Original Article: Investigating the Impact of Energy on Iran's National Security

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ABSTRACT

International relations experts acknowledge that one of the fundamental indicators of a hegemonic power in any age is the control of energy resources, lines, and routes. This fact has turned energy today into a tool of power and a goal of power. Statistics on world oil reserves show that 62% of the world's proven oil reserves are currently concentrated in the Persian Gulf region. According to the US Energy Information Administration, global oil consumption will increase by 50 % over the next two decades, from 85 million barrels per day in 2005 to 118 million barrels per day in 2025. Major oil market players are pushing for a national energy policy to secure their national interests. Influential countries in the global oil arena have found that as the concept of energy security becomes more complex and evolving, energy security. National interests are realized, requires the design and implementation of a "comprehensive national energy policy" that can address all specific dimensions of energy. The pervasive, which has short and long-term dimensions and solutions, also came around.

Introduction

Pursuing, achieving, and achieving national security for social and political cohesion is considered one of any country's goals and security policies; it takes the necessary sensible strategies and policies to achieve it [1]. Regarding the definition of the concepts of "national security", it should be said that a small number of political thinkers equate the concept of national security with the concept of "government" in the sense that according to the Treaty of Westphalia in 1648, they know [2]. However, many other

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political thinkers see the concept of national security as a Western American commodity, a product of the founding of the national security council under the national security act of 1947. What needs to be mentioned here is that the truth and the need for security in society and among a nation are twinned and in line with the formation of society and government, and the need to establish it is felt in all societies, so that Islam also creates and realizes it in society (Figure 1). But what is meant in this society is national security as a term in the culture of political science. In general, it should be said that accelerating and carrying out the processes of nation-building and state-building as a complementary part of defining the concept of national security that can be applied to third-world countries is necessary [3].

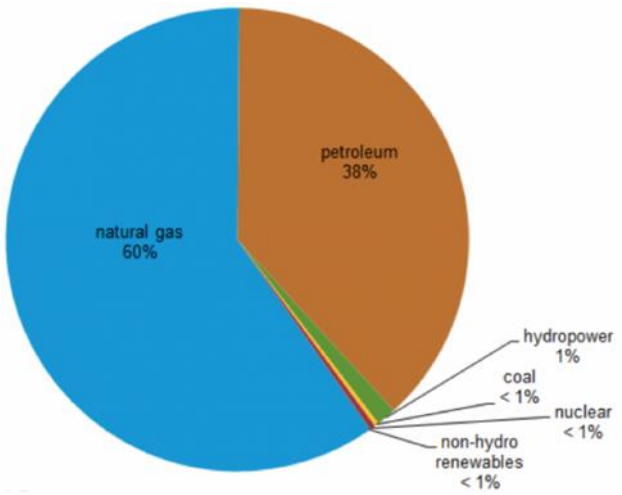

Figure 1: Render of the primary model

Energy policy at Heart of National Security Strategy

International relations experts, citing theories, acknowledge that one of the fundamental indicators of a hegemonic power in any age is the control of resources, lines, and energy transfer routes. This fact has turned energy today into a tool of power and a goal of power. In this context, the study of the geographical distribution of world oil reserves indicates the concentration of these resources in the Middle East and especially the Persian Gulf. Statistics on world oil reserves show that 62% of the world's proven oil reserves are currently concentrated in the Persian Gulf region. Global oil consumption is expected to increase by 50 percent over the next two decades, from 85 million barrels per day in 2005 to 118 million barrels per day in 2025, according to the US Energy Information Administration [4]. US oil consumption will increase from 20 million barrels per day to 29 million barrels during the same period, and the net share of US oil imports will increase from 53% to 70%. The US Energy Information Administration predicts that by 2025, energy consumption in developing countries will double. According to this forecast, Asia's share in increasing energy consumption in developing countries will be 69% [5].

When the world is facing increased demand and oil consumption, the oil market is experiencing unprecedented compression due to a sharp decline in "overcapacity." In such a market, no consumer can separate himself from oil price shocks regardless of his degree of independence. Since the oil market is mushroomed and intertwined, it has involved banks, investment funds, other financial institutions and industries, and legal and real investors [6].

