THE REPUBLIC OF TURKEY
BAHÇEŞEHİR UNIVERSITY

ENERGY SECURITY OF THE EUROPEAN UNION AND TURKEY'S EFFECT: NABUCCO PIPELINE PROJECT

Master's Thesis

ESMA ALİKOĞLU

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THE REPUBLIC OF TURKEY
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Thesis Advisor: ASSIST. PROF.DR.ÖZGÜR ÜNAL ERİŞ

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İSTANBUL, 2010 Esma ALİKOĞLU

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ABBREVIATIONS

Baku Tbilisi Ceyhan Pipeline	: BTC
Baku Tbilisi Erzurum Pipeline	: BTE
Billion Cubic Metres	: BcM
British Petroleum Company	: BP
Bulgarian Natural Gas Distributing Company	: Bulgargaz
Carbon Dioxide	: CO2
Egyptian Natural Gas Company	: EGAS
Energy Information Agency	: EIA
Energy Market Regulatory Authority	: EMRA
European Coal and Steel Community	: ECSC
European Commission	: EC
European Economic Community	: EEC
European Investment Bank	: EIB
European Parliament	: EP
European Union	: EU
Gesellschaft mit beschränkter Haftung	: GmbH
Group of Eight	: G8
International Egyptian Oilfield Company	: IEOC
International Energy Annual	: IEA
Justice and Development Party	: JDP
Kilometer	: KM
Liquefied Natural Gas	: LNG
Member States	: MS
Memorandum of Understanding	: MoU
MOL Group	: MOL
Multinational Oil Company of Anglo Dutch Origins	: Shell
North Atlantic Treaty Organization	: NATO
Organization of Petroleum Exporting Countries	: OPEC
Osterreichische Mineralöl Verwaltung Group	: OMV
Petroliam Nasional Berhad	: Petronas
Rheinisch-Westfälisches Elektrizitätswerk	: RWE
Single European Act	: SEA
Technical Aid to the Commonwealth of Independent States	: TACIS
The Interstate Oil and Gas Transport to Europe Program	: INOGATE
The National Iranian Gas Company	: NIGC
The Union of Soviet Socialist Republics	: USSR
The United States of America	: USA
Total Oil Company	: TOTAL
Transgaz Sa Company	: Transgaz
Transportation Control Measure	: TCM
Transport Corridor Europe-Caucasus-Asia	: TRACECA
Treaty on the European Communities	: TEC
Trillion Cubic Feet	: Tcf
United Kingdom	: UK
United States	: US

ABSTRACT

ENERGY SECURITY OF THE EUROPEAN UNION AND TURKEY'S EFFECT: NABUCCO PIPELINE PROJECT

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This thesis attempts to address one of the most important issues on the European Union agenda, energy security, through an in-depth analysis of the Nabucco Project. The European Union energy security issue which is still on the agenda, which started with the crisis like the oil crisis in 1973, 1979 and continued with the Russia-Ukraine natural gas crisis in 2009, has not been solved yet.
In this period, the problem of trust between the European Union and Russia which is in the position of being the most important supplier and the attitude of Russia led Europe to rethink about that issue. The European Union considered not only the other energy sources, but also the suppliers and the routes. Europe is searching for alternative routes in order to get out of the monopoly of Russia. In this case Azerbaijan, Turkmenistan, Georgia in Caspian Region and Iran, Iraq in Middle East and Egypt in the Mediterranean have been evaluated. The negotiations and the clashes, the effects of these on the determinate politics, the geopolitical effect of Turkey and the importance of Turkey have been examined in this study. When all these are evaluated, even if there are states within the European Union that want to eliminate Turkey, it will soon be understood that they will not be persistent on this issue. Unlike what some politicians think, the dependency of the European Union on Turkey is exactly the same level as the dependency of Turkey on the Union. Thus this matter will soon be seen in the near future's most important pipeline project; Nabucco Pipeline Project that is planned to be finished in 2019. In this study all these and the effect of Turkey on Europe's energy security issue, Nabucco Pipeline Project and how this process proceeded will be examined.

Keywords: European Union, Nabucco, Russia, Energy Security, Turkey.

ÖZET

AVRUPA BİRLİĞİ ENERJİ GÜVENLİĞİ VE TÜRKİYE'NİN ETKİSİ: NABUCCO BORU HATTI PROJESİ

Alikoğlu, Esma

Avrupa Kamu Hukuku ve Entegrasyonu

Tez Danışmanı: Assist Prof. Dr. Özgür Ünal Eriş

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Bu tez Avrupa Birliği'nin en önemli konularından biri olan Avrupa Birliği'nin enerji güvenliği ile yakından bağlantılı Türkiye'nin Avrupa Birliği enerji güvenliğine etkisi ve bu çerçevede Nabucco Boru Hattı Projesi'ni adres göstermektedir. Avrupa Birliği'nde 1973 ve 1979 petrol krizleri ile birlikte başlayan ve en son 2009 yılında Rusya ile Ukrayna arasında yaşanan doğal gaz krizi ile hala gündemde olan Avrupa Birliği enerji güvenliği sorunu devam etmektedir.

Bu süreçte Avrupa Birliği için en önemli tedarikçi konumunda olan Rusya ile Avrupa Birliği arasında ortaya çıkan güven sorunu ve Rusya'nın tutumu Avrupa Birliği'ni bu konuda tekrar düşünmeye sevk etmiştir. Avrupa Birliği hem diğer enerji kaynaklarını, hem de tedarikçileri ve rotaları tekrar değerlendirmiştir. Rusya'nın kendisine karşı elinde bulundurduğu tekel konumundan kurtulmak için alternatif yollar aramaktadır. Bu çerçevede bir yandan Hazar Bölgesi'ndeki tedarikçi konumundaki Türkmenistan, Azerbaycan ve Gürcistan; diğer yandan Ortadoğu'daki İran, Irak ve Akdeniz'deki Mısır değerlendirilmiştir. Bu ülkeler ile yaşanılan uzlaşmalar ve çatışmalar, bunların belirlenen politikalara etkisi ve bu sayede jeopolitik önemi ortaya çıkan Türkiye ve Türkiye'nin bölgedeki önemi açıklanmaktadır. Tüm bunlar değerlendirildiğinde Avrupa Birliği içinde her ne kadar Türkiye'yi saf dışı bırakmak isteyen üye ülkeler olsa da, aslında bu konuda çok ısrarcı olamayacakları anlaşılacaktır. Bazı politikacıların düşündüğünün aksine Türkiye'nin olduğu gibi, Avrupa Birliği'nin de Türkiye'ye olan bağımlılığı ortaya çıkmaktadır. Nitekim bu husus yakın tarihteki en önemli boru hattı projesi olan ve 2019 tarihinde tamamlanması planlanan Nabucco Boru Hattı Projesi ile bir kez daha görülmektedir. İşte bu çalışmada tüm bunlar ile Türkiye'nin Avrupa Birliği enerji güvenliğine olan etkisi, Nabucco Boru Hattı Projesi ve bu sürece nasıl gelindiği anlatılacaktır.

Anahtar Kelimler: Avrupa Birliği, Nabucco, Rusya, Enerji Güvenliği, Türkiye

1. INTRODUCTION

In order to understand the subject literally, we will start with the basics: what is energy security? First of all we should explain that energy security has the same meaning as energy supply security, meaning the access of fair rate energy sources without any physical cutback from the producer to the final consumer. The European Commission has defined energy security as ensuring that future essential energy needs are satisfied by means of a sharing of internal energy resources and strategic reserves under acceptable economic conditions and by making use of diversified and stable, externally accessible sources (www.ec.europa.eu 2005).

Guaranteeing energy security is possible with just powerful energy coordination between receiver and seller. In this respect, promoting relations between receiver and seller, operating an orderly price system and signing long term agreements will provide energy security in the European Union.

The European Union is founded on four Treaties. The first two were the Treaty establishing the European Coal and Steel Community (ECSC), which was signed on April 18th 1951, and came into force on July 23rd 1952, and the treaty establishing the European Economic Community (EEC), which was signed on March 25th 1957 in Rome and came into force on January 1st 1958 (often referred to as The Treaty of Rome). Therefore, even when looking back at the founding of the European Union we understand that the role of energy has been of basic importance and one of the oldest common policy areas in the European Union. In the 1950's, Europe only co-operated over steel, coal and agriculture; 50 years later, it focuses on gas and electricity. Therefore, we may say nothing has changed apart from the sort of energy. Energy is still one of the most important issues in the European Union. With the enlargement of the EU's borders energy, energy consumption and demand has increased as well (Warleigh 2005, pp. 12-13).

The members of the European Union (called the European Community until the Maastricht Treaty* came into effect) have begun to rethink energy matters following the 1973 and 1979 oil crises. These crises started with the establishment of the Organization of Petroleum Exporting Countries (OPEC), which is a permanent and intergovernmental organization. OPEC consists of 13 countries which are Iran, Ecuador, Indonesia, Nigeria, Angola, and 7 Arabic Countries. OPEC was founded at the Baghdad Conference to oppose pressure of leading US and Dutch oil companies on the 14th of September 1960. Through the organization, petroleum exporting countries took more interests in western countries and determined production levels. Organization increasingly started taking joint actions and opposed western oil companies as an united block in the 1970's (Aalto 2008, pp. 23-24).

The Organization of Arab Petroleum Exporting Countries (AOPEC) was founded by two members of OPEC, Syria and Egypt. Syria and Egypt launched the Yom Kippur War on Israel with a coordinated attack on October 6th 1973. The Arab-Israel war, the fourth war between them, triggered a large crisis. During the war, the Netherlands supplied arms to Israel and allowed aid flights to the USA from its airports. OPEC reduced oil production on October 16th 1973 and put an embargo on western countries, especially those carrying oil shipments to the USA and Holland. Moreover, OPEC raised oil prices and due to firm demand and reducing supply, prices largely increased. Thus economic stagnation and high inflation continued until the 1980's.

In 1973, an amazing increase in oil prices and the collapse of the stock market was the one of the largest global economic crisis, experienced since the 1929 crisis and had long-term effects. Before the 1973 first oil crisis, the members of the European Union (EU), as most developed countries were extremely addicted to importing, together with wasteful behavior in energy consumption. The oil crisis has revealed a need for a strategy which protects the energy supply from external shocks. As a result of the 1973 and 1979 oil crises and their consequences, energy security and natural gas has gained importance once again in the EU (Johnson 2005, pp. 262-266).

*Maastricht Treaty has been signed on February 7th 1992 and come into force on November 1st 1993

In the 1980's the environment emerged as another interest. From production to use, the existing energy system in general was very harmful to the global system, and the matter of how to re-orientate the energy system without endangering the environment became an important question.

Today, in term of global energy consumption the United States (US) is located in the first place and European Union in the second place. However, in terms of global energy imports the EU is located in the first place. With the expansion of the EU, which currently meets 50 percent of energy consumption with imports, 70 percent of energy consumption will come from imports in the years ahead. Emission rates in the Kyoto Protocol commitment, and the terms of recession period of nuclear energy, means it is understood that the EU will focus more on natural gas as an energy source within 30 years. While the share of oil will remain unchanged, the reduction evacuating area of nuclear (especially oil) will be filled by natural gas. Europe's dependence on natural gas imports have been continuously increasing. On average 40 percent of natural gas used in the member states of the EU is imported from Russia, Norway, North Africa and Algeria.

According to 2005 figures, the total energy demand is 38 percent oil, 29 percent gas, 1 percent solid fuels, 6 percent nuclear energy and 8 percent renewable resources (Eriş 2009, pp.2-3).

Contrary to its small oil and gas reserves, the EU is coal rich and coal prices have remained at low prices compared with other sources of energy for a long time. Despite advantages of coal, production has decelerated considerably in many member states of EU during the last two decades. The principal reason is the cost of coal extraction in the EU is three to four times the world market price of coal, and interest from states to subsidize domestic production has vanished. Besides, when coal is burned it releases considerably more carbon dioxide than other energy sources and therefore coal consumption has declined (Eriş 2009, pp.2-3).

However, early in the second half of the twentieth century, great hope was connected to nuclear energy. Because of the revealed health problems and environmental damage, the risk and problem of managing nuclear waste disappointed the world. In particular, 1979

Three Mile Island accident, which is the most significant accident in the history of the American commercial nuclear power generating industry , and 1986 Chernobyl nuclear reactor accident, considered to be the worst nuclear power plant disaster in history in the Soviet Union, pushed the EU away from the nuclear power. However, France especially has chosen to use nuclear power particularly in generating electricity. Drawing such a large percentage of overall electrical production from nuclear power is unique to France. In recent years, some member states of the EU are re-thinking their position on nuclear power (Eriş 2009, p.3). In particular, Angela Merkel, the president of Germany since 2005, made statements to reconsider the plans on nuclear power stations.

