamic character of energy geopolitics has natural consequences. These consequences often lead to effects at different levels and in various areas. In terms of effects, the most commonly encountered situations are undoubtedly the agenda of international politics and changes in the geopolitical and geostrategic nature of states. Therefore, it is possible

to state that any development in energy geopolitics positively or negatively affects the agenda of international politics as well as the geopolitical and geostrategic importance of countries.

When considered in the context of energy geopolitics, the importance of countries in geographical terms is closely related to being the main actors in the global energy equation. In this context, the main actors in the global energy equation can be broadly defined as export-oriented, transit, and import-oriented economies. These actors are inevitably in an environment of interaction due to reasons such as the importance and access of energy resources. The interactions in this field, which can be called energy relations and have become increasingly complex, are conceptualized in the literature of international relations as mutual dependence. However, the relationship of mutual dependence that arises in the context of energy has a quality beyond the usual. This type of relationship goes beyond the relations between importing and exporting economies. This is particularly evident during the trade of strategic energy resources such as oil and natural gas. Countries located on energy transit routes geographically are included in this context. One of the main reasons for this is the functioning of the global energy order as a circulation network. In this context, the global energy circulation network consists of various and similar, rival or alternative sub-networks. The relationship and community formed by the interactions of these small networks constitute the World Energy Circulation Network. The preferred route for the global energy circulation poses significant changes in the geographical and human-environment relations of the region in question (Akdemir and Kuşçu, 2012, p.85). Therefore, it is possible to consider the changing geopolitical and geostrategic positions of states in the context of energy within this framework.

States are highly likely to undergo geopolitical and geostrategic transformations by directly experiencing changes in energy geopolitics. This transformation is also associated with changes in the qualities of states in the context of energy. Therefore, it is possible to speak of the existence of a connection between the changes in energy geopolitics and the transformation among the qualities of states. In this context, considering the changes in the conditions of the period, an economy in an importing position can transform into an importer or transit country. However, when examined in terms of the effects on the qualities of states, this change manifests in two different ways. The same can be said in terms of geographical qualities. Therefore, it is observed that changes in energy geopolitics have both positive and negative effects on states, including their geography. In this context, while negative effects are directly related to adverse changes in energy geopolitics, positive developments are associated with favorable changes. When considering positive effects, it is witnessed that the most radical changes in the qualities

and relative positions of states in energy geopolitics are seen in importers and transit countries. Because such changes undoubtedly signify the increased geopolitical and geostrategic importance of the state in that direction.

2. Overview of the New Energy Geopolitics and Critical Minerals

From a strategic perspective, it is observed that energy geopolitics has undergone significant changes and transformations in the historical process. In this context, the discovery of oil has led to certain changes. However, globally, there has been a transition from coal to oil in energy production. One of the main reasons for this painful process is the struggles for dominance over oil. The effort to seize and control globally distributed oil reserves has left its mark on this period, asymmetrically spread across the world's geography (Sevim, 2020, p.57). Therefore, it is possible to state that energy geopolitics has shaped itself in this new era based on oil developments.

With the discovery of oil, the global energy order has undergone a radical process of change, and oil has quickly become the most consumed strategic energy source. In this context, especially the 20th century can be characterized as a period where oil technologies dominated the field of energy production entirely (Sevim, 2020, p.57). However, with certain events, especially in the last quarter of the 20th century, the throne of oil began to shake. The 1973 Oil Crisis is perhaps the most important of these events. Because crises like these, stemming from oil, have caused adverse effects on a global scale. Nevertheless, certain facts have become crucial. It is possible to consider the realization of the vital importance of energy security for states in this context. Energy security, which indisputably gained vital importance with the oil crisis, emerges as one of the fundamental dynamics of the changing process in energy geopolitics in the subsequent period. The transition to an energy geopolitics where natural gas gained importance with the oil crisis is an indicator of this. Therefore, it is possible to state that a new era defined from the perspective of fossil energy sources has been entered with the developments experienced.

Energy geopolitics is undergoing a radical transformation process at a very fast pace in recent years. This process, due to its radical nature, significantly differs from the changes experienced in previous periods. Associating the main reasons for this transformation process with the concerns of energy security and the solutions that have become compulsory in relation to changing conditions of the era would not be incorrect. Therefore, it is possible to consider the main reasons for the radical transformation process in energy geopolitics as events related to the reserve status of strategic energy resources, rapid changes in the demands of major

players in the energy chess for these resources, and developments in energy technologies (Sevim, 2020, p.58).

