THE EU ENERGY SECURITY CONSIDERATIONS AND TURKEY'S POSSIBLE MEMBERSHIP

A Master's Thesis

By

AYŞEGÜL TABAK

Department of International Relations Bilkent University Ankara

April 2009

THE EU ENERGY SECURITY CONSIDERATIONS AND TURKEY'S POSSIBLE MEMBERSHIP

The Institute of Economics and Social Sciences of Bilkent University

by

AYŞEGÜL TABAK

In Partial Fulfillment of the Requirements for the Degree of MASTER OF ARTS

in

THE DEPARTMENT OF INTERNATIONAL RELATIONS BILKENT UNIVERSITY ANKARA

April, 2009

| I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts in International Relations. |
|--|
| Assistant Prof. Dr. Paul Williams Supervisor |
| I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts in International Relations. |
| Assistant Prof. Dr. Ali Tekin Examining Committee Member |
| I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts in International Relations. |
| Assistant Prof. Dr. Aylin Güney Examining Committee Member |
| Approval of the Institute of Economics and Social Sciences |
| Prof. Dr. Erdal Erel Director |

ABSTRACT

THE EU ENERGY SECURITY CONSIDERATIONS AND TURKEY'S POSSIBLE MEMBERSHIP

Tabak, Ayşegül

M.A., Department of International Relations

Supervisor: Ass. Prof. Paul Williams

April 2009

This thesis aims to understand changing energy security considerations of the European Union and in this context Turkey's increasing chance to be a European member. In order to do that, the study targets the question: "How did European energy security considerations enhance and how does this situation influence Turkey's possible membership process, due to latter's geo-strategic position?". European Union, as the other import-energy dependent actors, has experienced the negative consequences of this dependency. Particulary, the energy's being used as a political weapon has made the "energy security" more momentous for the Community. In this respect, energy security policies has attracted more attention. As a result of one of these policies, diversification, the Union has started to give more consideration to diversified energy suppliers and transit countries. Accordingly, Turkey has gained a significant attention as an

important transit country, with the strategic position near to main energy

suppliers. Thus, this thesis proposes that Turkey's geo-strategic position will

enhance Turkey's significance for the Union and open the way for its Union

membership. Relying on official EU documents and literature, this study reaches

the conclusion that energy security is very important for the EU and in order to

enhance its situation the Union will try its best. In this regard, Turkey's religious

and cultural diffrences seems to be less important than Union's interests and thus

Turkey has an enhanced possibility to be an EU member.

Keywords: European Union, Energy Security, Green Papers on Energy,

Turkey, Membership

iv

ÖZET

AB ENERJİ GÜVENLİĞİ ANLAYIŞI VE TÜRKİYE'NİN OLASI ÜYELİĞİ

Tabak, Ayşegül

Master Tezi, Uluslararası İlişkiler Bölümü

Tez Yöneticisi: Yrd. Doç. Dr. Paul Williams

Nisan 2009

Bu çalışma, AB'nin enerji güvenliği anlayışını ve bu bağlamda Türkiye'nin artan üyelik şansını anlamaya çalışır. Bunu gerçekleştirebilmek için, bu tez şu soruyu cevaplamayı hedefler: "Avrupa'nın enerji anlayışı nasıl değişti ve Türkiye'nin jeostratejik pozisyonuna bağlı olarak bu durum Türkiye'nin olası üyeliğini nasıl etkiler?". Diğer ithal enerji bağımlı aktörler gibi Avrupa Birliği de bu bağlılığın olumsuz sonuçlarını yaşamıştır. Özellikle, enerjinin politik bir güç olarak kullanılması, "enerji güvenliğini" Topluluk için daha önemli yapmıştır. Bu bağlamda enerji güvenliği politikaları daha çok dikkat çekmiştir. Bu politikalardan biri olan, çeşitlendirme sonucu, Birlik farklı enerji kaynakları ve geçiş ülkelerine daha çok önem vermeye başlamıştır. Böylece, ana enerji kaynaklarına yakın olan stratejik yeri ile, bir geçiş ülkesi olarak, Türkiye, dikkate değer bir önem kazanmıştır. Bu yüzden, bu çalışma, Türkiye'nin jeostratejik pozisyonun Türkiye'nin Birlik için önemini arttıracağına ve Birlik üyeliği için