Compared to other energy sources, renewable sources of energy, hydropower, solar energy, wind energy, geothermal energy, biomass energy and ocean energy, have made significant progress during the last few decades. The use of fossil fuels caused an increase in average global temperatures the last thousand years. Intense air pollution has caused millions of dollars of damage. Therefore, the world is beginning the transition to a more sustainable energy system in which renewable resources will play an expanding role. Renewable energy sources are environment friendly and essential to tackling climate change (Kaygusuz 2007, p.19). However, for as long as renewable energy remains more expensive than other energy sources, fossil fuels could not be displaced on a widespread basis.

Aspects like the quality of crude, destination, taxes, exchange rates and refining capacity determine the oil prices in various countries. The globalization of the oil market transformed the meaning of energy security by stressing the oil prices. There seems to be an over dependency on the Middle Eastern countries which experience political tensions, wars and military operations. Especially after the oil crisis in the 1970's, the major producers in the region have increased the capacity of their production, and therefore, the problems that were likely to occur due to any political tensions have diminished. Despite all of the precautions, to achieve greater stability in the international market there should be more regions that make production (Bahgat 2006, pp.1-3). Oil still continues to lead more than any other energy sources, and demand for it grows rapidly even though it is known that oil reserves are limited.

2. EUROPEAN UNION AND RUSSIA ON ENERGY SECURITY

Europe is surrounded by rich natural gas reserves, while Europe's natural gas reserves are very limited (10 years at current production rates) and, as indigenous production falls and domestic demand continues to rise, gas dependency could increase to 80 per cent by 2020. At this point, Russia, which is the first import country to the EU, should be mention.

2.1 HISTORY OF EUROPEAN UNION ON ENERGY SECURITY

After the cold war, the EU began international projects to improve the co-operation, particularly on energy. Some of them are: TACIS, TRACECA, and INOGATE. Technical Aid to the Commonwealth of Independent States (TACIS) Program, founded by the EC in 1991, financed foreign and technical assistance to 12 countries of Eastern and Central Asia. Moreover, the program encourages democratization and reinforces the rule of law. Transport Corridor Europe-Caucasus-Asia (TRACECA) is an international technical assistance program, was launched in 1993, for the development of the transport corridor between Europe and Asia across the Black Sea, the countries of the South Caucasus, the Caspian Sea and the Central Asian countries. TRACECA is an energy, trade and transportation corridor from East to West. The Interstate Oil and Gas Transport to Europe (INOGATE) Program, founded in 1996, is an international energy cooperation program between EU and Black and Caspian Seas countries with some exception. The INOGATE Program provides the integration of gas and oil pipelines from the Caspian to the Black Sea and from there to Europe. The infrastructure is repaired with technical assistance, improvements to new projects, and enables the flow of energy supply to Europe (Winrow 2004, pp.35-37).

As a result, in order to provide security of energy supply with these projects, the EU aims to improve energy cooperation between suppliers and transit countries and establish a partnership. EU giving importance to energy security took place in official documents it prepared.

In December 1995, the European Commission had already defined energy security in a white paper entitled "An Energy Policy for the European Union".

In November 1997, another white paper was published for community strategy and action plan entitled "Renewable Sources of Energy".

In November 2000, the commission published a green paper entitled "Towards a European Strategy of energy supply". The commission took the view that the EU cannot reduce its dependence on imported energy in the foreseeable future. Therefore the Commission took the view that achieving security of supply should not be aimed primarily at maximising energy self-sufficiency or minimising dependence on imports but more at reducing the attendant risks and hence striving to achieve balance and diversification in relation to the different sources of supply by products and geographical zones (www.europeanenergyforum.eu 2009). More precisely, energy security is framed as a problem of geo-politics and international relations.

In June 2005, the European Commission adopted a green paper on energy efficiency emphasizing that growing energy demand makes energy efficiency a global priority and listing a number of choices to save 20 percent of energy consumption by 2020 in a cost effective way through changes in consumer behavior and energy efficient technologies.

On March 8th 2006, the European Commission published a new green paper entitled "An European strategy for sustainable, competitive and secure energy''. This fundamental document was intensely debated by member states and governments. The green paper makes suggestions that could form the basis for the shape and direction of the EU's future energy policy. The Commission asks the member states to do everything in their power to implement an European energy policy built on three core objectives: **sustainability** - to actively combat climate change by promoting renewable energy sources and energy efficiency; **competitiveness** - to improve the efficiency of the European energy grid by creating a truly competitive internal energy market; **security of supply** - to better coordinate the EU's supply of and demand for energy within an international context (www.europa.eu 2006). It based energy co-operation both on demand and supply.

After this in July 2006, the Treaty Establishing the Energy Community entered into force. The Energy Community aims to establish a common regulatory framework for energy markets, enhancing the security of supply of the single regulatory space by providing a stable investment climate in which connections to Caspian Area, North African and Middle East gas reserves can be developed, and indigenous sources of energy such as natural gas, coal and hydropower can be exploited. Besides its aim is to improve energy efficiency, foster the use of renewable energy and set out the conditions for energy trade in the single regulatory space.

In January 2007, the European Commission declared an EU Strategic Energy Review that identified three main challenges for common European energy policy: tackling climate change and global warming problems, enhancing EU competitiveness and enhancing EU security of supply.

In March 2007, the European Council adopted the action plan entitled An Energy Policy for Europe for the period 2007-2009. The basic purpose of the new policy of the EU is to reduce greenhouse gas emissions from its energy consumption by 20 percent by 2020. This aim will enable to meet the challenges of sustainability, competitiveness and security of supply. The challenges of climate change need to be tackled effectively and urgently. The aim is to increase the target to a 30 percent reduction by 2020 and 60-80 percent by 2050. It is a huge challenge: meeting this overall greenhouse gas target will require the EU to decrease the amount of CO_2 from its energy use by at least 20 percent, and probably more, within the next 13 years. But this will transform Europe into a highly energy efficient and low CO_2 energy economy, able to confront with confidence future energy challenges. EU is not only concerned about climate change, it is also about Europe's security of energy supply, economy and the comfort of its citizens.

On December 1st 2009, after several years of negotiation the Treaty of Lisbon entered into force, on institutional issues. The Treaty composes of the current EU and EC treaties, without replacing them. It provides the Union with the legal framework and tools necessary to confront future challenges and to reply to demands of the citizens. Also provides for the first time legal basis for energy policy in general and promotes measures at international level to deal with regional or worldwide energy and

environmental problems, and in particular combating climate change. The aims are clearly set out:

i. guarantee functioning of the energy market

ii. guarantee security of supply

iii. Promote energy efficiency and energy saving, and development of new and renewable forms of energy (www.ec.europa.eu 2010).

All of these steps, treaties and papers regarding energy security are evidence of the importance of energy security for the EU.

2.2 RUSSIA ON ENERGY SECURITY

After the communist regime collapsed in Eastern Europe, the European Community has achieved a good opportunity to set up energy cooperation with Russia and other states which declared their independence. This process began in 1990 with "the Lubbers Plan''. The basis of the Lubbers Plan was proposing to use the experience of the EC to intensify economic cooperation between Western and Eastern Europe, including the Union of Soviet Socialist Republics (USSR). The Lubbers Plan is not simply a program of modernization of Soviet energy industries on the basis of international cooperation. It is a program of stabilization for the entire Soviet economy. This plan was immediately recognized by the European Council and as a result the Energy Charter Treaty was signed in 1991.The primary objectives of the energy charter treaty are to improve security of supply, energy production, transformation, distribution and to maximize the efficiency of use and to minimize environmental problems. Foreign investment, In Russia and its states, which declared their independence after the communist regime collapsed, will be protected within the legal framework. Oil and natural gas will be delivered safely from these zones to the EU energy market. The energy charter treaty was the first step in the development of European and Russian energy cooperation. But so far Russia has not approved this agreement.

At the Russia-EU Summit in October 2000 was began the energy dialog. At the summit, both sides decided that it is important to establish a strategic energy partnership, which

is also based on energy security. From that date six-monthly summits were organized and at these summits joint declarations and progress reports have been adopted. EU-Russia Partnership and Coordination Agreement were reorganized as covering 10 new member states in April 2004. Russia has been included in a monitoring system of the EU Commission's energy market in 2004 (Johnson 2005, p. 272).

However, these positive developments experienced between EU and Russia on energy, will be totally changed by Russia and Ukraine natural gas crises, which will be explained in detail below.

2.2.1 The Dispute between Russia and Ukraine on Energy

58 percent of all natural gas consumed in the EU is imported and 42 percent of this is from Russia. Around 80 percent of EU imports of gas from Russia pass through Ukraine. In other words, 300-350 million cubic meters per day of gas passes via Ukraine towards the EU. This is the best proof of how the Russia and Ukraine's relationship are important for energy security (www.ec.europa.eu 2009).

Hence it is necessary to look backwards. After the break up of the Soviet Union, tensions between Russia and Ukraine and Belarus have been raised several times due to reducing the common denominator of the details of a new gas transit and supply regime. In other words, the absence of long term agreements has led to several disputes in the past. January 2009 was not the first time that gas supplies to the EU have been disrupted.

The most serious conflict and disruption, within the EU's gas supplies from Russia transiting through Ukraine for the EU, occurred in January 2006. On that occasion, gas supplies to the EU were restored after one day of disruption. Due to possible disruptions of gas supplies to the EU, several actions were taken by the European Commission. For notifying in advance possible supply disruptions, an Early Warning Mechanism has been developed within the framework of the EU-Russia Energy Dialogue based on establishing direct communication links between European Commission and Russia. Consequently, a specific working group has been founded to address the issue of

improving the security of energy supplies in the implementation of EU-Ukraine Memorandum of Understanding (MoU). In this context, an International Investment Conference on the modernization of Ukraine's gas transit system was organized by the European Commission on 23rd March 2009 in Brussels and as a result of that; an agreement was signed between the Commission, Ukraine and international financial institutions.

After the gas crises in January 2006, another recent indication was the military attack from Russia on Georgia in August 2008. The Baku-Tbilisi- Ceyhan pipeline bringing gas to Europe and another pipeline from Kazakhstan were threatened by Russia's military action in Georgia, where major pipelines go through. Actually, the Baku-Tbilisi-Ceyhan pipeline was reportedly bombed by Russia several times. Thankfully it was undamaged.

Because of the commercial dispute between Naftogaz (Naftogaz in Ukraine is the leading enterprise in Ukraine's fuel and energy complex, one of the biggest Ukrainian companies) and Gazprom (Gazprom Russia's biggest company and the world's largest issuer on natural gas), a gas crisis occurred in January 2009. A Natural gas crisis occurred due to Ukraine refusing to pay the price of natural gas, which was demanded by Russia, also refusing to pay the former debts to Ukraine. While the basic problem remained , the parties did not hesitate in making declarations on accusing each other: Russia claimed that Ukraine had stolen 65 million cubic meters of natural gas passing to Europe a day and had refused to be controlled at the European gateway by the international observes. Another claim was that Russia was unable to make deliveries to Europe due to cutting off valves by Ukraine. On the other hand, the Ukraine has claimed that the gas, going to Europe, was cut off by Russia. While Russia demands to increase the price of natural gas, Ukraine demands a higher transit fee.

Gasprom stopped supplying gas for Ukrainian consumption on January 1st 2009 while gas continued to be transited through Ukraine for European consumption. On 2nd January, gas deliveries to several European Member States, such as Poland, Slovakia, Hungary and particularly Bulgaria and Romania were affected. On 6th January, minor reductions of gas supplies were faced in the EU.

From 7 January to 20 January, there were no gas supplies from Russia to Europe. All supplies from Russia through Ukraine to the EU were cut. In order to end the gas crisis, the EU began their efforts with an aim to sign an agreement between the partners at two levels: the government of the Ukraine and Naftogas in Ukraine, and the government of Russia and Gasprom in Russia. As a result of that, a monitoring agreement was signed between Ukraine, Russia and the EU to oversee gas transit in Russian and Ukrainian territory by independent monitors on 9th January. On 17th January, EU, Russian and Ukrainian representatives participated in a summit in Russia and this resulted in an agreement between Prime Minister Putin and Ukrainian representatives on 18th January. On 19th January, within the scope of this political agreement, a new 10 year agreements was signed on the purchase and transit of gas between Gasprom and Naftogas. Finally, on 20th January, normal transit was restarted towards the EU.

2.2.2 Brief Overview of Russia's Attitude

All these Russian actions are viewed by European public opinion as an attempt to use gas as a political weapon to blackmail a neighboring consumer state. It is an undeniable fact that the instability of the situation in the world on energy regions and rising oil prices has created a large positive effect in the development of Russia's economy. With its economic growth, international prestige was also promoted and as a result of that obtained Group of Eight* (G8) presidency in 2006. Russia now wants to declare itself as an "energy superpower".