In the new era, it is highly probable that energy geopolitics shaped within the framework of fossil-based strategic energy sources will become compatible with the development of renewable energy sources. In this context, it is possible to speak of the influence of different dynamics in the new era compared to the previous ones. The radical characterization of the transition process to renewable energy sources is one of the main reasons for this. Undoubtedly, one of the significant dynamics in this regard is the climate change associated with the environment, which has become one of the main components of energy security in recent times. Therefore, it is possible to state that the combination of the climate change issue and the rapid cost reductions in renewable energy technologies with other dynamics leads to the redefinition of energy geopolitics (Blondeel, Bradshaw, Bridge, and Kuzemko, 2021, p.1).

The recent overall outlook represents a shift in the position among strategic energy sources, from the fossil fuel era to a new era characterized by low-carbon and green energy (Ediger, 2017, p.49). As a result of the transition to green energy, the transformation in the new energy geopolitics has its basis in renewable energy sources, which, unlike fossil fuels, are symmetrically distributed across the world geography, reducing the traditional energy geopolitics' regional risk (Sevim, 2020, p.60). Therefore, emerging energy sources in the new era are becoming more accessible. However, this does not imply that issues related to energy have no impact on the geopolitical and geostrategic characteristics of countries. In this regard, while the relative problems regarding access have been eliminated, issues related to energy will continue to affect the relative positions of countries in different ways in the new era.

Today, resources classified as green are more easily accessible compared to fossil energy sources and are not monopolized by certain major economies. This situation leads to some changes in traditional energy geopolitics and brings about different dynamics. These emerging dynamics can be considered as new parameters of the changing energy geopolitics. So, with the ongoing transformation, these new parameters replace the determinative effect of energy resources on the relative positions of states. These parameters are directly related to the ability to benefit from renewable energy sources. As it is known, the use of renewable energy sources is possible through their conversion into another form. However, this conversion process is not as easy as it may seem. Indeed, certain qualifications and requirements are involved in carrying out activities in this regard. Renewable energy technologies and economic capabilities can be considered within this context. However, in terms of their impact on the relative positions of

states, a different situation emerges. In this context, it is possible to state that some factors related to energy technologies are effective in terms of the qualitative characteristics of the relative positions of states. Therefore, we can relate the growing importance of critical minerals and rare earth elements in the new energy geopolitics to the development of renewable energy technologies.

In the transition process to clean energy, it is known that certain substances classified as critical minerals and rare earth elements have started to gain importance. The most significant reasons for this lie in the substantial differences between an energy system operating with zero-carbon technologies and a system fueled by traditional fossil-based fuels. For instance, constructing solar energy facilities and wind farms generally requires more mineral usage than their hydrocarbon-based fuel counterparts. It is possible to consider this in the context of the increase in needs associated with the transition to a decarbonized energy system. An example of this is that a typical electric car requires six times more mineral input compared to a traditional car. In this context, the inevitability of various consequences of directional trends can be observed. The impact of these consequences is evident in almost every aspect related to the renewable energy sector. It is possible to consider the increases in demand for certain raw materials in line with the development of the sector in this context. According to data from the International Energy Agency (IEA), since 2010, the average amount of minerals required for a new electricity generation capacity unit has increased by 50% as the share of renewable energy has increased (International Energy Agency, 2021, p.4).

The types of mineral resources used in the renewable energy sector vary according to technology. For example, lithium, nickel, manganese, and graphite are crucial for the performance, longevity, and energy density of batteries. The necessity of rare earth elements arises in issues related to the use of permanent magnets vital for wind turbines and electric vehicle (EV) motors. For instance, electric grids require large amounts of copper and aluminum. These minerals are referred to as fundamental building blocks for all technologies related to electricity. In this context, the increase associated with the transition to a clean energy system is observed within the framework of the requirements for these minerals. In light of all these, it is possible to interpret the developments related to this as the mining sector emerging as a significant force in energy markets. This is because until the mid-2010s, most minerals represented a small part of the total demand for the energy sector. However, especially with the recent acceleration of energy transitions, clean energy technologies have become the fastest-growing segment of demand (International Energy Agency, 2021, p.5).

The distribution of critical minerals and rare earth elements, which are essential components of renewable energy source technologies, across the world is similar to fossil energy sources. However, it is witnessed that a significant portion of these raw materials is in regions that can be described as politically and economically turbulent and unstable. Therefore, with the increasing geopolitical and geostrategic importance of these resource-rich regions, it becomes inevitable for the new energy geopolitics to focus on these areas. The future importance of the Afghan region in this regard is likely to increase.