yolunu açacağını savunur. Bu çalışma, AB resmi belgelerine ve literatüre dayanarak, enerji güvenliğinin AB için çok önemli olduğunu ve durumunu geliştirmek için Birliğin elinden geleni yapacağı sonucuna varır. Bu bağlamda, Türkiye'nin dini ve kültürel farkları, Birlik çıkarları karşısında daha önemsiz kalır ve böylece Türkiye'nin AB üyesi olmak için şansı artar.

Anahtar Kelimeler: Avrupa Birliği, Enerji Güvenliği, Yeşil Kitap, Türkiye, Üyelik

ACKNOWLEDGMENTS

First and most of all, I wish to express my gratitude to Associate Prof. Paul Williams, who supervised me throughout the preparation of my thesis with great patience and diligence. Without his support, recomendations and improvement, I would not be able write such a thesis. Besides, without Ass. Prof. Williams support, I would not be at Bilkent University.

I am grateful to Scientific and Technological Research Council of Turkey (TUBITAK) for its generosity and funding me through my graduate education. Thanks to the scholarship provided for me, I had no difficulty in searching and retrieving the necessary sources for my study.

It is my pleasure to acknowledge the support of Professors Ali Tekin and Aylin Güney for spending their valuable time to read my thesis and kindly participating in my thesis committee.

I am also grateful to my friends and colleagues Nur Seda Köktürk, Rüya Lüleci, Gülsüm Özsoy, Yasin Karayiğit, Abdurrahhim Özen, Çağatay Aslan, Durukan Kuzu, Pınar Üre for their friendship and support throughout my graduate education. They were always there with great support.

But, I want to present my particular gratefulness to Berivan Akın. If Berivan was not here, I would also not. She is more than a friend. Without her support, her patience and tenderness I would not be able to write this thesis and I will not be able to graduate. She was my family in Ankara.

Furthermore, I want to thank Erman Engiz. He was always there to support me. Without his support, patience and understanding, I would not be able to succeed.

Last but not the least; I owe my family more than a general acknowledgement. Their support, patience and boundless faith in me made the completion this work possible. They are the reason why I am here today. They are all my reasons.

TABLE OF CONTENTS

| ABSTRACT | iii |
|---|-------------|
| ÖZET | v |
| ACKNOWLEDGMENTS | vii |
| TABLE OF CONTENTS | ix |
| CHAPTER I: INTRODUCTION | 1 |
| CHAPTER II: ENERGY SECURITY | 6 |
| 2.1 The Difficulty of Defining "Security" and the Need for Broa | idening the |
| Concept | 7 |
| 2.2. The Concept of "Energy Security" | 9 |
| 2.2.1 Evolution of the Concept | 9 |
| 2.2.2 Definition of "Energy Security" | 12 |
| 2.3. Policies Needed to Secure Energy | 16 |
| 2.4. Conclusion | 19 |
| CHAPTER III: EUROPEAN UNION ENERGY SECURITY | 20 |
| 3.1. Background of EU's "Energy Security" Perspective | 21 |
| 3.2. Examination of EU Discourse on Energy Security through | the Green |
| Papers | 23 |
| 3.2.1. European Green Papers on Energy and Energy Security | 25 |
| 3.2.1.1. The Green Paper-For A European Union Energy Policy | y (1994) |
| | 26 |
| 3.2.1.2. Green Paper-Energy for the Future: Renewable Sources | |
| (1996) | 29 |
| 3.2.1.3. Green Paper-Towards a European Strategy for the Secu | ırity of |
| Energy Supply (2000) | 34 |