Therefore, any change in this market will not be limited to industries and end consumers. For example, for the United States, energy security, on the one hand, means protecting the domestic economy in terms of price and inflation changes, economic growth, and wealth transfer, and, on the other hand, means taking care of international economic and financial systems [7].

Oil and Gas and its Impact on Iran's National Security

One of the essential elements and factors affecting the national security of countries producing and consuming energy is oil and gas. After exploring oil in Iran, this raw material has gradually played a role as the most essential component affecting Iran's economy, politics, and security in general. It was considered international. With the evolution of geostrategic discourse to geoeconomic discourse in the last decade and the leading role of the economy in global relations, oil as the blood of modern industry has a higher position than other factors of power. In this period, energy, especially oil, has played a more significant role in determining security and creating regional and international conflicts [8].

Energy security is a key issue for industrialized and consumer countries. If there is no oil, production and development in the industrialized world will stop. Of course, the dependence of the producing countries should not be overlooked. The dependence of these countries is also unbelievable. They need large companies in the first place to provide the necessary capital and technology in production. To buy weapons, they have developed the necessities of life for their people, such as medicine, food, and industrial equipment that the world needs. The interdependence of the industrialized world and the oil-exporting countries could have worked out in the interests of both parties if it had started from a rational point of view and followed a logical path. However, unfortunately, this is not the case. Relationships do not start from the point where both sides are in balance. The game conditions have been imposed from one side to the other, and the stronger side has thought only of strength and power (Figure 2).

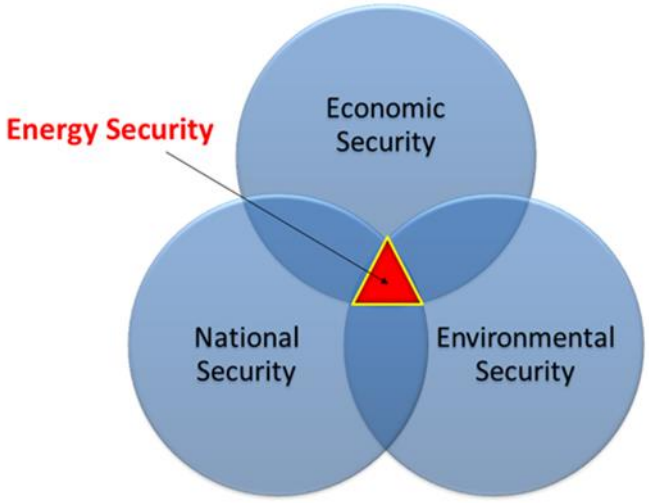

Figure 2: Reframing renewable energy as national security [9].

In classical geopolitical analysis, domination of the essential natural resources is considered domination of the world. The familiar is the transmission lines of energy that can have different routes in the present era. Building a pipeline for a transit country has some economic and political benefits:

A. Access to oil and gas for domestic needs in the direction of energy security

B. Foreign investment and job creation

C. A means of influencing the flow of oil and gas

Iran's unique geopolitical position allows it to become the center of trade and distribution in the region. The north and south axis of Iran is oil and gas production. The east and west axis is the axis of consumption, the center of which is Iran, can be the center of trade, so participation in the network of oil and gas pipelines in various forms can increase Iran's role and share Increase in the energy market [10].

Crossing the Caspian Sea oil and gas pipelines through a route other than Iran, in the long run, can reduce Iran's influential role in the energy and economic equations of the region and the

world, resulting in vulnerability, vulnerability rather than the impact of the process. The global equations will be strengthened. The geopolitical security implications of the passage of oil and gas pipelines through Iran itself in improving Iran's political trade relations with Europe and Asia, reducing Iran's isolation, easing US political pressure, increasing bargaining power in international relations, and increasing Iran's role in decisions [11].

USA and Middle East

Although the United States was once the largest exporter of oil, with the extraction of oil from the Persian Gulf, the country decided to implement a system of production restrictions and keep its oil reserves for the day; Because the United States considers its security to be dependent on the security of Western Europe, and any threat to the existing Western European system is considered a threat to American national security. Today, the United States is the largest importer of oil globally with 13.5 million Enters the day, accounting for 63.5% of its total daily intake. Middle East oil, particularly the Persian Gulf, accounts for 20 % of US oil imports, and this dependence is overgrowing.