3. Afghanistan's Energy Outlook in Classical Energy Geopolitics

Global energy geopolitics has evolved around events based on fossil energy sources since the early 1900s. Starting with coal, this process advanced to a new stage with the use of oil, and in the subsequent years, the addition of natural gas continued this trend. The developments during this classical energy geopolitics era significantly contributed to the conceptual deepening of energy geopolitics. Particularly, the contributions of oil and natural gas in surpassing the traditional trade relationship between importers and exporters and including transit states in this framework are undeniable. In this context, it would be a correct approach to consider Afghanistan in classical energy geopolitics based on its fossil energy resources and geographical location.

The strategic energy resources based on fossil fuels are oil, coal, and natural gas. When considered in terms of reserves, Afghanistan does not seem to have a promising situation in terms of fossil-based strategic energy resources. However, recent reports suggest the existence of oil and natural gas deposits in locations such as Amu Darya, Afghan-Tajik, Tripul, and Kashkari in the north of the country. Nevertheless, despite the lack of concrete data, it can be stated that research related to oil and natural gas has been conducted in the country since the 1950s, resulting in the discovery of six oil and eight natural gas fields (Assifi, 1982/83, p.255). However, as of the end of 2021, it is noticeable that the country has not been able to put these discoveries into production (CIA Factbook, 2022). But here, a distinction needs to be made. The available data indicate the current absence of oil reserves and production in Afghanistan. However, this situation may be temporary, considering experts' statements that the country is ready to extract oil from more than 50 wells.

The situation is somewhat different when it comes to natural gas. Therefore, the situation is not the same for Afghanistan regarding natural gas and coal as it is for oil. As of the end of 2021, the country's natural gas reserves are approximately around 50 billion cubic meters (CIA Factbook, 2022). In terms of natural gas production and consumption data, it is observed that

Afghanistan's annual production and consumption rates are the same. Because in 2021, the approximately 80 million cubic meters of natural gas produced in the country was entirely allocated to domestic consumption. Therefore, Afghanistan can be described as a closed country concerning natural gas import and export. Undoubtedly, several factors are effective in the country's closed nature. In this context, excluding political factors, the qualities of Afghanistan's energy sector emerge as the most important dynamics. The country's energy sector is significantly underdeveloped in many aspects. Moreover, it can be characterized as primitive, with almost no restoration in terms of technology. The formation of the sector dates back to the 1950s. In those years, the main actor in energy activities in Afghanistan was the Soviet Socialist Republics (USSR). Considering the historical context of Marshall Aid distributed by the United States, the USSR being the main actor in the region becomes more understandable. This situation is crucial in terms of classical energy geopolitics because during this process, the USSR seized the opportunity to intervene in Afghanistan. In this context, the announcement on December 18, 1955, by Moscow that it would provide Afghanistan with its first major development credit is one of the significant turning points. What still makes these credits significant is undoubtedly that a portion of them was allocated to hydrocarbon activities in the country (Assifi, 1982/83, p.255).

Among the fossil energy resources, Afghanistan's coal reserves stand out as a step further compared to other sources. The country's coal reserves are reported to be 66 million metric tons. When considered in terms of import and export, it is observed that the country is closed to the outside world according to the 2020 data, with the entire annual 2 million tons of coal allocated to domestic consumption (CIA Factbook, 2022). However, recent efforts by both the Afghan government and the International Donor Community to overcome Afghanistan's current situation are noteworthy. Because both the Afghan administration and the International Donor Community agree that Afghanistan's economic future is possible through the development of its natural resources (Wnuk, 2016, p.321). However, in practice, things are not as easy as they seem. Therefore, there are some obstacles to developing the country's coal deposits. Besides politics, the most significant obstacle to Afghanistan realizing this development opportunity is the lack of sufficient energy to process the extracted ores in a value-added way (Wnuk, 2016, p.321).

Afghanistan's lack of richness in strategic energy resources in the current era does not mean its insignificance in classical energy geopolitics. Despite being a landlocked mountainous country geographically, Afghanistan is a place historian have referred to as the "Heart of Asia."