| 3.2.1.4. Green Paper-On Energy Efficiency or Doing More with L | ess |
|--|--------------------|
| (2005) | 39 |
| 3.2.1.5. The Green Paper- Towards a European Strategy for Susta | inable, |
| Competitive and Secure Energy (2006) | 43 |
| 3.3. Conclusion: | 47 |
| CHAPTER IV: EUROPEAN ENERGY SECURITY POLICY | 48 |
| 4.1. Development of Common Energy Policy of the EU | 49 |
| 4.2. Internal Energy Policy of the EU | 53 |
| 4.3. External Energy Policy of the EU | 60 |
| 4.3.1. EU Relations and Partnerships with Its Major Energy Suppliers | s64 |
| 4.3.1.1. EU-Russia Energy Relations | 64 |
| 4.3.1.2. EU-Middle East Energy Relations | 69 |
| 4.3.1.3. EU- Norway Relations | 71 |
| 4.3.1.4. EU-Caspian Region Energy Relations | 73 |
| 4.4. Conclusion | 76 |
| CHAPTER V: TURKEY'S IMPORTANCE IN EU'S ENERGY SEC | CURITY |
| | |
| AND TURKEY'S POSSIBLE FUTURE MEMBERSHIP IN | THIS |
| AND TURKEY'S POSSIBLE FUTURE MEMBERSHIP IN CONTEXT | |
| | 77 |
| CONTEXT | 77 |
| CONTEXT | 7778 |
| 5.1. Pipeline Passing Via Turkey | 777879 |
| 5.1. Pipeline Passing Via Turkey | 77787979 |
| 5.1. Pipeline Passing Via Turkey | 7778797981 |
| 5.1. Pipeline Passing Via Turkey 5.1.1 East-West Corridor: | 777879798181 |
| 5.1. Pipeline Passing Via Turkey | 7779818182 |
| 5.1. Pipeline Passing Via Turkey | 77787981818283 |
| 5.1. Pipeline Passing Via Turkey | 77787981828384 |
| 5.1. Pipeline Passing Via Turkey | 7778798182838485 |
| 5.1. Pipeline Passing Via Turkey | 777879818283848585 |
| 5.1. Pipeline Passing Via Turkey | 777879818283848585 |

| 5.2.1. Challenges Arising from the Energy Suppliers | 88 |
|---|----------|
| 5.2.1.1. Geopolitics of Kazakh oil | 88 |
| 5.2.1.2. Geopolitics of Turkmen oil | 90 |
| 5.2.1.3. Bans on Re-export and Re-selling | 92 |
| 5.2.1.4. Ethnic Conflict | 93 |
| 5.2.1.5. Increasing Turbulence in the Middle East | 94 |
| 5.2.1.6. Russian Ambitions over Black Sea-Caspian Region | 95 |
| 5.2.2. Challenges arising from European Energy Market | 96 |
| 5.3. Interpretation of European Union and Turkey Relations in the cor | ntext of |
| Union's Energy Security Consideration and Turkey's Possible Energy | gy Hub |
| Role | 102 |
| CHAPTER VI: CONCLUSION | 106 |
| SELECT BIBLIOGRAPHY | 11 |

CHAPTER I

INTRODUCTION

As every nation state is dependent on energy, energy-import dependent countries are more vulnerable to disruption in their supplies. Starting with the 1973 oil crisis, continuing with various other problems arising from the Middle East, and lastly culminating in the Russian-Ukrainian dispute, energy security has crystallized as a well-known concept in international relations. Every nation has given considerable attention to this concept and has struggled to enhance its energy-security situation.

With the largest economy in the world, the European Union is one key actor that has understandably developed a keen interest in enhancing energy security. Being dependent on imported energy for over fifty percent of its energy supply, a figure that may rise to seventy percent over the next twenty to thirty years, the Union has

focused more attention on energy security. In this context, Union has been publishing documents focusing on energy security, notably a series of green papers, and has devoted more consideration to enhancing its relations with energy supplier and transit countries.