However, Russian-Ukraine natural gas crisis disillusioned other countries, having commercial relationships with Russia, and damaged the confidence of energy commerce for Russia. Russia has revealed itself unreliable in terms of investors. European countries such as France, Germany and Italy have clearly understood that due to conflict of its neighbor, they were deprived of energy. Moreover they concluded that because of Russia's political interest, their supply of energy may interfere and it may be dangerous

*The Group of Eight is a forum, created by France in 1975, for governments of six countries in the world: France, Germany, Italy, Japan, the United Kingdom, and the United States. In 1976, Canada joined the group (thus creating the G7). In becoming the G8, the group added Russia in 1997. In addition, the EU is represented within the G8, but cannot host or chair.

being dependent on Russia for energy. Under these circumstances, the countries, which have energy resource relationship with Russia, have preferred to diversify the energy imports, use the liquefied natural gas, build nuclear power reactors and search the other energy sources. In view of the facts, it may be fatal to Russia's plans on reaching political goals. Russia was not successful in both either timing or method. Petroleum and natural gas are strategic raw materials, in the interest of countries welfare and security and has different meanings on different levels for energy consuming and producing countries. In other words, energy should not have been used as a political weapon or vehicle. Therefore, energy diplomacy should be used as a deterrent effect not as an enforcement weapon.

When the Russia-Ukraine gas crisis occurred, at first Russia was opinionated but in a few days its attitude changed and the situation became thought-provoking because of the change of attitude of the Russian government. If the crisis was going to be solved easily, why did Russia initially exhibit a tough attitude?

Russia's position on this crisis and a series of political practices were inconsistent attempt. To turn the energy superiority to political power, it is needed to be patient. Strategy may be the right but tactic was not.

By choosing to exploit the control of energy export as geopolitical weapon, Russia has pushed Europe to respond with other initiatives. The result has been the development of alternative routes. Furthermore, without market liberalization, it will be difficult to attract investments to the Russian gas sector, and without investments, Gasprom will not succeed in meeting its ambitious production goals.

3. ALTERNATIVE ROUTES FOR EUROPEAN UNION

All these historical events on energy security have guided the EU to alternative ways of protecting energy. At this point the Caspian Region and the Middle East have been rethinking their solutions.

3.1 CASPIAN REGION AS A CANDIDATE

3.1.1 History of Caspian Region on Energy Security

Five countries, Azerbaijan, Iran, Kazakhstan, Turkmenistan and Russia, share the Caspian Sea. The commercial energy output began in the Caspian basin in the mid-19th century, making it one of the world's first energy provinces. The Baku region produced almost 50 percent of the world's total crude oil. The reason for this great level of production was the efforts and investment by the Noble Brothers, the Rothschilds and the leaders of Royal Dutch Shell, who helped Russia develop Caspian oil resources. Oil carried considerable strategic weight. In both the 1st and the 2nd wars the German army was short of fuel, and sought unsuccessfully to capture the Baku region. Unfortunately for the Germans they could not secure access to the Caspian's oil resources this was a big reason for its defeat in both conflicts. Genuinely, some of the roughest battles during the Second World War were fought over Azerbaijan. Concern over Baku's vulnerability to attack during the Second World War and the discovery of oil in the Volga-Urals region of Russia, and later in Western Siberia, made a change in the former Soviet Union's investment priorities. These developments contributed to a substantial reduction in Caspian oil production and exploration for most of the second half of the 20th century. However since the late 1980's Azerbaijan, Kazakhstan and Turkmenistan have increasingly gained ground on the energy market and attracted foreign investment. Despite the confidence in finding oil and natural gas, these countries have had challenges including legal status of the Caspian Sea, and competition over the most effective pipeline routes and geo-strategic rivalry (Bahgat 2006, pp. 1-3).

3.1.2 Caspian Region as a Candidate

On these grounds, the export of Caspian oil and gas to the EU would have seemed unrealistic a very short time ago. Wars, military operations and political tension in the Middle East and Russia-Ukraine gas dispute, Russia's policy on energy has changed the priority of Russia in the eyes of Europe. Thus far politically the EU had kept a low profile, even though major European oil companies, such as British Petroleum (UK), TotalFinaElf (France), Agip/ENI (Italy) and British Gas (UK) have invested in the Caspian Sea's resources (Eriş 2009, pp. 8-11). However particularly the completion of the Baku-Tbilisi-Ceyhan and South Caucasus pipelines have altered these circumstance. These pipelines effectively connect the Western Caspian shore with European markets, providing substructure for oil and gas, when the Nabucco Pipeline is realized. When completed it is clear that the potential entry of Caspian natural gas to Europe through the South Caucasus and Turkey will help Europe increase the variety, also reducing Russia's ability to dominate a cartel and the cartel's price-setting power. In order to prevent the urgent problems of Russia's gas cartel, The EU firstly should open direct access to Central Asian gas on competitive terms through the construction of a Trans-Caspian Pipeline.

The energy producing states of the Caspian basin – Azerbaijan, Kazakhstan and Turkmenistan – have large untapped potential production of both oil and natural gas. Europe's future growth in gas supplies is unlikely to be met by just Russian gas production but by gas supplies from the energy-rich states of the Caspian region: primarily Azerbaijan, Kazakhstan, and Turkmenistan. Azerbaijan and Kazakhstan mainly appear as oil producers. On the other hand, Turkmenistan appeared as a gas producer, which is probably among the world's top ten reserves, depending on estimates, and a production capacity that could easily reach over 100 bcm, almost all of which is available for export. Uzbekistan has considerable reserves of both oil and gas (Cornell 2008, pp. 143-145).

However, recent discoveries began to change this portrait. For example, the BP-led Shah Deniz consortium declared that Azerbaijan would enter the scene as a gas producer therefore more natural gas and oil was going to be supplied.

In Kazakhstan the TCO of Tengiz which aims to increase the capacity of their production by the 'Second Power Generation' project is also on the edge of solving their technical problems and therefore increasing their capacity.

The extent to which inner-Caspian might offer an alternative gas supply through Western energy corridor through Turkey should be indicated. Azerbaijan declared that their estimated gas production in 2010 is 0.70 tcf in, and it might reach as much as 1 tcf. Kazakhstan will be producing 1.24-1.5 tcf gas. Turkmenistan will remain as the great gas producer by reaching a production of 3.5-4 tcf per year. *(Table 3.2)*

Table 3.1: Caspian gas reserves

Caspian Gas Reserves (in tcf)			
Country	Proven reserves	Possible reserves	Total reserves
Azerbaijan	30	35	65
Kazakhstan	65	88	133
Turkmenistan	71	159	230
Inner-Caspian	166	282	448
Uzbekistan	66,2	35	101
Russia (Caspian Cost)	NA	NA	NA
Iran (Caspian Cost)	NA	11	11
Outer-Caspian	66	46	112
Total Caspian Sea Region	232	328	560
Source :Adopted from EIA 2007			

Table 3.2: Caspian gas production

Gas Production in Caspian (tcf/year)				
Country	**1992**	**2000**	**2005**	**2010**
Azerbaijan	0.28	0.20	0.18	0.70 – 1
Kazakhstan	0.29	0.31	0.84	1.24 – 1.50
Turkmenistan	2.02	1.89	2.08	3.5 – 4
Inner-Caspian	2.59	2.40	3.10	5.44 – 6.50
Uzbekistan	1.51	1.99	1.97	3.20
Iran	NA	NA	NA	NA
Russia	NA	NA	NA	NA
Outer-Caspian	NA	NA	NA	NA
Caspian Total	4.10	4.39	5.07	8.64
Source :Adopted from EIA 2007				

This picture gives us a very clear conclusion. In the year 2010, Inner-Caspian will be powerful enough to produce about 6 tcf of gas per year. After extracting the domestic

use and Turkmenistan's commitments to Russia, the natural gas that will be available for external markets is about 2-3 tcf (Bilgin 2007, pp. 6386-6388).

These numerical analyses prove the importance of the Caspian region once again. It will highly contribute to the diversification of oil and natural gas supplies and meet the demand of Europe. However, the resources or production capability of the Middle East is not held by the Caspian Region.

3.2 MIDDLE EAST AS A CANDIDATE

3.2.1 Iran

According to Gas and Oil Journal, Iran houses the second-largest pool of untapped petroleum in the world next to Russia and its proven reserves exceed 28 TCM. The cost of producing the gas in Iran is one of the lowest in the world. What this all means is that Iran will play a critical role in the world's future energy equation.

Approximately two-thirds of Iranian natural gas reserves are located in non-associated fields, and have not been developed. Major natural gas fields include: South and North Pars, Tabnak, and Kangan-Nar. Iran's natural gas export is minimal due to rising domestic demand even with future expansion and production from the massive South Pars Project. Iran's domestic consumption is 102.40 BcM while production is 101.00 BcM. The National Iranian Gas Company (NIGC) is responsible for natural gas infrastructure, transportation, and distribution.

According to the agreement signed between Turkey and Iran in August 1996 for 25 years, Iran needs 10 billion m^3 of natural gas supply and ensures continuity to Turkey. On January 19th 2006, Iran reduced the gas flow to Turkey. Turkey, which is dependent on energy export, has great importance due to Iran being second in the supply of natural gas to Turkey. (Victor 2006, pp. 212-213) Turkey, confronted the same problem in the winter of 2007. But was more prepared this time. To solve the issue Turkey recovered this cut off by increasing supplies from Gazprom through Blue Stream Pipeline.

However, Turkish authorities stated that in this event, natural gas cut off was countered due to technical problems from Iran and unable to respond to domestic demand because of difficult winter conditions. Turkish authorities did not ask for another reason behind it. Besides, there is not any other country which can cover the deficit of 30 million m^3 natural gas of the world.

It is a matter of fact that Iran had a very hard winter; the air temperature was below zero in 2006 and 2007. Due to cheap natural gas, Iranian people have not managed to understand the economical use and escape the excesses in consumption. Therefore, Iran, which can not respond rising demand in domestic consumption, is having difficulty in exporting enough natural gas to the foreign market. On the other hand, in the former and present day conditions, the lack of hardware in Iran is another difficulty. These technical problems that occur on natural gas refinery affects all these streams, supply of natural gas on the domestic market and foreign markets.

Iran signed an agreement with Turkmenistan for secure gas flows to Turkey while meeting its domestic demand until it developed the gas infrastructure and increase production. The aim of 2006 gas sale agreement is to increase exports to Iran from 8BcM per year to 14 BcM per year by 2024 with a new pipeline. Nevertheless Turkmenistan demanded to increase gas sale prices, which is at $ 75 per McM, to Iran given that Gasprom had already accepted to pay $ 150 and Petro China $ 196. When Turkmenistan stopped natural gas flow of 23 McM per day causing gas supply interruptions from Iran to Turkey, and subsequently deliveries to Greece, negotiations were suspended in December, throughout January 2008. Iran aims to make investment in nuclear power for its domestic need of electricity and re-export Turkmen gas while cooperating with foreign investors to develop its rich natural gas fields especially in South Pars* (Bilgin 2009, pp.6-8).

Iran imports a fundamental part of the gas it consumes, while its exports at present are limited to pipeline gas being supplied to Turkey and a relatively small volume of LPG by Gulf standards. Since December 1997, Iran has been importing about 5 McM/day

*The South Pars field is a natural gas condensate field located in the Persian Gulf. It is the world's largest gas field, shared between Iran and Qatar.

from Turkmenistan through a 200-km pipeline supplying the north-east of the country. Imports from Turkmenistan are to rise to 8 BCM/year from fiscal 2005 which began on March 21. Gas exports on a large scale will begin from 2008/09 and will include LNG to be supplied to India and other markets (www.allbusiness.com 2009).

On July 2009 between governments of Iran and Turkmenistan an agreement was signed to transport Turkmen natural gas to the Gulf of Basra and the world markets via Iran. On January 2010 Devletabad-Serahs-Hangeran natural gas pipeline was opened. A 30,5 kilometer long pipeline was built by the Turkmen Nebitgas. By capacity of 12 billion cubic meters of natural gas per year, it will carry 6 billion cubic meters from the line in the first place.

As mentioned above, Turkmenistan has sold 8 billion cubic meters to Iran from the natural gas deposits in Korpe. Going into operation of the pipeline, this amount reaches 14 billion cubic meters in the first stage. In the coming years, it is planned to rise to 20 billion cubic meters.