Although geopolitically forgotten by the rest of the world from time to time, Afghanistan has a pivotal position directly felt in terms of geostrategic importance when its place is altered or eliminated (Assifi, 1982/83, p.253). The intervention of the USSR in the country with the beginning of the Cold War and the subsequent shift in power balances are indicators of this. Therefore, although it seems forgotten from the perspective of classical energy geopolitics, this situation is not permanent. The increasing influence of major players in the global energy sector, especially in recent times, is evidence of the changing dynamics in classical energy geopolitics. In this context, the fact that the increased interest of global actors in the country coincides with the period when we witness the change in classical energy geopolitics is extremely remarkable. Therefore, it can be stated that Afghanistan is becoming increasingly important in the new era of energy geopolitics.

4. Increasing Significance of Afghanistan in the New Energy Geopolitics

Looking at the world map, it is evident that Afghanistan holds a crucial position in terms of its geopolitical location. Afghanistan's geographical position at the intersections of the north-south and east-west geopolitical axes of the Asian continent is noteworthy. Moreover, this physical location makes Afghanistan an important agenda item in global politics. The fact that Afghanistan, due to its geographical position, has become an area of influence for both the continent and global superpowers is an example of this (Karakaya and Nazari, 2022, p.143). In this context, it can be stated that Afghanistan is one of the key elements of the global-scale great game played out on the chessboard. Undoubtedly, this situation is also valid for the great game evolving in the framework of energy geopolitics. However, this should not be perceived as a new phenomenon for Afghanistan, as its historical importance continues to grow in the context of new energy geopolitics. Therefore, associating the main effects of the transition to the new energy geopolitics on Afghanistan with its role as a key element of the great game is possible.

4.1. Renewable Energy Potential and Afghanistan

In the transition period of energy geopolitics that we are witnessing, it is possible to talk about the constructive impact of some factors on the system's actors. When considering Afghanistan, one of the leading factors is the rare earth elements that the country possesses. Therefore, it is possible to express that Afghanistan, which is insufficient in terms of the basic elements of the old energy geopolitics, is increasingly coming to the forefront in qualitative terms in line with the conditions of the period. In this context, two main factors that are effective in bringing Afghanistan to the forefront in the context of the new energy geopolitics in terms of quality, considering the changing conditions of the period, stand out. The first is undoubtedly

the potential that the country has in terms of renewable energy sources despite being poor in hydrocarbon reserves. In other words, Afghanistan is considered to have significant potential for energy production from renewable sources (Baziari, 2020). However, it is observed that Afghanistan faces some problems in the context of its development in this field. Although the country has significant potential for energy production, Afghanistan ranks very low in the world rankings in terms of the population's access to grid electricity. It is estimated that only about 30% of the country's citizens have access to electricity, with the reliable access rate being only between 10-15% (Baziari, 2020).

Even the fact that only 11% of the rural areas where three-quarters of the Afghan population lives are connected to the grid poses a significant problem for the country (Baziari, 2020). However, evaluated in the context of recent events, it can be seen that the problem can be overcome. In this context, the most important developments are witnessed in connection with the significant increase in international-scale aid to the country in recent years. With the international aid given to the country in recent years, Afghanistan has experienced significant expansion, especially in the electricity sector. However, relative to the country, this expansion is still inadequate. Therefore, while the electricity sector of Afghanistan has expanded significantly with international assistance in recent years, this progress is still not sufficient to reduce the country's dependence on imported energy. At this point, it is observed that some suppliers stand out for Afghanistan. It is known that approximately 80% of the country's energy is supplied by Tajikistan, Iran, Uzbekistan, and Turkmenistan, which economically corresponds to approximately \$300 million annually. Considering all this, it can be said that Afghanistan is facing a significant energy security problem such as dependence on imported energy.

While Afghanistan has made progress in the energy sector, the issue of energy import dependency is likely to remain on the agenda for some time. However, available data suggests that the energy security problems associated with this area can be overcome in the medium and long term. In this context, it is crucial to consider the country's potential in renewable energy sources as a significant factor in the medium and long term. Experts widely acknowledge Afghanistan's substantial potential in renewable energy sources, making it possible for the country to become self-sufficient by developing indigenous power resources. Unlike many other developing countries struggling to identify clean energy sources, Afghanistan possesses significant assets in renewable energy. For instance, the southern part of the country offers substantial opportunities in solar energy, with an average of 8.8 hours of sunlight per day and approximately 300 sunny days annually, providing a potential to generate 220,000 MW of

energy. In terms of solar radiation, this potential is expressed as 5.5-6.5 kWh of solar radiation per square meter per day (Patmal and Shiran, 2021, p.106). The exceptional productivity levels in the deserts of Kandahar, Helmand, Hairatan, and Laghman contribute significantly to this solar energy potential. Consequently, photovoltaic systems could be a highly suitable alternative for Afghanistan (Baziari, 2020).