The Russia-Ukraine dispute and Russia's related energy cut caused the Union to size up its vulnerability and consider energy-security precautions more carefully. Diversification, by source, supplier or transit country, has been the centerpiece of options the EU has been weighing. In this regard, relations with alternative energy suppliers in the Middle East and Caspian, as well as energy transit candidate countries, like Turkey, have become critical.

Turkey, as an official candidate member country since 1999, has been struggling since 1959 to join what has become the EU. Like every candidate country, it has had to fulfill an increasing number of common obligations, yet has also experienced unique barriers stemming from its disparate culture and religion. Yet, perhaps due to Union's energy security concerns, Turkey may have gained an invaluable source of leverage in the membership process.

Turkey is uniquely poised to serve as an export conduit for some of the world's main energy suppliers in the Middle East and Caspian basin and it has joined many pipeline projects originating from these regions to Europe. Some of these pipelines have been established, whereas some remain in the planning process. If most of the projects are actualized, Turkey will become an essential energy hub for Europe. Yet,

even if only some of the projects are actualized, they will give Turkey greater relative power.

This thesis aims to examine the geo-strategic power that Turkey gains in its relations with the European Union from the possibility of its becoming an energy hub. In this regard, the Union's energy energy security concerns, and Turkey's place within them, will be examined in detail.

The thesis starts with a general overview of energy security in order to establish a framework for understanding the EU's perception. Then it continues with the second chapter, which starts by explaining the difficulty of arriving at a concrete security definition.

The second part of this chapter covers a more detailed study of energy security study. After discussing the evolution of the energy security concept, the concept is examined from the different perspectives of consumer and producer. However, since the main aim of the thesis is to study the EU's energy security concerns, the consumer view especially that of the Union, is studied in more detail. In the third part of this chapter, the policies needed to secure energy, particularly from the consumer perspective, are analyzed.

The third chapter elaborates the Union's particular conception of energy security. This chapter identifies the EU's basic assumptions about energy security and what it proposes to overcome any related challenges. In the first part, the evolution of the Union's energy security concept is examined, and then in the second part, the EU

discourse on "energy security" is discussed. This part consists of a detailed study of all green papers prepared by the Commission on energy emphasize the Community view on energy and its proposed policies on energy.

The fourth chapter examines the European energy policies needed to enhance energy security. The common energy policy is suggested as the elementary policy objective and the internal and external energy policies are examined in this context. This chapter continues with a more elaborate study of European internal energy policy centered on the Green Paper 2006 and ends with an analysis of European external energy policy, which covers EU relations with major and alternative energy suppliers, Russia, Middle East, Norway and Caspian region countries.

In the fifth part, Turkey's importance in EU's energy security concerns and its possible future membership are examined. This chapter starts with study of pipelines passing via Turkey and suggests the increased importance of Turkey in this context. In the second part, the challenges for Turkey to be an energy corridor are acknowledged and examined in greater detail. Geopolitics of Kazakh and Turkmen oil and gas, bans on re-exporting and re-selling, ethnic conflict, increased turbulence in the Middle East and Russian ambitions over the BlackSea and Caspian sea regions are studied as supplier-origin challenges. Challenges stemming from the Union are also examined. In this regard, this part focuses on the energy security concerns of United Kingdom, France, Germany and Poland. After mentioning the challenges, the last part of the fifth chapter offers an interpretation of Turkey's possible membership.

This thesis uses fundamentally textual analysis methodology. The EU official documents and papers are analyzed in order to understand European perceptions of energy security and to understand the European stance. Furthermore, the literature is reviewed in order to see different comments and interpretations on this subject.

CHAPTER II

ENERGY SECURITY

This chapter aims to establish a framework for understanding the "energy security" concept and, in this regard, examines different "energy security" definitions and policies. The first part of this chapter focuses on security more broadly. It explains the difficulty of finding a concrete definition of security and the need for broadening the content of the concept.