3.2.2 Iraq

According to International Energy Annual (IEA), In Iraq, percent 95 of total energy consumption is oil and 5 percent of total energy consumption is natural gas. As it is understood from these figures, in spite of natural gas having a big potential, it is mainly underdeveloped. According to the Oil and Gas Journal, Iraq contains 110 trillion cubic feet (Tcf) of proven Natural Gas reserves, along with roughly 150 Tcf in probable reserves. Main sources of Iraqi natural gas are the Kirkuk, Ain Zalah, Butma, and Bay Hassan oil fields in Northern Iraqi and the North, South Rumaila and Zubair fields in the Southern Iraqi. Iraq's Northern Gas System was damaged during the Gulf War and the Kurdish rebellion of March 1991. Therefore, energy structure has been mainly waited. Besides, the invasion of USA in 2003 caused sabotage of pipelines (Cordesman and Al-Rodhan 2006, pp. 226-227).

In February 2007, a draft hydrocarbon law, which was prepared by three members from cabinet to define the legal framework for foreign investments as well as revenue sharing,

was approved by Iraqi Cabinet. It is yet to be passed by the Parliament to become effective. The draft law basically aims at transformation of Iraqi energy sector from a closed and a nationalized structure into commercial industry that is fully open to all international oil companies while allowing the Iraq National Oil Company to have exclusive control of 17 of Iraq's 80 known oil fields, leaving two thirds of known and all of its as yet undiscovered fields open to foreign investors (Juhasz, 2007). The parliament did not pass the law because of the disagreements on significant details.

Despite the problems on draft law, Iraq plans to increase production of the North Iraqi natural gas and commercialize it by cooperating with Turkey. Furthermore Iraq is in search of more international support to commercialize the gas/oil found in Southern Iraq (Bilgin 2009, pp.8-9).

Turkey and Iraq plan to cooperate on energy sector in spite of Turkey's security concern on PKK. Meanwhile, general director of BOTAŞ has started the feasibility study work on Turkey-Iraq Natural Gas Pipeline construction which is considered parallel to the Kirkuk-Yumurtalik line. It is expected for the line to carry 10 billion cubic meters of Iraqi natural gas to the world via Turkey. On August 17th 2007 within the framework of the participation of energy ministers, Turkey and Iraq signed a MoU. The project, located in the northeast gas fields is described as an integrated project consisting of development, production, gas processing and pipeline construction. According to the project, came from Iraq to follow Silopi- Sirnak-Diyarbakır line of natural gas pipeline is planned to be downloaded from Diyarbakir to Adana. In addition, it is planned to manipulate to Iraqi natural gas at the liquefied natural gas terminal established in Yumurtalik.

On September 2008, ministry of oil of the Republic of Iraq signed a preliminary agreement with Royal Dutch Shell to exploit natural gas in Iraq. Despite of criticism of the Iraqi politics to sign the agreement, it is announced that Shell would have to wait until January 2010 Iraqi national elections. Members of parliament criticized the negotiations as being non-transparent and the agreement as being unconstitutional. Besides, the Oil and Gas Committee in the parliament was worried that Shell would be establish a monopoly with a 25 year agreement. Another controversial issue was how

much of the natural gas will go to domestic needs, and how much will be exported. Finally, the operational area of Shell will be just Basra or all Southern Iraq.

In spite of all these negotiations and uncertain legal environment, the Ministry of Oil of the Republic of Iraq, Royal Dutch Shell plc (Shell) and Petronas Carigali (Petronas) signed a 20-year agreement to provide technical assistance in the development of the Majnoon oilfield on January 17th 2010. Majnoon, located in southern Iraq, is a huge oil field, with reserves of 13 billion barrels of oil.

Shell and Petronas have beaten a rival bid from France's Total and China's CNPC. Shareholding of Shell is 45 percent share, with partner Petronas holding 30 percent. On the other hand, the Iraqi state holds 25 percent of the participating interests in all licenses (www.shell.com 2010).

3.2.3 Egypt

Egypt natural gas was introduced to Egyptian local market in 1975 and the first liquefied natural gas (LNG), with the Suez Canal and Sumed Pipeline, began to be exported in January 2005. Natural gas reserves of Egypt are mainly in the Western Desert, off the Mediterranean shore, in the Nile Delta. In spite of being a significant oil producer, Egypt only recently had a bright prospect on natural gas. Crude oil production has been in decline for several years. To minimize the growing domestic demand of oil, Egypt has been encouraging the production, exploration and domestic consumption of natural gas.

One of the biggest gas producers in the country is the International Egyptian Oilfield Company (IEOC), a branch of Italian Eni. Other companies such as BP, BG, Apache Cop. and Shell operate activities of exploration and production for a period of generally 20 years in different geographic zones of oil and gas deposits in the country.

Egypt and Jordan agreed to construct the Arab Gas Pipeline to export natural gas to Jordan, and then later to Syria and Lebanon. Since July 2003 following the construction of pipeline, Egypt began exporting gas to Jordan via a new pipeline from El Arish on Egypt’s north Sinai cost to Taba on the Gulf of Aqaba, and then underwater to the

Jordanian city of Aqaba. In May 2008, the EU declared a joint statement aimed at connecting Arab Gas Pipeline. The capacity of this pipeline, currently approximately 31 McM, was planned to reach 283 McM per day to other markets including the EU. In May 2008, Egypt declared a moratorium, which deferred the Commission joint statement on Middle Eastern gas pipeline and aimed at extension of Arab Gas Pipeline to Turkey by also including Iraq gas (Bilgin 2009, pp.9-10). In December 2008, the EU and Arab Republic of Egypt declared a MoU on strategic partnership on energy. By this statement, the EU and Egypt agreed to cooperate on energy comprising natural gas and development strategies and projects in the period of 2009-2015 (www.ec.europa.eu 2008).

4. THE ROLE OF TURKEY ON EU ENERGY SECURITY

4.1 BRIEF OVERVIEW OF TURKEY'S POLICY IN CENTRAL ASIA AND CAUCASUS

During the communist Soviet Union regime, Turkey avoided establishing official ties with Soviet Republics though initial steps towards creating contacts were taken by private companies and individuals. However, after Gorbachev's policies began to open the closed Soviet system, Soviet Republics started to declare independence one after the other between June and October 1990 though their foreign relations were still under the surveillance of Moscow. With the Soviet Union formally broke up in December 1991, Turkey became the first country to recognize the sovereignty of all the Central Asia and Caucasian countries. Thus, Turkish policy toward the region has changed and Turkey has signed various agreements with these states. By the end of 1991, Turkey had dramatically abandoned its Moscow-centered stance. All these developments increased Turkey's regional and international responsibilities and Turkey aimed to play a dynamic role in connecting regional countries to rest of the world.

On the other hand, Turkey also expected to gain economic benefits from the development of closer ties with Central Asian and Caucasian states for the growing Turkish economy. Apart from the potential for economic cooperation, Turkey also expected to become more important in the region because of its historical, cultural, ethnic and linguistic links with the region's large Turkic populations. Besides, being a model to these countries due to the secular and constitutional character of Turkey, Turkey's claims were supported by the West and Russia (Davis and Azizian 2007, p. 195).

However, the effort of Turkey to being a model has been confronted with difficulties. First of all, because of the large deficit and high inflation, Turkish economy has not been good throughout the 1990's and therefore, Turkey was unable to meet its promises to regional states. Secondly, despite their common Turkic origin, most of the people in the region have developed a sense of individual identity. An additional difficulty was

that Russia was still a great power and aimed to continue political and economic influence in the region.

As a result of all, there were some disappointments on both sides. However, the stand and policy of Turkey, on matters such as possible Iranian attempts to turn regional states into theocracies in its own image or the conflict between Azerbaijan and Armenia over the Karabakh issue and on the other issues, was measured and calculated. Hence mid 1990's, the focus has shifted from common on Turkic origin, to economic and political common point in the region and right policies, and Turkey's important position has been recognized by the EU and the rest of the world. This also has increased possibility of full membership in the EU.

Some further explanations are needed at this point on Turkish policy after 1995. Because of the legacy of distrust between two nations and the historical baggage, Turkish- Armenian relationships were delicate that time. Also, Turkey recognized the Azerbaijan's claim over the Karabakh issue and Turkish public opinion strongly sided with Azeris. Even the efforts of Turkey and the EU, the problems between Armenia and Turkey on the matter still have not been solved. Besides, about the conflicts between Russia and Georgia, Turkey had shown great sympathy for the Chechen cause. All these policies tightened Turkey, Azerbaijan and Georgia relationships and caused to sign intergovernmental agreements on energy. As a result of that, Baku-Tiflis-Ceyhan Project and South Caucasus Project (as mentioned below) have come about.

After the November 2002 elections, with the coming of Justice and Development Party (AKP) to power, Prime Minister Recep Tayyip Erdoğan visited Azerbaijan, Kazakhstan and Turkmenistan and it has become clear that Turkey' interest was the pipeline projects which affect especially the relationship of Turkey and the EU (Aydın 2004, pp.2-19).

4.2 HISTORICAL DEVELOPMENT OF NATURAL GAS AND OIL IN TURKEY

Recent studies have confirmed the existence of oil and natural gas in Turkey. While the first productive oil well was discovered in Raman in 1945, natural gas consumption began in the early 1970's with the usage of indigenous natural gas production. Petrol was encountered in different regions and production is done especially in Southeastern Anatolian region in Turkey. However, while the oil fields usually were discovered in Southeastern Anatolian Region, the natural gas fields were discovered in Thrace.

While the first studies were begun in 1983 on natural gas, an agreement was signed between Turkey and the Former USSR to transport natural gas to Turkey. The demand of natural gas was low due to missing of required infrastructure in cities and insufficient knowledge about natural gas use until 1987. The construction (emergence) of the Turkish gas market started by introducing gas in power generation in 1987. Hamitabat and Ambarli natural gas power plants were constructed in a short period and Turkey started to use natural gas only for electricity production in 1987. In 1988 natural gas began to be used for the residential and the industrial sector. Today, with a growing gas market, natural gas is used on power generation, residential, industrial and fertilizer.

On the other hand, in 1954 studies of prospects for oil started, and with 1973 and 1979 oil crises when the price of petrol increased 10 times, Turkey took notice of prospects for oil. Thus in 1991 production of indigenous oil hit record levels. However after 1991, drilling and prospects for oil and natural gas has been declining for a variety of reasons such as insufficient budget. Indeed it is known statistically that reserves of Turkey on oil and natural gas is not on the level of Middle East countries and our fields include heavy oil.

On this point, there is need to look at Turkey's state-owned company BOTAŞ. BOTAŞ was established by the Turkish Petroleum Corporation (TPAO) in 1974 for the purpose of transporting Iraqi crude oil to the Ceyhan Marine Terminal, in accordance with the Iraq-Turkey Crude Oil Pipeline Agreement signed in1973 between Turkey and Iraq.

BOTAŞ, which was established for Turkey's increasing need for diversified energy sources, became a monopoly in the market since 1987. BOTAŞ has transported crude

oil through pipelines to cover natural gas transportation and trade. BOTAŞ's responsibility is to construct and operate gas pipelines. However, there are no restrictions on private or foreign companies in the distribution of natural gas in cities (Öztürk &Hepbaslı 2003, pp. 294-298).

4.3 EFFECTS OF EUROPEAN UNION ENERGY POLICY ON TURKEY

Adaptation process of Turkey on the EU energy acquis began after Helsinki Summit, where Turkey was declared a candidate for accession to the EU, in 1999. Reform process for reconstruction of energy sector of Turkey on Europe internal energy market started in 2001. On this point, Turkey has not been yet successful enough on implementation, despite of being achieved the legal work.

In order to fund a competitive market, legal arrangements have been continually made by Turkish government. Substantial progress has been achieved by establishing The Energy Market Regulatory Authority (EMRA) to be in charge of regulation and supervision of electricity, gas, petroleum and LPG markets and adopting Electricity and Natural Gas Market laws in 2001. By adapting petroleum and LPG market laws in 2005, competition oriented mechanisms has been put into place. In the same year, concerning renewable energy sources, the law on the renewable energy sources adopted for the promoting investment and liberalized energy markets on the sector. The Energy Efficiency Law was enacted in order to provide efficiency in the use of energy resources from consumption to production and prevent waste in 2007. Unfortunately, this has not been reflected to implementation yet.

Turkey is a country rich in resources such as hard coal, lignite reserves, hydro and other renewable resources for example wind and solar energy. However, they are not duly utilized. Moreover, to meet the demand of electricity, the procedure for the first nuclear power station of Turkey has begun after fifty years of waiting on the issue. Turkey's first nuclear reactor, requiring 60 percent domestic ownership by law will meet 5 percent of Turkey's energy demand and be operating by 2013 (www.ec.europa.eu 2008).

With the pipelines passing through Turkey to Europe, Turkey assists the internal market of the EU for integration. This assessment is increased by the completion of Nabucco Pipeline Project, which is also mentioned on Turkey's progress report in 2009.