However, controlling OPEC market power and oil price fluctuations is one of the US goals for which it devises and implements a variety of strategies. By 2017, it is projected that about 68% of US oil needs will be met through Imports will be provided, and oil consumption will account for 40 % of the energy needed, which is primarily used for land and air transportation. These reports indicate that the United States and the global economy are growing dependent on oil. This could have severe consequences for economic prosperity, national security, and day-to-day operations in the United States. Based on different estimates, it can be assumed that global oil reserves will be depleted in the next 40 to 60 years. For all these reasons, the raw material guarantee factor is getting closer and closer to the center of American foreign policy. It is in every possible way. This route has sometimes been taken diplomatically and sometimes militarily. A report dated January 2, 1954, prepared shortly after the coup d'état for the US National Security Council on August 19, 1953, states: At present, the Allies We in Europe are dependent on Middle Eastern oil. If this oil flow is cut off, Western Europe will not be defensible, and all our expenses for revitalizing that part of the world will be wasted. Two weeks after the report, the US National Security Council, in a meeting attended by President Eisenhower, decided to inform the Attorney General that the security interests of the United States required US oil companies to join the International Consortium. Sign a consortium with the Iranian government to restart the Iranian oil industry so that the friendly Iranian government can enjoy its rich oil revenues, provided it safeguards the interests of the Western world concerning Middle East oil reserves. The importance of Iranian oil and the region from the point of view of US national security is stated by Admiral Radford, the representative of the US Department of Defense in the Eisenhower period, as follows: The importance of Iranian oil and its resolution from the US national security point of view does not require any exaggeration. The Middle East is the only region in the world where we have not made enough progress in defending ourselves against Soviet imperialism. Iran must be kept on the side of the free world, and the key to this is the solution to the oil problem. We must persuade Britain to agree to our plan to solve this problem. The British and American reaction to Mossadegh's attempt to nationalize oil in 1951 and overthrow him and the unsuccessful British and French attempt in 1956 to counter Nasser's action on the Suez Canal was due to the oil issue. These two events are two critical pieces of historical evidence to prove this dependence.

Energy storage is a safe way for the future

The growing demand for energy in different parts of society has faced a significant challenge. Increasing energy consumption has made the need to produce as much as possible [15-21]. At the same time, the tools needed to produce energy are facing many problems. International treaties have increased to reduce pollution levels, and global warming has led to a reduction in carbon dioxide emissions. These issues are replacing the old methods of energy production with new methods. Some new methods are still

under consideration, such as nuclear power generation, and some rely on climatic conditions, such as wind, solar, and hydroelectric energy. These new methods have significant advantages over the method. Older ones produce energy, but there are still many challenges. The output of conventional energy generation methods is easily adjustable for different needs.

In contrast, due to the dependence of new resources on nature and climatic conditions, their output may not be commensurate with the amount of energy required. The output of these resources in daily, monthly and annual periods may fluctuate widely. At the same time, demand may change daily, monthly, and annually. Therefore, we need a method that stores energy in many cases and uses stored energy in cases of shortage. Only then can we rely on solar, wind, and other renewable energy sources as a significant source of energy. There are other reasons to save energy. Depending on the type of storage, this type of system can control and meet demand during peak times. Energy storage allows the generation and distribution of electricity at its highest capacity, which reduces the demand for the new generation and distribution lines. Energy storage for a long time can be used to balance the voltage during peak times. At present, there is an excellent need for high-scale energy storage. Conventional energy storage methods do not apply to high-capacity systems, and their efficiency is not optimal. However, various new methods are being developed. Some of these methods are based on old concepts that are now being used for new devices, and others are entirely new ideas. Some of these methods are more advanced than others. However, they are in development.

Methods and Solutions

A. Identifying the challenges and strategic issues of the country's energy sector and determining the priority and importance of each of them.

B. Indexing to measure the strategic challenges of the energy sector and analyze the relevant developments through ongoing study of the performance of strategic indicators of the energy sector in the country [22-28].

C. Analysis of the political geography of energy developments globally and its impact on the country's energy sector.

D. Study the barriers to developing competition in the energy industry and strategies to create competitive markets in the sub-sectors of electricity, gas, and petroleum products.

E. Develop a strategy to develop the share of new renewable energy, coal, and nuclear power in the primary energy production basket in the country.

F. Analyzing the barriers to private sector participation and attracting foreign investment in the country's energy sector.