Another area that stands out in relation to Afghanistan's potential in renewable energy sources is hydroelectric power. Afghanistan, with its mountainous terrain and extensive river systems, has a hydroelectric energy potential exceeding 23,000 MW. Approximately 87% of this potential, around 20,000 MW, is concentrated in large rivers such as Amu, Panj, and Kokcha in the north and east of the country, while over 8.3%, approximately 1,900 MW, is located in the eastern part of the Kabul region. Additionally, experts emphasize the presence of approximately 800 MW of hydroelectric energy potential (3.5%) in provinces such as Balkh and Jowzijan in the north. Another approximately 500 MW (2.2%) is found in the central-western part of the country (Shirzad and Tarhan, 2019, p.173). Despite this potential, available data indicates that Afghanistan has not fully utilized its hydroelectric energy resources. The country has the potential to use over 23,000 MW in micro, medium, and macro-scale facilities (Karabay, 2015). Recent developments, such as the construction of new hydroelectric power plants and the rehabilitation of existing ones, indicate a positive trend. For instance, according to a report by the United Nations Development Programme, Afghanistan has witnessed the construction of nearly 250 micro-scale hydroelectric power plants in the last 15 years (Shirzad and Tarhan, 2019, p.173).

In terms of renewable energy sources, another prominent aspect in Afghanistan is its wind energy potential. The country has a significant potential in this field, with approximately 652,864 km² of its total area of 31,600 km² (4.84%) suitable for large-scale and highly efficient wind power plants, according to a report by the United States Renewable Energy Laboratory (UYEL). The total potential of this area is estimated to be around 158 GW (Ershad, Brecha, and Hallinan, 2016, p.446). Herat in the west and Balkh in the east are two of the main areas with significant wind resources in the country (Ershad, Brecha, and Hallinan, 2016, p.447). However, challenges similar to other areas hinder the full utilization of this wind energy potential in Afghanistan. The country's Energy Ministry cites weak infrastructure as a key obstacle, limiting the feasible installation capacity to 66,726 MW (Shirzad and Tarhan, 2019, p.171). The obstacles include insufficient expertise in renewable energy technologies and the inability to formulate effective policies, making policy ineffectiveness a significant barrier in

Afghanistan. The ineffectiveness of policies in Afghanistan is particularly evident in the lack of consideration for stakeholders' views and feedback in the policy development process. As a result, energy policies in Afghanistan are predominantly developed by the central administration's energy policy makers, without adequate involvement from other stakeholders. Consequently, Afghanistan's political stance becomes a significant impediment to the country's energy sector (Patmal and Shirani, 2021, p.106). Nevertheless, Afghanistan has taken initiatives to overcome these issues with certain practices. For instance, the RER2032 roadmap provides a framework for addressing these challenges. According to Afghanistan's Renewable Energy Roadmap for 2032, the country aims to achieve a 600 MW electricity generation capacity from wind energy by 2032 (Asian Development Bank, 2017, p.54).

Conclusion on Afghanistan's emerging energy geopolitics, initiatives aimed at changing Afghanistan's relative inadequacy in the new energy geopolitics are crucial. However, it cannot be claimed that the country has fully embarked on a transformative journey. The effectiveness of these initiatives will become clearer through medium and long-term returns. Therefore, describing Afghanistan's renewable energy initiatives for adapting to the new energy geopolitics as a radical transformation in the short term is challenging. Nevertheless, based on the available data, certain realities can be identified. In light of all this, it can be said that Afghanistan is developing in connection with the new energy geopolitics, and the process is progressing positively.

4.2. Potential of Critical Minerals and Afghanistan

Developments in the new era of energy geopolitics are making Afghanistan, already a key player, even more important. In this context, the transformation associated with the increasing use of renewable energy resources has direct implications for Afghanistan in terms of energy geopolitics. Consequently, with Afghanistan gaining prominence in connection with the transformation, there is an undeniable link between the progress and advancements in the field of renewable energy. In addition to the potential of renewable energy sources, the increasing importance of Afghanistan in the new era of energy geopolitics is influenced significantly by energy technologies in this field. Therefore, Afghanistan becomes a key player in the new energy geopolitics not only due to its potential in renewable energy sources but also because of the serious impact of energy technologies in this area, which are essential components of technological development required for the consumption of renewable energy sources. When looking at the critical industrial minerals, it is interesting to note that Afghanistan, a significant part of which is made up of natural resources, presents a unique