On this point it must then be analyzed on what the EU thinks of it. The European Commission, which evaluates Turkey's adaptation process on the EU energy acquis, in the 2009 progress report (15th chapter) has emphasized that regarding the internal energy market; significant progress can be reported on electricity, renewable energy and energy efficiency. On the other hand, limited progress has been made on natural gas, nuclear energy, nuclear safety and radiation protection. Turkey needs to implement its legislation and strategies.

Moreover, Energy Community Treaty was adopted by Turkey in 2006. The EU has accepted this agreement in order to integrate regional electricity and natural gas markets, which the EU aimed to establish, in Southeast Europe with its own internal market. It will be particular in relevant for energy sources, energy efficiency and environmental issues.

The concession of gas distribution has been given to private companies in some regions. However, transfer of 4 bcm with an import agreement, from BOTAŞ to private companies, was inefficient to create wholesale gas trade activities. Natural gas market law needs to be revised due to a discrepancy between law and developments on the market. Moreover, because of gas storage facilities are very limited in Turkey; the investments are being prepared and should help to balance supply and demand (www.abgs.gov.tr 2009).

4.4 ROLE OF TURKEY

According to Jozias van Aartsen (2008, pp.1-2), "it is a sad truth that no democracy can be truly sovereign unless, broadly, it enjoys independence in energy". And as it is explained above, being independent on energy is not possible for the EU without collective effort. Europe may be successful in providing affordable and continuous

energy to its citizens by developing an integrated market with Caspian Region, Middle East and Turkey.

Not only its geopolitical position but also being a solid secular republic in the Middle East has increased the importance of Turkey. (Davis and Azizian 2007, p.206) Turkey recently stands in the forefront because of its role as a gateway for gas to enter the EU. Cooperating with the EU brings various benefits in energy fields to Turkey and the EU. Consequently, the EU achieves reliable alternative supply routes but on the other hand Turkey achieves transit revenues, new refineries, LNG terminals, trading facilities and other energy-related business.

Turkey's geographical position is irreplaceable, especially concerning natural gas. With the Bosphorus strait and the completion of Baku-Tblisi-Ceyhan Pipeline, South Caucasus Pipeline structures and other new pipelines, Turkey already successfully fulfills its duty in this regard (Özdemir 2008, pp.99-107). The Bosporus is now the world's busiest maritime strait. With tankers of 200,000 tons or more transiting the Bosporus every 20 minutes, growing traffic, its narrow, busy waterways, it poses significant environmental and safety risks to Istanbul. Turkey has repeatedly complained about the rising volume of maritime traffic and suggested solving this issue through building bypass pipelines that would ease the traffic. For instance, Burgas-Alexandropolis Pipeline will relieve tanker traffic in the Turkish Straits by reducing the number of vessels. Nearly 4 percent of the world's daily oil consumption is carried through the Turkish Straits.

Turkey exercised the energy role in 2006. Russia used its energy force as chantage to punish the pro-western foreign policy orientation of Georgia and also in Ukraine a year earlier. Gasprom demanded to double the gas prices for the Russian gas imports of Georgia. In order to solve the problem Georgia asked the Turkish and Azerbaijani governments for help. Nonetheless the strong Russian opposition on signing the agreement, through an agreement signed between Georgia, Turkey and Azebaijan for redistribution Turkey lent its quota of 800 McM to Georgia of the quotas from Shah-Sea Pipeline. The unofficial unit price for this volume was $120 per 1000 cubic meters. Because of that, Turkey gave up the advantageous right to buy Azerbaijani gas at $120 dollars per tcm, compared to its imports from Russia at almost $300. Turkey was

therefore given a strategic goal of becoming an energy center that connects the EU and Caspian states. Although Turkey secured the stability and sustainability of its neighboring states, Turkey became highly dependent on Russia. This example shows the common strategic interests of the US, EU, Turkey, Georgia and Azerbaijan in the sphere of energy (Özdemir 2008, pp.107-109).

Turkey is not short of gas at the moment. On the contrary, Turkey has signed long term contracts with Russia, Iran and other suppliers committed to purchasing more than they actually needed and if these contracts are breached, the penalties would be paid. Therefore, Turkey needs to build infrastructure for storing gas, re-exporting surpluses to the EU and distributing the gas imports around the country so that it can be used residential and industrial. However, BOTAŞ does not have a sufficient budget for investment (Barysch 2007, pp.2-6).

On other hand another problem of Turkey on re-exporting the gas is the Russian opposition. Turkey is allowed by Azerbaijan to resale its gas to European markets. On the contrary, resale clauses are not obtained at the contracts for the purchase of Russian and Iranian gas. Eventually, this may not be an important problem with regard to the selling of Iranian gas, since Tehran is willing to see its gas enter European markets via Turkey. However, Russia is opposed to the Turkish resale of Russian gas to European markets.

Nonetheless, giving the right to Turkey to re-export the gas is being discussed by Gasprom in order to undermine the Nabucco Project, proposing an alternative project, which brings the Russian gas from Turkey to Southern Europe through a second Blue Stream Pipeline. Eventhough the President of Russia, Putin, raised this possibility in 2006; the Turkish –Russian relationship has suffered lately, because of Turkey's active support for Nabucco. Russia is concerned for not contributing to Turkey's role on Eurasian energy politics. Moreover, Russia plans to build another gas pipeline, called South Stream, from the Black Sea to Bulgaria via Turkey. Despite the agreement having been signed between ENI and Gazprom, with the support of the European Commission, it needs Turkish acceptance of Gazprom's offer to become a transit state.

The US government supports the diversification of energy supplies for energy security which transports Caspian energy to Europe, on the contrary Russia seeks a way in order to expand Soviet-era nourth-south energy infrastructure and keep its dominant position on the market. Turkey's side on this issue will affect this conflict. Till now, Turkey has decided to support Europe. However, the EU's attitude regarding Turkish full membership, and its strategic role on energy could continue the support for the EU. Otherwise, there is no doubt that Turkey would reverse it stance on the issue (Özdemir 2008, pp.110-112).

Special attention should be given to the role of the Justice and Development Party (JDP) in analyzing the role of Turkey on energy. JDP has created a new policy strengthening the foreign policy, which can be described with key words; pragmatism and flexibility. Moreover, the JDP adopted in principle an economic liberal ideology in terms of political economy as well. Despite strong criticisms by nationalist parties such as the Nationalist Movement Party and Republican People's Party; privatization, minimizing the role of state, opening the national market for foreign investment have been given preferences within economy. Facing criticisms on his party's economic policies, Prime Minister Recep Tayyip Erdoğan stated that one of his duties was to market Turkey. This perspective is also effective in energy politics as well. The government has realized many liberal reforms on the functioning of the energy market to comply with international and European conditions. In spite of its former problems with countries such as Greece, Iran and Russia; Turkey has not hesitated to cooperate with them in terms of energy-based cooperation. Moreover, the government emphasized the importance of the role of Turkey as an energy hub and becoming aware of its advantage in the process of becoming an EU member. Turkey plans to enter into the EU with the help of pipelines such as Turkish-Greek Pipeline and Nabucco Project and upcoming projects (Bacık 2006, pp.302-304).

Due to its growing population, dynamic industry and economy and recently its role on energy makes the EU rethink Turkey's possible membership. Some authorities emphasized the energy as one of the most significant common interests of the EU and Turkey. Even the president of France, Nicolas Sarkozy, which opposed the membership

of Turkey and the energy giant of France, Gas de France, is very interested in the Nabucco Project.

4.4.1 Projects To Be Realized Or Those Under Construction

Aim of Turkey is to become the fourth main artery for providing the flow of natural gas to Europe after Russia, Algeria and Norway. However, this aim will only be possible with materializing the number of projects, which will bring the gas across Turkey, besides existing pipelines.

Azerbaijan-Turkey (Shahdeniz/Baku-Tblisi-Erzurum) Project: It is a natural gas pipeline transporting gas from the Shah Deniz gas field in the Azerbaijan via Georgia to Turkey, approximately 8.4 Bcm/y of gas. It runs parallel to the Baku–Tbilisi–Ceyhan (BTC) pipeline. It could also be linked to any future Trans-Caspian gas pipelines.

A 15 year gas trade contract between Turkey and Azerbaijan was signed on March 12, 2001. In this content, developed Azerbaijan-Turkey Natural Gas Pipeline Project has been realized in 3 phases to the construction of tender and two of phases have been completed. Gas production at Shah Deniz began in December 2006. Russian influence and it has the potential to strengthen Turkey's role as a hub for energy supplies to Europe, but the project faces many of the same environmental and social problems as the BTC pipeline project (Bacık 2006, pp.299-302).

Turkey-Egypt Natural Gas Pipeline: The aim of the project is to bring Egptian natural gas to Turkey. Within the contents of the project, between Egyptian Natural Gas Company EGAS and BOTAS a framework agreement, relating to issues of gas import and gas transmission to Europe via Turkey, was signed on March 17, 2004. With the project, from Egypt to Turkey 2-4 billion m^3 gas export, to European markets via Turkey 2-6 billion m^3 gas export per a year is envisaged. At the end of the talks between the Egyptian and Turkish Ministers held in Istanbul, a MoU was signed on February 16, 2006 aimed at the continuation of mutual cooperation in the field of natural gas. Within the framework of signed MoU, with the participation of Syria, working groups were

formed and the endeavour of the project's feasibility and requirements were initiated. Related ministries and working groups come together and set work on various dates. (www.turkishny.com 2009)

Turkey-Greece-Italy Gas Pipeline: Within the framework of EU Commission INOGATE Program, Southern Europe Gas Ring Project has been developed for transport of natural gas, which has been provided by the Caspian Basin, Russia, Middle East, South Mediterranean countries and other international sources over Turkey and Greece, to the European market. Turkey-Greece-Italy Natural Gas Pipeline is the next stage and aimed to extend Turkey-Greece Natural gas pipeline to Italy with a line extension which is passing through the Adriatic Sea. BOTAŞ is participating in the works of Depa of Greece and Edison of Italy. Regarding the connection line between Greece-Italy, the official agreement was signed by Italian and Greek government representatives on January 31, 2007 in Athens. Turkey-Greece-Italy Intergovernmental Agreement came to life in Rome on July 26, 2007. Within the framework of the project, 3,6 bcm natural gas to Greece and 8 bcm natural gas to Italy is planned to transport via Turkey. Commissioning of the line is envisaged in 2012.

Turkmenistan-Turkey-Europe Natural Gas Pipeline Project: The aim of this project is to bring Turkmen gas from the Caspian Sea to Turkey and Europe. In this context, on October 29, 1998 a framework agreement was signed by the president of Turkmenistan and Turkey. On May 21, 1999 BOTAŞ and Turkmenistan 30 years long term natural gas sale and purchase agreement was signed for 16 billion cubic meters of natural gas purchases. Five billion cubic meters of this gas is Russian gas.

Turkey-Iraq Natural Gas Pipeline: The aim is to bring the Iraqi gas to Turkey and export it to Europe via Turkey. In 1999 with the signature of the Turkish minister of energy and natural resources and the Iraqi minister of oil, the project was begun. The project, covering Iraq's natural gas fields located in The North East is, an integrated project consisting of field development, production, gas processing and pipeline construction process. The intention is to bring 10 billion cubic meters of gas a year. Because of the sanctions of the United Nations, some delays have occurred in order to

actualise the project. On August 7, 2007 with the MoU parties declared the common purpose and TPAO and BOTAŞ representatives decided to start the feasibility studies.

