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GLOBAL ENERGY POLICIES AND ENERGY CONTRACTS

Abstract

This article examines global energy policies and energy agreements, discusses the importance of energy to countries, identifies and substantiates problems in global energy policy. Today, global energy policy is mainly analyzed in terms of oil and natural gas. The regions that form the basis of these policies are the Middle East, Central Asia and Caspian regions, which have the largest share in terms of resources. There is serious global competition in the field of exploration, production and delivery of oil and natural gas to international markets. Energy is a vital issue for the European Union, as it is for the rest of the world. The importance of energy comes from the fact that it is used as a basic resource in almost all economic activities. Energy is concluded as an indispensable factor for economic development.

In addition, energy has properties that make life easier and improve people's quality of life. Based on the research, the author suggests that the European Union, which has a unique structure, should not be neglected in this vital energy field. Although the EU is not indifferent to the energy issue, it is still debatable whether the progress made in the energy field is sufficient to meet the EU's energy needs.

Keywords: *energy, global energy, energy contracts, petrol, natural gas*

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Qlobal enerji siyasətləri və enerji müqavilələri

Xülasə

Bu məqalədə qlobal enerji siyasətləri və enerji sazişləri tədqiq olunur, həmçinin enerjinin ölkələr üçün əhəmiyyətindən bəhs edilir, qlobal enerji siyasətindəki problemlər müəyyən edilir və əsaslandırılır. Bu gün qlobal enerji siyasətini, əsasən, neft və təbii qaz təhlil edilir. Bu siyasətlərin əsasını təşkil edən regionlar isə ehtiyatlar baxımından ən böyük paya malik olan Yaxın Şərqi, Mərkəzi Asiya və Xəzəryanı regionlardır. Neft və təbii qazın kəşfiyyatı, hasilatı və beynəlxalq bazarlara çatdırılması sahəsində ciddi qlobal rəqabət var. Enerji bütün dünyada olduğu kimi, Avropa İttifaqı üçün də həyati əhəmiyyət kəsb edən məsələdir. Enerjinin əhəmiyyəti onun demək olar ki, bütün iqtisadi fəaliyyətlərdə əsas vəsait kimi istifadə edilməsindən irəli gəlir. Enerji iqtisadi inkişaf üçün əvəzsiz amil kimi nəticəyə gəlinir.

Bundan əlavə, enerji həyatı asanlaşdıran və insanların həyat keyfiyyətini yaxşılaşdıran xüsusiyyətlərə malikdir. Tədqiqat əsasında müəllif təklif edir ki, unikal struktura malik olan Avropa İttifaqı bu həyati enerji sahəsində laqeyd qalmasın. Aİ enerji məsələsinə biganə qalmasa da, enerji sahəsində əldə edilən irəliləyişlərin Aİ-nin enerji ehtiyaclarını ödəmək üçün kifayət edib-etməməsi hələ də mübahisəlidir.

Açar sözlər: *enerji, qlobal enerji, enerji müqavilələri, benzin, təbii qaz*

Introduction

Energy resources are one of the basic inputs that are essential for the economic development of countries. Sustainable energy policies, in addition to ensuring supply security and diversifying supply sources, aim to supply the type of energy desired to be used to the society at a low cost and in the requested quantity and quality.

Today, 87 % of the world's total energy production is provided by fossil fuels, 6 % by renewable resources, and 7 % by nuclear energy. Approximately 64.5 % of the world's electrical energy production comes from fossil resources (38.7 % coal, 18.3 % natural gas, 7.5 % oil).

In line with the current level of technology and predictions, 88% of the world's general energy demand will be consumed in the next 30 years. It is estimated that a very significant part of it will be covered by fossil resources.

While 46 % of the oil produced in the world today is subject to interregional trade, this rate is expected to increase to 63 % in 2030. In terms of natural gas, it is thought that both the amount to be produced will increase and the percentage transported between regions will increase from 15 % to 26 % in 2030.

Coal, which is among the fossil resources used in energy production, is a widely used fuel in the world due to its ease of production, consumption and reliability. Today, approximately 25 % of global energy demand is provided by coal sources. However, in terms of global markets, coal is generally a locally-regionally preferred fuel type.

The high cost of obtaining renewable energy types in general, the difficulty in storing the intermittent energy obtained from many of them, and the limited renewable energy infrastructure prevent the widespread use of renewable energy in the world. However, due to increasing awareness about global warming and environmental issues and developments in energy production and transmission technologies, the demand for renewable energy resources is expected to increase in the coming years.