G. Analysis of barriers to developing natural gas exports and increasing the country's share in the global natural gas market.

H. Analysis of barriers and strategies to increase the country's share in electricity exchanges in the region.

I. Analysis of environmental hazards of the energy sector in the country and emission reduction strategies.

Challenges and Problems

Naturally, the energy sector faces a wide range of domestic and international strategic opportunities and threats, all of which seem unlikely to be addressed by a research institute over five years. However, in its long-term plan, this sector will try to expand its field of study and research activities to all strategic dimensions of the energy sector [29-37]. Some of the most important axes of strategic studies in the energy sector of the country are:

1. The strong influence of the energy sector from the developments of the political geography of energy and strategic trends on international energy markets.

2. Inefficiencies due to non-competitive structures in the country's energy industry and barriers to forming competitive markets.

3. Lack of active participation of the private sector in the country's energy industry and financial constraints in developing the energy sector.

4. Unbalanced energy portfolio, especially the low share of new renewable energy, nuclear energy in the composition of primary energy.

5. Inadequate attention to the environmental hazards of energy consumption and the worrying growth of emissions from energy consumption.

6. Failure to achieve the strategic goals of energy subsidies.

7. The lack of role of the potentials of the country's energy sector in regulating foreign policy.

8. Small share of the country in the world natural gas market.

9. The country's small share in electricity exchanges in the region.

Conclusion

Oil and gas, as essential carriers of energy, while being considered factors of production, are also considered capital, liquidity, wealth, opportunity, and providing the grounds for the transfer and recognition of superior technology. Iran's security has always been directly related to oil and has always been a part of politicians' view of Iran. The issue of Iran's oil and oil resources. Oil provides more than 80% of the country's foreign exchange earnings, and the relationship between Iran's economy and the world is mainly done through this industry. Therefore, due to the dependence of Iran's economy on oil revenues, national security is also affected by variables outside the borders. There is a direct relationship between Iran's national security and world oil prices. As the crisis in world oil prices increases, so does the country's security sensitivity. Therefore, Iran's single-product economy is one of the security challenges that, in addition to leading to slow economic growth and development, by creating competition with other countries and thus diverging from other countries in the region, reproduces insecurity for Iran. The more the world market and different countries depend on Iranian oil and gas, the more they will have to protect the production and flow of Iranian oil and gas. This, in turn, requires a proper position in the global energy market (oil and gas). It will be to establish peace and security in Iran. Therefore, increasing Iran's role in ensuring the energy security of consumers also contributes to ensuring Iran's national security to the extent that when this role is minimized. In an underdeveloped structure, the economy's dependence and foreign trade on a single product can make the country's economy and security equally vulnerable. To reach a suitable position in the global energy market, especially oil, huge investments must be made to increase the oil and gas production capacity. Of course, the required investments in this sector have required the use of credit and technology of foreign companies. The problems of the country's infrastructure and the oil industry, and the existing restrictions in its foreign relations have not achieved its desired realization so far. Meanwhile, the domestic consumption of energy carriers has a very unfavorable situation and growing trend, which is considered a threat to Iran's national security in the long run. Another aspect of the role of energy in Iran's national security is the existence of typical oil and gas fields with neighboring countries on land and at sea. Standard oil and gas fields are considered an essential element in Iran's energy security and national security; Because if the necessary investments are not made for the exploitation and development of these areas, due to the commonality of these areas, the result will be the loss of Iran's share, in addition to the delay in making these investments, Iran will produce a security margin. And it will lose political power from oil and gas. Another way to increase Iran's national security is to make joint investments in Iran's oil and gas fields with the cooperation of countries in the region and foreign investors. This links Iran's interests with these countries. The challenges facing Iran and investing in Iran need to gain the trust of investor countries. The growth rate of natural gas consumption in Iran has been faster than production growth. Consumption of this material in 2007 amounted to 113 billion cubic meters, which in 2008 increased by 8.3% to 11.76 billion cubic meters,

given Iran's share of OPEC while maintaining an export capacity of 2.5 million barrels per day. And according to the US Department of Energy, OPEC crude oil production will increase by about 25 % by 2030. In other words, to keep its share in OPEC as the second-largest producer of crude oil, Iran must increase its production capacity by 25 percent, which seems unlikely given the current situation.

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