The second section focuses on "energy security". After discussing the evolution of this concept, the "energy security" concept is examined from the different perspectives of consumers and producers.

The last part of the chapter analyzes briefly what kind of energy policies are preferred in order to secure energy, particularly for consumers. The main policies comprise diversification in terms of supply source or energy mix; having security margin in terms of strategic reserves or adequate storage capacity along the supply

chain; cooperation, whether among consumers, among producers or between producers and consumers; and high-quality and timely information.

2.1 The Difficulty of Defining "Security" and the Need for Broadening the Concept

Security, with its primary aim of survival, is an overriding imperative for nations. In order to attain other determined targets, each nation has to achieve its basic security. Although a common security definition, acceptable to everyone, cannot easily be reached, it is the primary aim of every nation to attain its preferred conditions of security.

Security is a subjective and evolving concept. As there are many different actors and issue areas, there are equally diverse security considerations and definitions. As Buzan (1991: 7) states, there are "moral, ideological and normative" features of security and they make it difficult to achieve a security definition agreed by everyone. As Lipschutz (1995: 10) states;

Security has a specific meaning only within a specific social context. It emerges and changes as a result of discourses and discursive actions intended to reproduce historical structures and subjects within states and among them. To be sure, policymakers define security on the basis of a set of assumptions regarding vital interests, plausible enemies, and possible scenarios, all of which grow, to a not-insignificant extent, out of the specific historical and social context of a particular country and some understanding of what is 'out there'.

Thus, to give a concrete security definition, which is appropriate to everyone, is not possible. Until now, security has carried a so-called "Cold War" dimension, by which the state and the military dimension command the greatest attention (Bilgin, 2005: 16). Yet, changing conditions and necessities have altered security concerns, thus leading to new emphases and the broadening of the security context (Tuchman 1989: 162; Buzan 1991: 6).

With the economy, military and technology so dependent on energy, energy and security access to it have gained greater stature within the new security framework. As Roberts (2004: 5) suggests, "we live today in a world completely dominated by energy." As Roberts (2004: 5-6) also states, energy "is the currency of political and economic power" and it is what "determines the hierarchy of nations", which means that political and economic power are highly influenced by a country's possession of energy.

On the other hand, limited sources of energy and an expected decrease in its supply have made energy a central concern in security calculations. In the contemporary period, energy is an obviously vital part of modern life and survival and a major source of security in all its varied facets. Thus, with every nation aiming to retain or improve its relative position on energy related issues, this leads to a logical focus on "energy security". It is in this context that "energy security" has become a key concern in today's international relations and security environment.

2.2. The Concept of "Energy Security"

2.2.1 Evolution of the Concept

Although "energy security" as an undeniable concept of contemporary international relations studies is gaining greater attention now, it is not an entirely new, post-Cold War issue. In fact, energy security concerns are nearly a century old. For Bahgat (2006: 965), "energy security" concept began to be defined and its implications examined after the first oil shock of 1973. On the other hand, Yergin (2006: 69) suggests that "energy security" emerged as a significant issue as early as World War I (WWI).

Yergin (2005: 52) bases his argument on the decision of first lord of British Admiralty, Winston Churchill, just before World War I. This is when Churchill transformed the Royal Navy from coal to oil and as a result of this decision, the source of the fleet's propulsion turned to Iranian oil in place of Welsh coal. Recognizing the new risk entailed by this historic conversion, Churchill stated that "safety and certainty in oil lie in variety and variety alone", thereby advancing a fundamental principle of energy security, diversification of supply (Yergin, 2005: 52).