Global energy policies and energy contracts

Energy policy is generally related to technology, economy and energy. It consists of the institutional structure where decisions are made and includes supply-demand management in the short term and planning activities in the long term (Bayrach, Aras, 2007: 14). In addition to the scarcity of energy resources and the gradual decrease in their reserves, the greenhouse effect and climate changes resulting from global warming require the production of energy policies at national and international levels that take into account the interests of future generations.

In the energy market, balance and therefore price is created by energy supply and demand. The main factors that determine energy demand are economic growth, lifestyle, development level of society, technological development and energy prices. In determining energy supply, reserves, production and investment costs, conversion technologies, and economic and political relations between countries and regions are among the main factors that need to be considered.

Continuously predicting the factors affecting energy supply and demand with scientific and real methods, updating them in line with global changes and revising them when necessary is an important prerequisite for effective energy policies (Pamir, 2006: 4).

Energy supply security is a concept that includes the principles of availability, accessibility and acceptability. In this context, energy security is defined as providing energy at affordable prices and in sufficient quantities (Ushumezsoy, Shen, 2003: 106). One of the most important problems in energy supply security is ensuring production and transportation security in meeting energy demand, as supply and demand are located in different geographies.

The concept of energy security changes depending on whether a country is an energy producer or consumer. Just as "energy supply security" is important for countries that have to import energy from abroad because they produce less energy resources than they need, "energy demand security" is as important for countries that produce more than they need and export. In this respect, energy security; In addition to being an international issue, it also shows that producers and consumers are mutually dependent on each other (Ediger, 2007: 5).

There are some differences in energy demand security depending on the development level of the country. For example, while the uninterrupted flow of energy imports is important for developed countries, it is more important for developing countries with a balance of payments deficit to obtain energy at as low and stable prices as possible.

A significant disruption in global energy resources and/or transmission lines negatively affects the world economy. For energy supply security, countries need to diversify their energy supply portfolio and types, increase efficiency in energy consumption and develop effective energy management strategies.

Privatization and liberalization activities in energy markets as a result of globalization and the legal and structural change process carried out for this purpose have created significant uncertainty in the world energy market. This environment of uncertainty has revealed the need to attach importance and invest in domestic resources.

Since the oil crises of the 1970s, many industrialized countries have initiated various programs to develop renewable energy solutions. However, low oil prices have been one of the most important factors preventing the development of renewable energies. Today, renewable energy provides 13.1 % of global energy reserves and 17.9 % of world electricity production (5).

Nuclear energy has a share of approximately 7.6 % in global energy production. Especially since the waste problem has not yet been solved, new power plants are not built with existing technologies in the USA and EU countries, and those that have completed their economic life are decommissioned. However, intensive R&D studies are continuing to solve the waste problem and to build safe power plants with new technologies.

All renewable resources, especially solar, wind and geothermal, are considered as the energy sources of the future because they are clean fuels and renewable (Karajan, 2007: 245). However, there are also some technical, economic and institutional obstacles that restrict the widespread use of renewable energies. The most important of these obstacles include high installation and transmission costs, intermittent production and storage problems.

Although renewable resources do not yet have the technologies to compete economically with other conventional resources, they are increasingly coming to the fore in energy policies, especially in the EU, in terms of both the promotion of clean energy and resource diversity (Ozsabunjuoghlu, Ughur, 2005).

Today, global energy policies are determined by fossil fuels, mainly oil and natural gas. The areas that determine the basis of these policies are the Middle East, Central Asia and the Caspian regions, which have the most important reserves.

Among the fossil fuels in the world, oil and natural gas deposits are not distributed equally across regions as coal reserves. While developing countries have large amounts of oil and natural gas reserves, developed countries that consume the most oil and gas have few or negligible reserves.

In the energy market, not only resources, but also the safety of routes and pipelines that will ensure the delivery of these resources to consumers is of great importance for consumers (Pamir, 2006: 24). For this reason, both supply and demand and trade routes must be secured together.

Developed countries want to enter these markets where energy resources are more but consumption is less, and they want to strengthen their energy security policies by maintaining their position in the energy world. For this purpose, by using their technology and financial resource superiority it forces developing countries to impose a series of sanctions with theses such as globalization, new world order, clash of civilizations and definitions of new security understanding.

One of the most important actors in the ongoing energy struggle in the world economy is the USA. The USA, which has the world's largest economy and developed industry, has a significantly increasing energy consumption every year. For this reason, how the USA will obtain energy has begun to be considered as a security problem for the future of the country (BP, 2008).

The USA is developing multifaceted policies to provide the energy resources it needs uninterruptedly, cheaply, from various sources and in safe ways. The USA played important roles in

Middle East oil after 1947. The USA, which has great influence in this region outside its geographical borders, has been using the oil here for its own country for years.