picture contrary to expectations. For example, a news article published by The New York Times in 2010 revealed that Afghanistan had approximately \$1 trillion worth of untapped rare mineral reserves (Risen, 2010). This news indicated that beyond the known reserves, Afghanistan had discovered untapped mineral deposits in quantities that could fundamentally change the country's economy and perhaps the Afghan war itself, according to senior U.S. officials at the time (Risen, 2010). One of the most significant impacts of this news was that it drew more global attention to Afghanistan in a different context. As a natural consequence of these developments, the increased interest and orientation of global powers towards the country have become one of the main agenda items in international politics again. For example, a Pentagon information note supported thoughts related to the increasing importance of Afghanistan, stating that Afghanistan could be the "Saudi Arabia of Lithium," an important raw material for laptop batteries and BlackBerries (Risen, 2010). Certainly, the observations related to the country were not limited to this. Therefore, the results obtained from subsequent research shortly after suggesting that realities beyond the expressions made have come to light. Because the available data indicates the presence of previously unknown deposits with large veins of critical industrial metals such as iron, copper, cobalt, gold, and lithium, exceeding the expectations in terms of both size and the minerals essential for modern industry. In connection with this, leading experts in the world emphasize that Afghanistan can eventually be transformed into one of the most important mines (Masood, 2021).

The undeniable connection between Afghanistan's natural resources and its progression as a key player in the new energy geopolitics is evident. Although Afghanistan has petroleum, natural gas, and coal reserves, which are vital elements of the former energy geopolitics, it is rich in natural resources such as iron ore, certain rare earth elements, lithium, chromium, lead, zinc, copper, gold, uranium, and bauxite, whose importance is increasing in the new era (Masood, 2021). In this context, one of the natural resources highlighted in terms of renewable energy technologies is copper. According to a report published by the Afghanistan Ministry of Mines and Petroleum in 2019, the country's copper reserves are approximately 30 million tons. However, shortly after, the Ministry revised this reserve quantity by announcing the discovery of an additional 28.5 million tons of copper in unexplored porphyry deposits. In light of all this, it is possible to state that Afghanistan has approximately 60 million tons of copper reserves, valued at tens of billions of dollars, from an economic perspective. In this context, it is noteworthy that the economic value of these reserves has made Afghanistan increasingly important in the new energy geopolitics. However, it is not limited to this. Therefore, factors

associated with the increased interest and orientation of global powers towards Afghanistan become more prominent at this stage. Because, more important than the presence of reserves is the ability to benefit from them, becoming a more crucial quality for Afghanistan in the new era of energy geopolitics.

It is possible to argue that the increased global interest and orientation towards Afghanistan in the context of the new energy geopolitics are closely related to the country's rich natural resources, despite lagging far behind in the energy sector of the era. In this regard, it could be claimed that the inclination and growing interest of the prominent actors in the international system towards Afghanistan have become a fundamental factor in the country's increasing importance in the new energy geopolitics. The most prominent country in the global actors' orientation towards Afghanistan is undoubtedly China. For instance, the Metallurgical Corp of China (MCC) and Jiangxi Copper consortium have been operating in Afghanistan since 2008 under a 30-year leasing agreement for Mes Aynak, the country's largest copper project (Masood, 2021). However, the natural convergence of a relatively poor country like Afghanistan with China becomes apparent in this context. Despite being one of the world's poorest countries, Afghanistan's wealth offered by its mountainous geology naturally attracts China's direct interest. In such an environment, China's convergence with Afghanistan, which is rich in geological resources, controlling many rare earth elements used in various technologies, including components in electric vehicles and touch screens in smartphones, becomes inevitable (Shah, 2022). Additionally, it is possible to point out some factors that have paved the way for China's rapprochement with Afghanistan. China's diplomatic and commercial moves towards Afghanistan in this regard can be considered. However, what makes the convergence between the parties particularly important is Beijing's attitude towards the Taliban, which has been associated with terrorism by the international public. China continues its diplomatic mission in Kabul, hinting that it may formally recognize the Taliban government. Moreover, with recent developments, China has gone a step further, expressing opposition to international sanctions against Afghanistan. In this context, it can be stated that Beijing has positioned itself well to make deals with the Taliban, especially in the mining sector (Blumenthal, Purdy, and Bassetti, 2022). The statements from the Taliban side support this expression. For example, Zabihullah Mujahid, the Taliban spokesperson, recently stated that China's investments are crucial for the reconstruction of Afghanistan (Bloomberg HT, 2021).