On the other hand, oil became a critical factor in WWII, and this importance grew in the following decades. Crises originating in the Middle East gave energy security a higher profile (Yergin, 2005: 53). The first oil shock of 1973 is among the most well-

known crises in the Middle East. It emerged when the members of OAPEC (Organization of Arab Petroleum Exporting Countries) cut oil production and shipment to the US, South Africa, Portugal, and the Netherlands. The embargo caused uncertainty and led to panic buying, thus increasing oil prices, and so it became clear that energy could be used as a political weapon.

Then, with the 1978-1980 Iranian Revolution and the 1980 Iraqi invasion of Iran, it became clear that oil prices are highly volatile and can be easily manipulated. With the 1991 Gulf War and 2003 Iraq War, increasing oil prices generated by events in the Middle East made energy security a more acute problem. Yet, although Middle Eastern problems have considerable energy-related impacts, problems of energy security do not emerge only from this region.

In 2006 Russia cut gas supplies due to the dispute with Ukraine, and once more it became obvious that energy could be used as a strong political weapon against imported energy-dependent countries. With Tehran's even more recent threats to disrupt Persian Gulf oil shipments (BBC News, June 2006) in connection with rising tension over Iran's nuclear program, the importance of energy security has been underscored again. Accordingly, it became obvious that threats to energy security have multiple origins and energy can be used as a political weapon.

With regard to concerns over energy supply dependence, the most obvious threat to energy security arises from supply disruptions¹ and past experiences prove that there

-

¹ Adams (2003: 47) defines energy disruptions as disturbances to the world oil flow, but it can be enlarged to include all energy flows.

are many possibilities for energy disruptions. Disruptions can emerge from political instability in the supplier or consumer region; market instability; accidental disturbances; and terrorist activities. The political instability of the supplier, which Lesbirel (2004: 8) defines as *force majeure*, can originate from domestic political unrest², war related damage, and political objectives and transportation facilities of the supplier countries³.

On the other hand, Lesbirel (2004: 8) states that disruptions can also originate on the demand side in the case of embargo⁴ or as a result of insufficient investment in upstream sectors. Possible accidents, that can take place at any stage of drilling, production, pipeline transfer and vessel transportation, may also cause supply cuts (Lesbirel, 2004: 8). Furthermore, terrorist activities targeting energy drilling, production and transportation centers are also among possible risks that may lead to energy disruption. Clawson (1995: 175) also states that rapid economic growth of developing countries⁵ and economic problems⁶ are among risks that may lead to energy disruptions.

_

² "Armed conflicts or significant levels of civil unrest in major energy-exporting countries might result in crisis conditions if sizeable levels of petroleum or other energy resources were kept from the market (or a such a threat appeared immediately) and sufficient excess production appeared to be unavailable from other producers/regions" (Clawson, 1995: 173). For Clawson, also regime changes may lead to supply shortage and destabilization of energy-producing regions. The armed conflicts and political unrest have major effects on market and economy of a particular country, and if the country is one of the few supplier states, then the events have impacts on world energy markets.

³As Clawson (1995:175) states, since there are few energy shipping transportation points such as; Strait of Hormuz, Stait of Malacca, Panama Canal, Rotterdam Harbor, or through Bosporus, any disruption of crude oil or product shipment at this points could result in a crisis.

⁴ For the embargo conditions, Clawson (1995:174) mentions the growing political strenght and influence of the environmental movements. He believes that this kind of developments will have more considerable effects in the future. Due to the growing environmental awereness, it can be suggested that he seems right.

⁵ "Sustained and dramatic economic growth by developing countries in Asia and Latin America during the next twenty-five years could put strains on world energy markets and contribute to the onset of crisis conditions" (Clawson, 1995: 175).

It is clear that there exist various risks can lead to energy disruptions and supply shortages for import- energy dependent countries. Securing energy is not solely about geology anymore, as geopolitics has also gained importance. To preserve a secure supply of energy is significantly important for the overall security of nations and securing energy has assumed an even greater place in state strategies and politics.