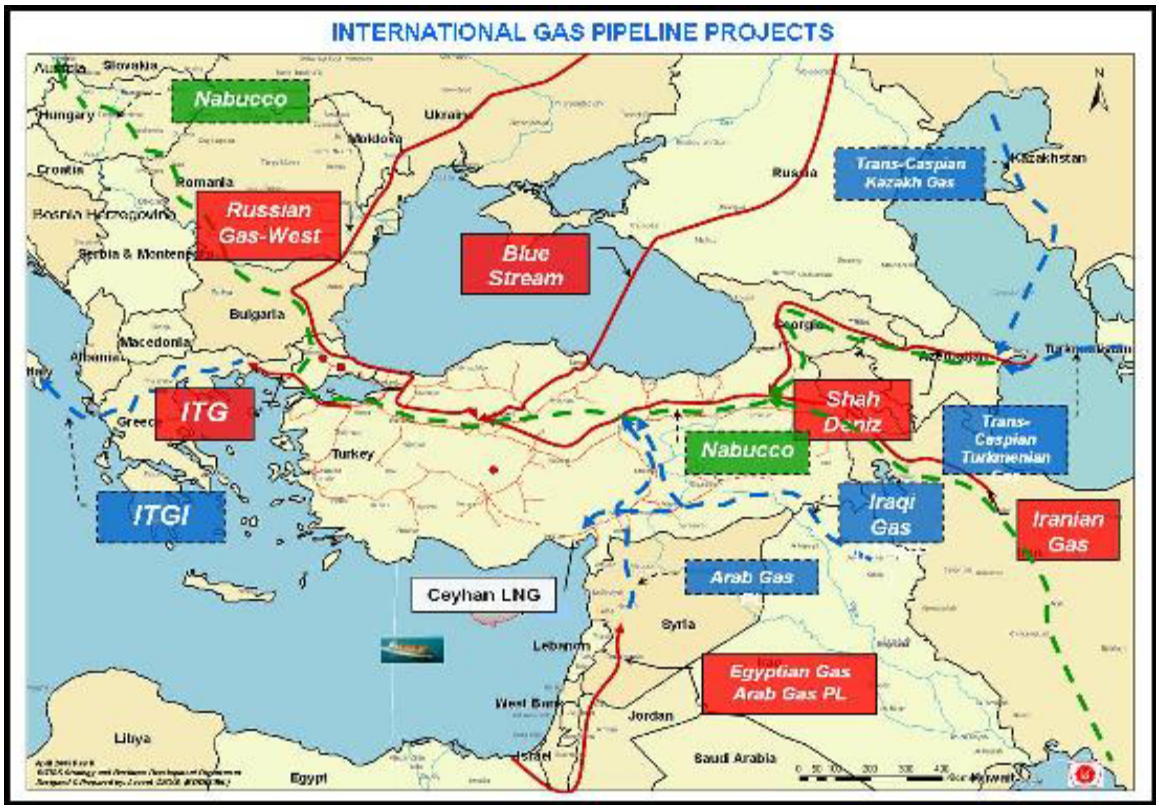


Figure 4.1: International gas pipeline projects via Turkey

Source: Adopted from BOTAŞ, (2010)

4.4.2 The Existing Pipelines

Russian Federation-Europe-Turkey Natural Gas Pipeline: With this project, Russian gas passes through Turkey via the Bulgarian borders. The length of Turkish line is 842 km. Between Russia and Turkey an agreement for the gas trade was signed in September 18, 1984. The first part of the pipeline was finished in 1987 and the gas brought from Russia was used to produce electrical energy in Turkish Hamitabat plant in Kırıkkale. Thrace Combined Cycle Power Plant. In 1988, the pipeline was lengthened to Ankara and started to be used in the residential, commercial and industrial sector. The first agreement was signed for a 25 year period and 6 billion cubic meters of natural gas per year. However, the second agreement extended the project for another 25 year period on the basis of 14 billion cubic meters of natural gas.

Iran Turkey Natural Gas Pipeline: The agreement between Turkey and Iran was signed in 1996 for 25 year gas trade to satisfy the Turkish market demands from Iranian resources. As mentioned before, although the gas supply was cut off several times, it is now back to normal again.

The Blue Stream Pipeline: The Blue Stream Pipeline carries the natural gas of Russia to Turkey from the Black Sea to Samsun Port up to Ankara. Total length of the pipeline is 1,213 kilometers. The pipeline has been constructed by Russia, Turkey and Italy-involving a joint venture between Russia's gas giant Gazprom and Italy's major energy provider ENI. Building the Blue Stream pipeline was intended to be the foundation for a strategic partnership between Russia and Turkey, with joint participation in energy and transport projects. According to Gazprom the pipeline was built with the intent of diversifying Russian's gas delivery routes to Turkey and avoiding third countries. Preparations of the pipeline project began in 1997. On December 15th 1997, Russia and Turkey signed an agreement on construction of the sub sea pipeline. The duration of the gas trade between Gazprom and BOTAŞ is 25 years. The construction of the Russian land section was built in 2001-2002. Gas flows from Russia to Turkey started in February 2003. However, because of the price issue between Russia and Turkey, the official opening ceremony at the Durusu gas metering station took place only on 17 November 2005. By 2010, Blue Stream pipeline is expected to be operating at full capacity, delivering 16 billion cubic meters of natural gas per annum.

After the First Blue Stream pipeline, Blue Stream 2 was first proposed in 2002. Gas prom were planning to blue stream pipeline 2 construction and export Russian gas via Turkey to Greece, Italy, Bulgaria, Romania, Hungary, Austria and Israel. However, with the emergence of South Stream Pipeline as an alternative to Nabucco Pipeline Project, Blue Stream Pipeline has been postponed, due to South Stream was not only alternative to Nabucco but also was alternative to Blue Stream 2. In addition, Turkey's big effort to implement Nabucco has caused to reviewing ideas of Russia on it. However, during the negotiations of Alexey Miller' visit (the President of Gasprom) to Turkey, parties have brought up the issue and agreed that they can meet the technique needs of the pipeline, it has brought from two countries and the cost of pipeline will be appropriate when it is compared with other projects. It is foreseen that this pipeline will build up to Blue

Stream 1 in parallel and be extended to Israel. We may say that parties will continue to negotiate in the coming days.

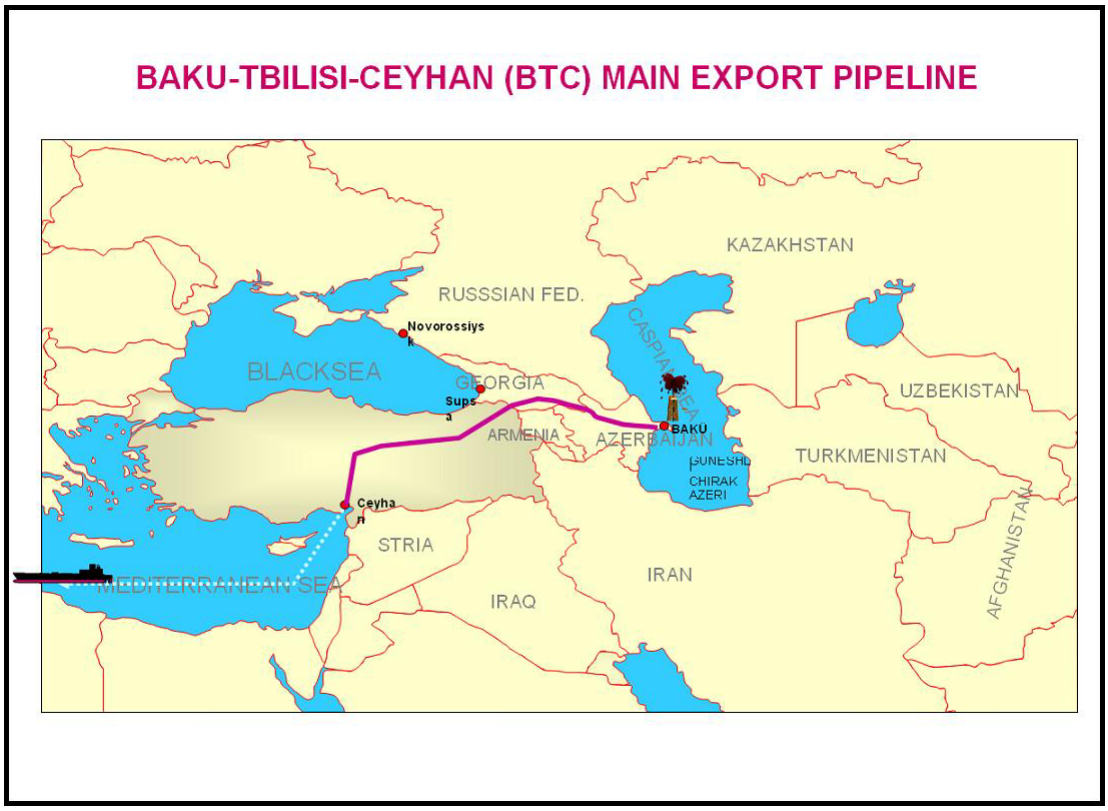


Figure 4.2: Baku Tbilisi Ceyhan Pipeline Project

Source: Adopted from BOTAŞ, (2010)

The Baku Tbilisi Ceyhan Oil Pipeline: The Baku-Tbilisi-Ceyhan Pipeline 1,768 km long and begins at the Sangachal Terminal near Baku in Azerbaijan, crosses Azerbaijan, Georgia and Turkey and terminates at the Ceyhan Marine Terminal (Haydar Aliyev Terminal) on the South-Eastern Mediterranean coast of Turkey. The first document on the construction of the Baku-Tbilisi-Ceyhan pipeline was signed between Azerbaijan and Turkey on 9 March 1993. The construction of pipeline began in 2003 and was completed in 2005. It was designed to carry one million barrels of oil per day from the Caucasus to the Mediterranean and it is capable of carrying 1 percent of the world's daily oil requirements. It has been built by a consortium of Western and American oil companies led by BP, SOCAR, Unocal, Statoil, TPAO, Eni, Itochu, ConocoPhillips, Inpex, TotalFinaElf ve Amerada Hess. Because of these features of the project, the

project will help the US and the EU to guarantee energy security. Consequently, sea transportation will be relieved.

5. NABUCCO PIPELINE PROJECT

Named after a Verdi opera about the Babylonian king Nebuchadnezzar, Nabucco will be a pipeline to link the world's richest gas regions, the Caspian region, Middle East and Egypt, to the Europe.

Figure 5.1: Nabucco Pipeline Project

Source: Adopted from BOTAŞ,(2010)

The total length of the line will be 2,841 km excluding feeding lines and 3,282 km with including feeding lines. The line lengths for attended countries are showed below:

Table 5.2: Nabucco and feeder lines

Nabucco Line	Turkey Section	:	1,558 km
	Bulgaria	:	392 km
	Romania	:	457 km
	Hungary	:	388 km
	Austria	:	46 km
Feeder Lines	Georgian Border-Horasan	:	226 km
	Iran Border-Horasan	:	214 km
Turkey Total		:	1,998 km

Source: Adopted from BOTAŞ (2010)

As it is seen at table 5.2, Turkey has the longest lines 1558 km. However, Austria will benefit from the corporation tax because the center of Nabucco Company is in Austria.

Estimated investment costs including financing costs for a complete new pipeline system amount to approximately 7.9 billion Euros. On the other hand, according to market studies the pipeline has been designed to transport a maximum amount of 31 bcm/y. The importance of project is proved by these figures.

First talks regarding the project started in February 2002 initiated of BOTAŞ with the working groups formed by OMV Erdgas (Austria–today OMV Gas), BULGARGAZ (Bulgaria), TRANSGAZ (Romania) and MOL (Hungary) with BOTAŞ.

Eventually a cooperation agreement was signed between BOTAŞ, Bulgargaz, MOL, Transgaz and OMV Gas whose main goal was to conduct a feasibility study for the construction of the new gas pipeline in October 2002.

On December 22nd 2003, a grant agreement was signed between OMV Gas, the other four partners as associate beneficiaries and the European Commission. With this agreement, the EC covered half of the cost of both the technical and economic feasibility studies of the project. These studies were finalised in principle by the end of

2004 and it was understood that the project is technically and economically feasible and financially bankable.

On June 24th 2004, Nabucco Gas Pipeline International GmbH, was established. The shareholders are Nabucco partners and each shareholder holds an equal share of 16,67 percent. It is responsible for commercialization of the capacity under transportation agreements with shippers. Nabucco Gas Pipeline International GmbH will be the only company in direct contact with the shippers (one stop shop principle), and will act independently from its parent companies.

In 2005 Nabucco Partners decided to go on with the project and to enter into the Development Phase, which all technical, legal, commercial and financial issues will be covered. Development Phase is estimated to continue until end of 2010, when financial closure is expected. The construction of the Nabucco Pipeline is planned to start in 2011 and will be finished for transportation of gas in 2014.

In June 2005, The Joint Venture Agreement, set out the rules of the Nabucco Partners' participation in Nabucco Gas Pipeline International GmbH and the Nabucco National Companies, was signed by the Nabucco Partners on 28 June 2005.

In February 2008, German RWE officially became the 6th equal shareholder of the consortium and remains open for a potential 7th shareholder to strengthen the project. The following companies have shown interest in being the 7th partner: French Gas de France and Total and Germany's E. ON. Even the president of France, Sarkozy, opposed the membership of Turkey in the EU, and the French energy giant, Gas de France, was very interested in the Nabucco Project. After not making progress with TOTAL, the interviews started with Gas de France. However, the interviews were frozen due to a law which allowed the punishment of people who rejected the so-called Armenian genocide, which in turn was accepted by the French assembly. This began talks with RWE on it. E. ON Company, due to the company's partnership began with the Hungarian company MOL, Nabucco's partner, and its participation to competitor projects, was rejected. Thus negotiations were completed with RWE and it was declared as the 6th partner. In the meantime, Canadian Enbridge and Polish PGNIG declared their intentions to be the sub

participator. The British Merrill Lynch, the Japanese Sumitomo companies and JBIC showed their intentions to become the new financially partner.