The idea of harnessing Afghanistan's underground wealth is not a new one. Therefore, the aspirations of Afghanistan's previous administrations to process its estimated trillion-dollar

worth minerals and contribute to the country's economy are known. However, this situation has been hindered by the wars and violent events in the region. Now, witnessing the Taliban making efforts to realize these aspirations in a similar manner, it is evident that the country's current situation makes it impossible for the Afghan government to achieve this. Foreign investment becomes necessary at this point, and the increasing interest of countries like China in the country is becoming inevitable. However, China is not the only actor in the orientation towards Afghanistan in terms of the new energy geopolitics. Especially the recent withdrawal of the U.S. from the country has brought various actors' attention to Afghanistan. In this context, countries like Iran, Russia, and Turkey are attempting to take advantage of the power vacuum created by the U.S. departure with their investments (Euronews, 2022). Additionally, statements from countries like India, Pakistan, Uzbekistan, and Tajikistan, expressing their readiness for dialogue with the Taliban regime, imply the involvement of other actors in the game as well.

Conclusion

Despite being the focal point of wars and conflicts, especially since the 9/11 incident, Afghanistan presents an overall image of a failed state. While external factors are often cited as influencing the country's situation, Afghanistan's attitudes and behaviors have generally had a negative impact on its international standing in geopolitics. For example, the active presence of a globally recognized terrorist organization like Al-Qaeda in the country until recently can be considered within this context. Moreover, the takeover of the country's government by the Taliban after the U.S. withdrawal has further tarnished Afghanistan's negative image on the world stage. Therefore, despite possessing significant cultural heritage, especially since the beginning of the 21st century, international dynamics have played a crucial role in shaping Afghanistan's unfavorable image.

Labeling Afghanistan as a failed state, often associated with external interventions aligning with the interests of major powers and attempts to isolate it from the international arena, is directly related to its geopolitical and geostrategic potential. Despite being geographically closed, Afghanistan has substantial potential in geopolitical and geostrategic terms. Recent developments have taken this potential to a new level, indicating that Afghanistan has become more important geopolitically and geostrategically. In other words, recent geopolitical and geostrategic developments have contributed to Afghanistan's increased significance. The key development that elevates Afghanistan's importance is undoubtedly the

transformation in the global energy order. In this context, we can say that Afghanistan has become a crucial player in the game of the new energy geopolitics.

One of the most natural outcomes of the transformation in the global energy equation is its impact on energy geopolitics. The shift in the fundamental structure of the equation in the global energy order has led to a new era in energy geopolitics. The increase in geopolitical and geostrategic importance of Afghanistan emerges in this context. Despite being among the world's poorest economies, Afghanistan's mountainous geological structure offers a set of riches that could potentially turn the country into a significant component of the new energy geopolitics. In this regard, it is possible to assert that Afghanistan's potential to become a key player is related to its richness in vital raw materials necessary for the functioning of the new energy order. Therefore, limiting the increased importance of Afghanistan solely to its minerals would be highly misleading. At this stage, some potentials of the country related to the new energy geopolitics come into play, particularly its potential in renewable energy sources.

In the context of the transition to the new order, Afghanistan's potential plays a crucial role in making it one of the most important agenda items in international politics. However, the current situation of Afghanistan has different consequences for the new energy geopolitics. In this context, it is possible to point out some reflections of Afghanistan's inadequacy in converting its existing potential into a usable form, especially in the energy sector, on the new energy geopolitics. The inevitable focus of powerful actors in the system on Afghanistan is evident. Despite being aware of its potential in the new energy geopolitics, the current situation requires the country to rely on foreign investments. Therefore, in such an environment, the inevitable orientation of the strong actors in the system who are already aware of the country's wealth towards Afghanistan becomes unavoidable. China, controlling globally significant raw materials crucial for renewable energy technologies, is undoubtedly the most important actor in this context. Moreover, similar initiatives from countries such as Russia, Turkey, India, and Iran are observed. Thus, all these developments make Afghanistan one of the essential components of the new energy geopolitics. In this context, it can be stated that Afghanistan is increasingly becoming one of the significant players in the new energy geopolitics.