The USA, which alone consumes $\frac{1}{4}$ of the energy consumed in the world, imports 27 % of this consumption. According to the US Department of Energy, the import dependence ratio of energy consumption is estimated to increase to 38 % in 2025 (Pamir, 2006: 72). The USA can only produce approximately $\frac{1}{3}$ of the oil it consumes. The reserves of the USA are only sufficient for 10-11 years with this production rate. If this production ends, it will be a country completely dependent on foreign sources (Ushumezsoy, Shen, 2003: 15).

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The 1973-1974 and 1979 oil crises in the world economy caused lack of supply security, instability in prices and imbalance in the balance of payments in the EU. These problems have led member countries to expand their energy policy goals and tools and to national governments to pursue a more active and determined intervention policy on energy (Harrop, 2000: 147).

In November 1983, the European Council authorized the EU for its own energy policy for the first time. Since this date, several yearly framework programs have been created for measures in the field of energy in the union. In such a framework program, common tasks and goal projections are determined for each member country in terms of increasing energy efficiency, reducing import dependency, using domestic energy resources more and promoting new energy technologies.

The existing institutional framework for energy policy at community level is based on foundation agreements that have been concluded over time towards coordination between EU institutions, member state governments and energy economic associations and companies (Zippel, 2006: 42).

EU energy policy generally has three main objectives. These are competitiveness, energy supply security and environmental protection (Harrop, 2000: 185). While achieving these goals, it is aimed to preserve the share of coal in total energy consumption, increase the share of natural gas, establish maximum safety conditions for nuclear power plants and increase the share of renewable energy sources.

The EU, which accounts for 16 % of global energy consumption, has a structure that is highly dependent on foreign sources for both oil and natural gas. The EU's domestic resources are quite limited and it meets half of its energy needs through imports. The import dependency ratio, which is 80.2 % for oil, is 54.5 % for natural gas and 38.2 % for coal (European Commission, 2006a).

The share of energy in the EU's total imports is around 6 %. The EU enlargement process is expected to further increase foreign dependence on energy. Due to increasing environmental concerns in the EU, the decommissioning of nuclear power plants, which have begun to complete their economic and technical life, and the promotion of the use of natural gas instead of coal in electricity production due to social security and increasing labor costs, are among the important reasons that increase the union's foreign dependency in terms of energy is taking.

In order for the EU's dependence on external energy resources to increase and for these resources to reach the European market without interruption, close relations have been established with the main producers such as the Middle East, the Caspian Region and Russia. Most of the approximately 600 million tons of oil consumed annually in Europe is supplied by countries such as Russia, Algeria, Libya, Iran and Norway (North Sea). Europe is trying to strengthen its relations with countries such as Russia, Iran and North Africa in order to meet its dependence on oil (Ushumezsoy, Shen, 2003: 15).

The Russian Federation comes first among the countries with which the EU can cooperate effectively and in the long term in the field of energy. Russia is aware of this situation and uses its natural gas and oil as leverage in the international energy market. The increasing dependence on Russia in imports creates concerns in terms of supply security and prices, and the EU Commission

warns its members that the share of imports from a non-member country should not exceed 30 % of the total.

With the EU enlargement process, it is trying to increase efficiency by combining the disconnected and relatively small energy markets of the newly joined countries. It is aimed to create an EU-wide energy market by interconnecting energy (electricity and natural gas) networks and liberalizing energy markets (Bayrach, 1999a: 590).

Conclusion

Today, energy has a position that closely affects and directs economic, political, social and military developments in the international arena. According to IEA predictions, in the next 30 years, most of the world's energy demand will be met by fossil resources, especially oil and natural gas.

In the global energy market, producers, countries on transportation lines and large consumers have important strategic weight. Today, the Middle East and Central Asia-Caspian countries, which have a significant advantage in the world oil and natural gas supply, will maintain these positions for many years to come.

There is a great competition in the exploration, production and transportation of oil and natural gas to international markets, with regional and global power struggles taking place. In this competition, in addition to large states and multinational enterprises, organizations such as IEA, OPEC and various international financial institutions also play a decisive role.

Due to the large amounts of known and unknown reserves of oil and natural gas in the Middle East and Central Asia-Caspian Regions, it is expected that the USA will maintain its presence in the region for a longer time.

In order to reduce the ever-increasing cost of imported energy in the global energy market, and to ensure the sustainability of the energy and environmental problem, the use of renewable energy sources such as solar, wind, hydraulic, hydrogen, wave, geothermal and biomass, which are inadequately utilized, should be increased.

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