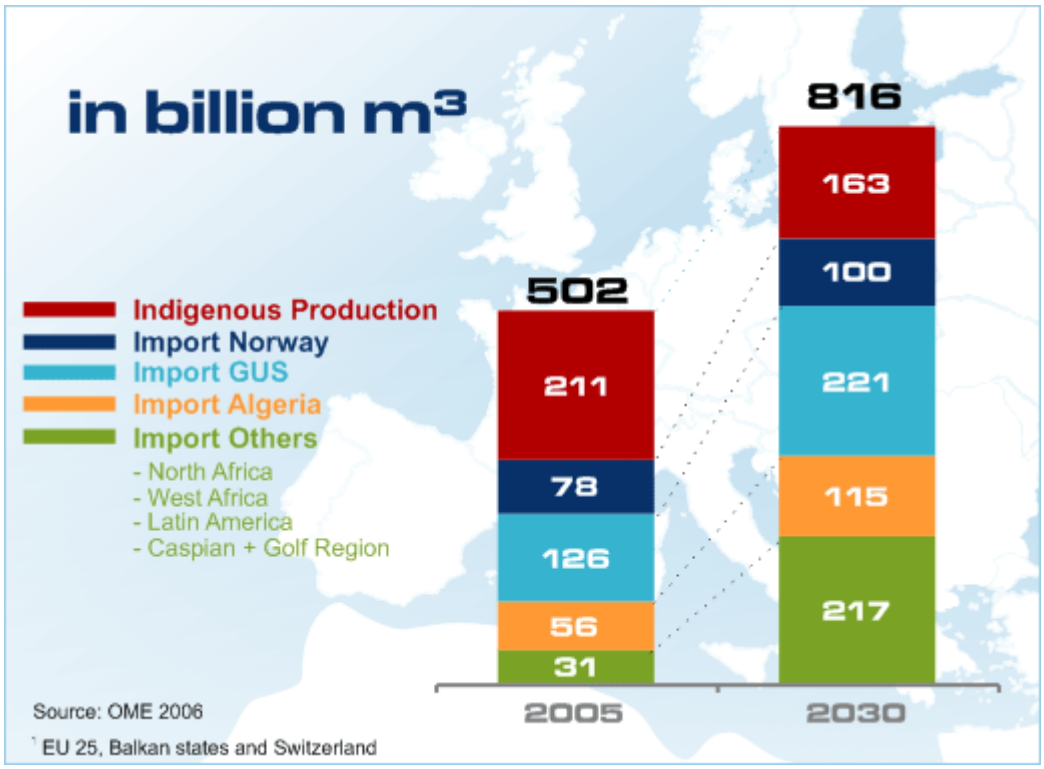
The intergovernmental agreement was signed by five prime ministers in Ankara on July 13, 2009. The EU was represented at the ceremony by the President Jose Manuel Barroso and the Commissioner for Energy Andris Piebalgs, and there were also representatives from the US, Special Envoy for Eurasian Energy Richard Morningstar and Ranking Member of the US Senate Committee on Foreign Relations Senator.

Source: Adopted from Nabucco (2010)

Figure 5.2: Nabucco Pipeline Project construction

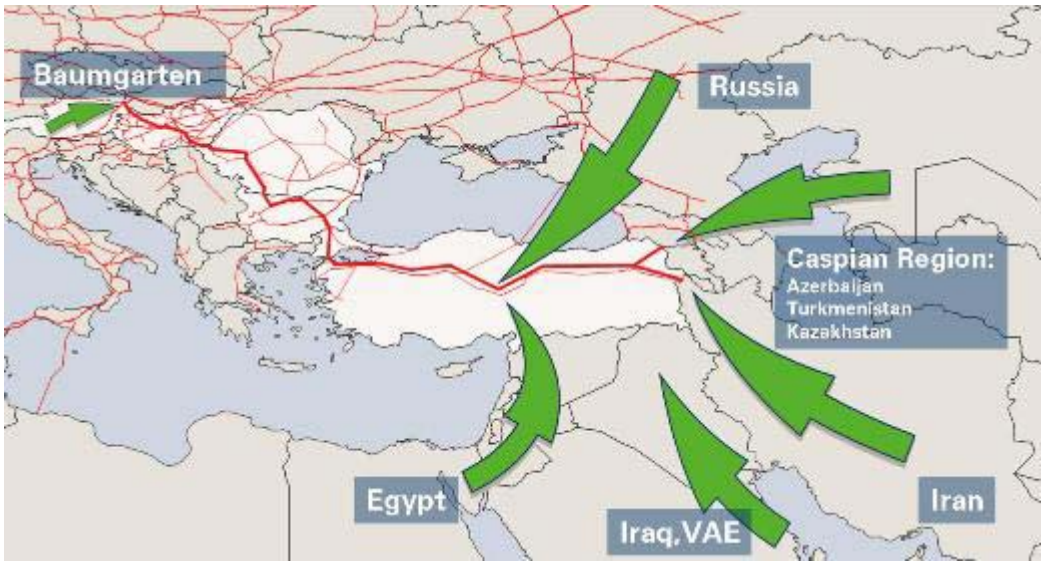
As a result of feasibility study it was decided to construct the pipeline in two major stages as a first and second construction step. The first construction step technically can be separated to two back-to-back construction phases as first construction phase and second construction phase. First construction phase starts in 2011 and an envisaged route is from Turkey (Ankara) to Austria (Baumgarten). Construction line will be approximately 2,000 km. After this phase, the existing pipeline facilities between the Turkish / Georgian and Iranian borders could be used in order to connect the new pipeline to the Turkish borders for a temporary period of 2 years. It is envisaged that the project will start operation in 2014 and the initial pipeline capacity up to 8 bcm, while

the construction of the rest of the pipeline will be finished at the same time. The second construction phase will consist of the construction of the remaining section between the Turkish border to Georgia resp. Iran and Ankara and run from 2014 until end 2015. The second construction step will construct further compressor stations to increase capacity. This will consist of the installation of further compression stations at key points of the pipeline, the capacity will be up to 31 bcm/y (www.nabucco-pipeline.com 2009).



Source: Adopted from Nabucco (2010)

Figure 5.3 : Forecast of gas supply Europe



Source: Adopted from Nabucco

Figure 5.4: Nabucco Pipeline Project gas supply sources

5.1 THE NEGOTIATIONS OVER NABUCCO PIPELINE PROJECT

In April 2009, the president of USA, Barack Obama took one of his first foreign visits to Turkey. One of reasons for his visit, as well as the other important problems of America like its situation with the Muslim World, was Nabucco because Nabucco is an integral part of the US strategy of total energy control over both the Europe and Eurasia. Until the Obama-Erdogan talks, Nabucco had not covered the distance to sign the intergovernmental agreement in July 2009. After that changes took place and the US showed its influence over Eurasian energy control once again. Nabucco has big political backing from US as well as the EU as an alternative to Gazprom (Engdahl 2009).

However, at this point it is needed to be mentioned that the US opposes Iran's involvement in Nabucco Project. Until now the potential suppliers are Azerbaijan, Turkmenistan, Kazakhstan, Egypt, Iraq, Russia and Iran. Among them, the US has immensely opposed the participation of Iran to Nabucco due to its energy policy over the nuclear program. The US authorities emphasised many times that the US will not support Iran's involvement in Nabucco or in any other projects because the legislation prohibiting the purchase of oil and gas from Iran under the Iran Sanctions Act

(www.turkishny.com 2009). In the meantime, Nabucco Managing Director Mitscheck leaved the door open to Iran's involvement with saying:

Nabucco has never excluded any source. Nabucco is not excluding any source. Bottom line, we have to buy the gas. The national gas companies will evaluate the political aspect, the commercial aspect, the technical aspect and then they will decide to buy gas from Azerbaijan, Turkmenistan, Iraq, Iran and Russia. For all these sources, we are open to transport the gas

However, despite all protest from America and the West, Iranian leader, Mahmud Ahmedinecad has declared enriching uranium from 5 percent to 20 percent in February 2010. Needless to say that this last event has not effected the situation in a positive way, despite of being holding the second largest natural gas reserves in the world and all the lobbying activities of Turkey to Europe in order to accept Iran. Iranian politicians have claimed many times that Iran's isolation, its poor relations with international community and economic sanctions have not damaged the country seriously and they persisted in continuing the nuclear program but in reality Iran's industry have suffered and will continue to suffer further if no compromise is made.

Another problematic potential supplier is Russia. In spite of Nabucco envisaged a multi sourcing approach, being a supplier of Nabucco is not possible in the short term according to Europe. However, US authorise dissent on the subject. Washington's Eurosian Energy envoy, Richard Morningstar, recently declared that the US aims to depoliticize the Nabucco Project and it might be possible for Russia's participation in the pipeline. According to Morningstar not as a controlling partner, this may give the opportunity to continue its monopoly, but as a participant this could be an opportunity for Russia. However, even Morningstar knows that it is not a possibility for today. Samuel Charap, a scholar in the Russia and Eurasia Program at the center for American Progress, said that in spite of Morningstar's extreme positive approach, Russia would not sign it because Nabucco is exclusively a means of undermining its export monopoly (www.eurasianet.org 2010).

The main gas suppliers for Nabucco are Azerbaijan and Turkmenistan. However, now Azerbaijan has problems providing enough gas to make Nabucco feasible. Azerbaijan signed 1,1 billion dollars natural gas purchase agreement with Russia Gazprom in the beginning of 2010. Azerbaijan signed another agreement after that with Iran 500.000 metrecupes natural gas agreement for 4 months. For Baku's energy market, with its

booming economy China is another alternative. Signing agreements with countries particularly with Russia has affected Nabucco in a negative way. It gives opportunity to Russia to be the only energy supplier for Europe. Due to not having transportation agreement with Europe, Russia has been obliged to make alternative plans for Azerbaijan according to Azeria media. Azerbaijan's President Ilham Aliyev confirmed this determination saying "how long we are going to wait" in regard to the Nabucco project during the World Economic Forum held in Davos in 2009. Aliyev told the press that "The country needed to know what export outlets were available and make its plans accordingly." After five years of waiting, during the high-level Nabucco conference in Budapest on January 26th and 27th 2009, Aliyev declared that Azerbaijan's decisions would ultimately depend on a number of answers to questions, four of which will be crucial. These are: the timetable for pipeline construction, the purchase price for Azerbaijan's gas, its financing, and the transit regime through Turkey and other countries (www.jamestown.org 2009).

On the other hand, the energy problem between Turkey and Azerbaijan poses serious problems. Ongoing conflict on natural gas prices between the two countries is one of the factors which block the project. Aliyev's speech, which underlined the conflict on it, proved the seriousness of problem once again in Davos.

The U.S. Special Envoy for Eurasian Energy Richard Morningstar had a speech about the Southern Corridor, a means of transporting natural gas to Europe via either the Nabucco Pipeline (from Turkey to Austria) or Interconnector Turkey-Greece-Italy Pipeline, said "The failure so far of Turkey and Azerbaijan to conclude an agreement on Shah Deniz gas purchase and transit is somewhat disappointing." He said that both countries are good friends with the US, and the US will be objective in their negotiations. However he also emphasized despite everything, significant further delays could see the window of opportunity for putting in place this key piece the close of the Southern Corridor (www.en.apa.az 2010).

Despite the large Turkmen gas reserves the government did not allow an independent assessment of its resource base. Most of the gas that Turkmenistan will produce over the next 20 years is already committed through long term contracts that the country's late dictator signed with Russia. Vladimir Putin tried new ways to reinforce this dependence

with the plan, building a new gas pipeline from Turkmenistan through Kazakhstan into Russia in May 2007. Luckily, the agreement could not be implemented. If it was, Turkmen gas would continue to flow northwards into Russia, rather than westwards towards Turkey, and from there to the EU.

Other potential suppliers of the first round of implementation of Nabucco Project, Turkmenistan is moving away from the relatively expensive dependence on Russia to handle all its exports of natural gas in recent years. As Russia badly wants to ensure that this regional natural gas continues to flow west through its gateway and it has been bringing pressure to bear on Turkmenistan, the Turkmen has continued to speak favorably about Nabucco. The policy of Turkmenistan's new president, Gurbanguly Berdymukhammedov, is to not tie his country's energy future to Russia alone. Recently Turkmenistan has been transporting up to 40 bcm natural gas per year for the Chinese market. Moreover since 9th February 2010 Turkmen natural gas started to flow to Russia again and it will give 30 bcm natural gas per year. After all this, could Turkmenistan also be able to provide the gas for Nabucco?

While it is aimed to fill the Nabucco line with Azerbaijan and Turkmenistan in priority, Egypt can be a supplier in the long term. Egypt could link its Trans-Arab pipeline to Nabucco, if the Trans-Arab pipeline, which starts in Egypt, is extended about 200 kilometers.