REFERENCES

- Akdemir, İ., and Kuşçu, V. (2012). Küresel enerji eksenleri ve Türkiye'nin coğrafi konumu. *Marmara Coğrafya Dergisi* (26), 82-107.
- Asian Development Bank. (2017). TA-8808 AFG: Renewable energy development in Afghanistan. New Delhi: ITP India.
- Assifi, A. T. (1982/83). The Russian rope: Soviet economic motives and the subversion of Afghanistan. *World Affairs*, 145(3), 253-266.
- Baziari, T. (2020). Powering Afganistan with renewable energy. *Environmental Circular Economy*, 1-5.
- Blondeel, M., Bradshaw, M., Bridge, G., and Kuzemko, C. (2021). The Geopolitics Of Energy System Transformation: A review. *Geography Compass*, 15(7), 1-22.
- Bloomberg HT. (2021). Taliban: Çin yatırımları Afganistan'ın yeniden inşası için çok önemli. <https://www.bloomberght.com/taliban-cin-yatirimlari-afganistan-in-yeniden-insasi-icin-cok-onemli-2286858>. Erişim tarihi: 01.09.2022.
- Blumenthal, L., Purdy, C., and Bassetti, V. (2022). Chinese investment in Afghanistan's lithium sector: A long shot in the short term. <https://www.brookings.edu/blog/up-front/2022/08/03/chinese-investment-in-afghanistans-lithium-sector-a-long-shot-in-the-short-term/>. Erişim tarihi: 01.09.2022.
- CIA Factbook. (2022). Afghanistan. <https://www.cia.gov/the-world-factbook/countries/afghanistan/#energy>. Erişim tarihi: 25.07.2022.
- Ediger, V. Ş. (2017). Enerji jeopolitiğinin uluslararası iklim değişikliği girişimleri üzerindeki etkisi. *Uluslararası İlişkiler*, 14(54), 45-70.
- Ershad, A. M., Brecha, R., and Hallinan, K. (2016). Analysis of solar photovoltaic and wind power potential in Afghanistan. *Renewable Energy*, 85, 445-453.
- Euronews. (2022). Çin yatırımlarını çekmek isteyen Taliban Buda heykellerini koruma altına aldı. <https://tr.euronews.com/2022/03/27/cin-yat-r-mlar-n-cek-mek-isteyen-taliban-buda-heykellerini-koruma-alt-na-ald>. Erişim tarihi: 01.09.2022.

- International Energy Agency. (2021). The role of critical minerals in clean energy transitions. Paris: International Energy Agency.
- Karabay, Z. B. (2015). Afghanistan targets renewables to meet domestic demand. <https://www.aa.com.tr/en/energy/renewable/afghanistan-targets-renewables-to-meet-domestic-demand/8244>. Erişim tarihi: 24.08.2022.
- Karakaya, İ., and Nazari, M. İ. (2022). Afganistan'da Taliban iktidarı dönemleri (1996-2001 ve 2021 sonrası) ve Afganistan dış politikası. *Karadeniz Teknik Üniversitesi Sosyal Bilimler Enstitüsü Sosyal Bilimler Dergisi*, 12(23), 143-169.
- Masood, A. (2021). Reuters. What are Afghanistan's untapped minerals and resources? <https://www.reuters.com/world/asia-pacific/what-are-afghanistans-untapped-minerals-resources-2021-08-19/>. Erişim tarihi: 30.01.2024.
- Patmal, M. H., and Shirani, H. (2021). Public awareness and their attitudes toward adopting renewable energy technologies in Afghanistan. *International Journal Of Innovative Research and Scientific Studies*, 4(2), 105-117.
- Risen, J. (2010). U.S. identifies vast mineral riches in Afghanistan. <https://www.nytimes.com/2010/06/14/world/asia/14minerals.html>. Erişim tarihi: 24.08.2022.
- Sevim, C. (2012). Küresel enerji jeopolitiği ve enerji güvenliği. *Journal of Yaşar University*, 26(7), 4378-4391.
- Sevim, C. (2020). Yeni enerji jeopolitiğine genel bakış. *İzmir Sosyal Bilimler Dergisi*, 2(2), 57-63.
- Shah, S. (2022). China pursues Afghanistan's mineral wealth after U.S. exit. <https://www.wsj.com/articles/china-pursues-afghanistans-mineral-wealth-after-u-s-exit-11647172801>. Erişim tarihi: 01.09.2022.
- Shirzad, A. M., and Tarhan, İ. (2019). Afganistan'ın yenilenebilir enerji kaynaklarının teorik potansiyelleri ve kullanım kapasiteleri. *Çanakkale Onsekiz Mart Üniversitesi Fen Bilimleri Enstitüsü Dergisi*, 5(1), 157-186.
- Wnuk, C. (2016). Coal resource potential of Afghanistan. *International Geology Review*, 58(3), 321-341.