From the beginning Kazakhstan is one of the countries, which appear on the list for Nabucco due to its natural gas reserves. However in june 2009, Kazakhstan energy assistant deputy minister Aset Magauov affirmed in Europe Atlantic Association Council that Kazakhstan will not be involved because of its new projects and not having free gas resources.

Not provided adequate gas pipeline in a situation of these countries, liquefied natural gas (LNG) comes from Qatar will be gasified again and used in the pipeline.

According to allegations, Turkey demanded to use 15 percent of the gas exported to Europe at discounted price over Nabucco negotiations. It is mentioned as allegation, because this demand has not been included in the intergovernmental agreement.

Moreover, the energy minister of Turkey, Taner Yıldız has rejected this claim: "There is no given right to Turkey for 15 percent, so how can he abdicate". He asked if Turkey has the opportunity to ask more, why he ask for 15 percent? Minister Taner Yıldız put down its statement to a Nabucco document, which saying 50 percent of the capacity will be auctioned among the shareholders, 50 percent of the capacity with full Third access. Turkey wanted to emphasise that Turkey's support for Nabucco was unconditional.

The Turkish economy will be boosted by Nabucco gas pipeline project. 4.5 Bn Euro direct investment will be realized at the Turkish Pipeline Section. 2 mm tons of steel is needed for the section. Dividends will be benefited by BOTAŞ as shareholder and potential operators. Moreover, Turkey will benefit from taxes paid by Nabucco like other Nabucco partners. The Estimated tax revenue coming from the Nabucco Project is 7,8 billion Euro in 25 years. Even though Austria will take the corporation tax, Turkey's proportion for tax is 4,2 billion Euro.

However, according to some authorities there are some elements of uncertainty with the project. In March 2009, The EU has finally signaled its willingness to finance Nabucco. At a summit in Brussels, leaders gave final approval to a €200 million finance package intended to kick-start the controversial project. This money will be made available to the Nabucco consortium via the European Investment Bank and being given this consortium is essentially a loan, intended to be used to generate further cash (www.europeanenergyreview.eu 2009). Despite this development, it is still not clear how it will be financed, the cost of the project is an estimated 7,9 billion euros. According to authorities, the problem is not financing but finding the gas to feed the pipeline. Releasing a statement to the press following an extraordinary EU summit on March 1st 2009, German president Angelina Merkel said that the Nabucco gas pipeline must not be subsidised with public money. She said, there is no need for financial support for Nabucco as there is no shortage of private investors. The problem with Nabucco is where the gas will come from, not where the investment will come from, Merkel added.

While the developments going through recently about Nabucco, there is another project which gained popularity, the South Stream Pipeline. The South Stream is another step boosting Russia's efforts to remain the dominant energy supplier. The project provides

for South Stream's offshore section to run under the Black Sea from the Russian coast (Beregovaya compressor station) to the Bulgarian coast (Varna) and further to Italy and Austria. From Bulgaria the route will split north and south, branching off northwest to Austria and south to Greece and Italy. The total length of the offshore section will be around 900 km. The pipeline intentionally bypasses Ukraine due to the Russia–Ukraine gas disputes which occurred over the years. Therefore, the pipeline is routed through Turkey's waters to avoid the exclusive economic zone of Ukraine. It is scheduled to be complete by the end of 2015 (www.old.gazprom.ru 2009).

Source: Adopted from South Stream Pipeline Project (2010)

Figure 5.6: South Stream Pipeline Project

The talks between Gazprom and Eni started in November 2006 and as a result Stratetic Partnership Agreement entered into force. On June 23, 2007, Gazprom and Eni signed the MoU for the South Stream Project implemented and announced it. The project has received broad international support and Bulgaria, Hungary, Greece, Serbia and Slovenia have already signed up for its implementation. Lastly in March 2010, after a year and a half of intense negotiations, Croatia officially joined the Russian-backed South Stream Pipeline Project (Biocino 2010).

Many experts doubt that the South Stream is a viable project, since it would be more expensive, at least twice as much as Nabucco. The latest projected cost is €12,8 billion (double the original estimate) and most experts estimates it will increase still further. It

will be one of the most expensive pipelines in history. The reason is the cost of constructing an undersea pipeline. This segment will extend 900 kilometers beneath the Black Sea. It will be the deepest subsea pipeline ever constructed (www.hudson.org 2010). "It is a political pipeline designed to counter Nabucco" according to Alan Riley from London's City University. Although it is seen as rival to the planned Nabucco Pipeline, Russia does not object to the construction of such pipelines as Nabucco. On the other hand, Nabucco will expand not only the delivery routes but the supply sources. Despite the hurdles, Nabucco planners expect to start construction next year and insist it will start pumping gas to Europe by 2014 (İzmirli&Gurgenidze 2010).

On the other hand Turkey is seen to participate to South Stream Pipeline. Turkish Energy Minister Taner Yıldız said that Turkey would review all the offers on the table, but added that Nabucco and South Stream were not rivals in Turkey's understanding. "Not one of the projects is being looked at as competitors. Each one has its own course of development" he said (www.turkishny.com 2009). In fact, to this statement, 65 percent of Turkey's dependency on natural gas is affected. Another reason behind it, South Stream Pipeline Project possibly passes through over exclusive economic zone of Turkey.

So now the Nabucco project needed to act together, establish deadlines and take resolute leadership for the pipeline to be built.

5.2 ANALYSIS OF NABUCCO PIPELINE PROJECT

The EU has understood the importance of the energy security with the crisis like the oil Crisis in 1973, 1979 and the Russia-Ukraine Crisis. No doubt that, the issue of energy security could not be made clear without mentioning Russia, because Russia is one of the main characters in this movie that is still in the main position of energy supply to the EU and that makes the Union totally dependent on herself. At this point, especially, if we just go back one year, and remember the experiences with Russia in 2009, we would easily understand how important Nabucco Project is.

Despite of the dependency of the EU to Russia on energy, Russia has its own problems. These problems can be examined in two dimensions. First one is the losing the

efficiency on current deposits particularly in Siberia. The cost of increasing this efficiency is financially very high. Despite having large natural gas deposits in West Siberia and Shtokman, the investment cost of these deposits will reach $ 40 billion. In order to overcome this situation, Russia has cooperated with Norway and French companies. However, the global economic crisis has caused to postpone the investments of these companies.

Secondly, domestic consumption of Russia are increasing faster than Gazprom's appraisement. In 2020 and 2025, this increase is expected to be approximately 60 percent more than prescribed one. Due to increasing domestic consumption of Russia and its target for EU market, it is not possible for Russia to meet the export and domestic demand without buying natural gas from Caspian Region and Middle East particularly Turkmenistan, Kazakhstan and Iran.

In the situation of bringing Turkmen and Iranian gas by a pipeline passing through Turkey, will not only be loss of share in the market but also make things difficult for internal market. In this case Russia will lose the possibility of re-exporting the Turkmen and Iranian gas and have to face to directing its own gas to internal consumption. Today the biggest concern of Russia is transport of Turkmen and Iranian natural gas to Europe by various projects.

Named after a Verdi opera about the Babylonian king Nebuchadnezzar, answering to just 3 percent of the EU's natural gas demand, Nabucco Pipeline Project is far away to be enough for EU on its own. In fact, the South Stream project and Nabucco are not the projects rejecting each other or competing. Both projects were born for different future needs, because South Stream Project aims to eliminate the dependency of Russia to Ukraine on gas flows. Nabucco is a future project. Nabucco has been designed to transport a maximum amount of 31 bcm gas per a year. Russia's annual sale to Europe is six floors up, approximately 180-200 bcm.

However, as it is explained above, it is a tremendously important to search for alternative routes for the huge amount of European energy demands, the diversification of suppliers, will lessen of its dependence on Russia energy and the transportation of natural gas from the Caspian region, Middle East and Egypt across Turkey, Bulgaria,

Romania, Hungary, Austria and will further the Central and Western European gas markets. On the other hand, with Nabucco Pipeline Project, the importance of Turkey would be stressed once again. The project has big positive effects on Turkey that aimed to become the bridge between Europe and Asia and the Middle East.

5.3 A DICHOTOMY IN EU OVER ENERGY POLICY AND NABUCCO PIPELINE PROJECT

The European Commission has great concerns on energy policy. These concerns appear to be considerably clear, but policy actions are indefinite and inadequate. However, infrastructure investment, the importance of renewable resources and control of energy production and distribution are high priorities of the Commission. On the other hand, national energy needs and preferences are addressed by national governments rather than by the Commission. There is one exception: Climate change and the regulation of greenhouse gas emissions which all member states experience the same (Karthryn 2010, pp. 11-13).

One of the reasons with the EU does not have a common energy policy is each member state consumes and produces different amounts of natural gas and oil. Besides, the member states differ in terms of energy intensity, import dependency and energy diversity. Therefore, the member states can be divided into three groups on the natural gas and oil index. For instance; Austria, Hungary and Romania are at high risk due to not producing their own gas, imports from Norway and non-EU countries and gas as a share of total energy consumption is high. On the other hand the low risk countries mainly import only from EU suppliers, produce their own gas, or diverse energy portfolio. For instance, France, which has different energy priorities, is protective of its nuclear program, while Germany and Poland are protective of their coal industries (Karthryn 2010, pp. 21-23).

Another reason why European Commission and member states along with other member states are united is the threat of Russia's energy dominance (www.csmonitor.com 2010). The old and new EU member states differ substantially on the issue. The old EU member states, such as France, Germany and Italy, search

improved ties with Russia in order to secure long term energy interests. The new EU member states wish to distance themselves from Russia to the farthest extent possible and wish to eliminate their dependence on Russian energy, such as Poland and the Czech Republic which are Central and Eastern European Countries. Therefore, construction of the Nabucco Pipeline is supported more by Central and Eastern European Countries due to their policy of diversification of resources and suppliers. This situation creates such a dichotomy in the EU.

Another concern is the role of nuclear energy within the European energy mix. The member states such as Greece and Portugal oppose the nuclear energy. On the other hand the biggest support is observed by the member states such as France, Czech Republic, Slovakia and Lithuania. The European Commission seems to take sides with France, as it is more open the prospect of a Single European Nuclear Energy Policy (www.assessingaccession.eu 2010).

All these disagreements in the EU make it difficult to unite on the energy policy and consequently Nabucco Pipeline Project.

6. CONCLUSION

As the number of the EU members increase and the borders expand, the energy supply that the EU needs has increased. This has highlighted the energy security issue, and made it one of the most important matters of the Union. In this study, one of the most important projects, Nabucco Pipeline Project, which was expected to bring a solution to the energy security issue and Turkey's effect on the EU energy security have been examined.

The members of the European Community have begun to rethink energy matters following the 1973 and 1979 oil crises. After the communist regime collapsed in Eastern Europe, the European Community has achieved a good opportunity to set up energy cooperation with Russia and other states which declared their independence. This process began in 1990 with the Lubbers Plan. Despite of Russia wants to declare itself as an energy superpower; the absence of long term agreements has led to several disputes in the past. The serious conflict and disruption, within the EU's gas supplies from Russia transiting through Ukraine for the EU, occurred in 2006 and 2009. The gas supplies to the EU have been disrupted and these crises damaged the confidence of energy commerce for Russia.

In this frame, the problems experienced between Russia and the EU in the last years have increased the unstable feeling of the Union about energy and made the Union search for new strategies. As a result of this, the other supplier and the potential supplying countries have been Azerbaijan, Turkmenistan, Georgia in Caspian Region and Iran, Iraq and Egypt in the Mediterranean. Turkey is the country that has made the political and physical connections (with the pipelines) between the above countries and Europe that wants not to be dependent on Russia. Thus Turkey has affected the energy security issue in positive ways by Russia-Europe-Turkey pipeline and Turkey-Greece pipeline projects.

Europe wants to pull through all the problems experienced up until now, believed that the problem would be solved to a certain extend with the new project of Nabucco Pipeline Project and because most of the pipeline would pass through Turkey, the importance of Turkey would be stressed once again. Turkey does have to satisfy internal

gas demand but it also has a strategic vision. Nabucco Pipeline Project had fundamentally positive effects on Turkey that aimed to become an energy hub between Europe and Asia and the Middle East.

However, despite the important effect of the project that would reduce the dependency on Russia, there were problems like finance that were decelerating the project. This led to South Stream Project which is also one of Russia's projects and which is known via Nabucco to come into prominence. Yet South Stream Project would make no difference in the energy security issue due to the effect of Russia on the project. If we just go back one year, and remember the experiences with Russia in 2009, we would easily understand how important the Nabucco Project is.

In fact Nabucco is not only a project, it is a tool of politics that the EU wants to achieve. In this study the aim is to show that in case the EU forgets the past issue and wants to exclude Turkey, the same problems would be experienced again.

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