2.2.2 Definition of "Energy Security"

"Energy security" can be examined from the two sides of the market. As mentioned in the previous part, security is a socially constructed concept and for security related issues, there is not one concrete definition. The threat as perceived by one party of the game does not automatically define the threat for the other party. In that case, in order to define security, different opinions should be taken into considerations, as is especially the case for "energy security".

Since there is an energy market and since there are two sides of the market, producer and consumer, "energy security" can be defined from each side's particular perspective. However, since energy is perceived as a security matter mostly by imported energy-dependent nations, studies of "energy security" are generally dominated by the scholars in these countries and thus the given "energy security"

⁶ For the economic problems Clawson (1995:175) focuses on the adverse international economic conditions and suggests that they will possibly develop gradually or over a short period of time, and will have considerible impact on crisis conditions.

definitions generally are strongly imprinted with consumer perspectives, on which this study focuses.

The primary notion of "energy security" for consumers is reliable supply with limited vulnerability at affordable prices. The most common used version is defined by UNDP (2001: 112) as:

The continuous availability of energy in varied forms, in sufficient quantities, and at reasonable prices. It means limited vulnerability to transient or longer disruptions of imported supplies. It also means the availability of local and imported resources to meet, over time and at reasonable prices, the growing demand for energy. Environmental challenges, liberalization and deregulation, and the growing dominance of market forces all have profound implications for energy security.

Kalicki and Goldwyn (2005: 9) offer a similar conception:

Energy security is assurance of ability to access the energy resources required for the continued development of national power. In more specific terms, it is the provision of affordable, reliable, diverse, and ample supplies of oil and gas and adequate infrastructure to deliver these supplies to market (Kalicki and Goldwyn 2005: 9).

However, they acknowledge that the concept has acquired a wider dimension. According to them, the concept now encompasses whole energy types and entire infrastructures, whereas initially, it was more narrowly focused on the flow of oil. Like Kalicki and Goldywn, Costantini et al (2007: 210) define energy security along the lines proposed by the International Energy Agency (IEA) and suggest that it is "the availability of a regular supply of energy at an affordable price". Winrow (2007: 219), citing Barton et al. (2004: 5), defines the concept in a similar way:

Energy security has been defined as a condition in which citizens and businesses have access to sufficient energy resources at reasonable prices for the foreseeable future free from serious risk of major disruption of service.

Downs (2004: 22), citing Yergin, once more suggests that the objective of energy security for the consumers is "to assure adequate, reliable supplies of energy at reasonable prices," yet he states that it should be attained in a way that "does not jeopardize major national values and objectives".

It should be noted that energy security can also be analyzed from the perspective of producing countries. In its basic conception, energy security for the producer is related to security of demand (Yergin, 2006: 1). That is, energy-producing countries aim to secure continuity of demand for their supply. On the other hand, as is the case for consumers, the producers also seek reasonable prices, but "reasonable" in this case pertains to what permits them to make new investments, together with guaranteed markets (Winrow, 2007: 219). Moreover, economic independence is also crucial for producers, many of which achieved political independence only in the last century. As Quandt (1981: 3) and Maachou (1982: 38) state, producer countries seek to reduce their dependence on foreigners for discovering, extracting, transporting and marketing the energy. Maachou (1982: 389) also suggests that the energy producer countries need to diversify their economies away from energy.

Thus, as mentioned before, concrete consensus definition of "energy security" can be hard to come by. As it is the case for security, "energy security" is also an evolving and subjective concept, changing in relation to historical and social context. For example, for Russia, as it is for OPEC, "energy security" means security of demand for its exports, and as long as continuity of demand is preserved, its primary position

as the supplier will be preserved. Moreover, Russia, in particular, aims to reassert state control over "strategic resources" and gain primacy over the pipelines and market channels through which it ships its hydrocarbons to international market (Yergin, 2006: 1). In a realist energy-dependent world system, keeping its energy supplier position will help Russia re-gain and preserve its relative power and security.

On the other hand, for the European Union (EU) and the United States (US) "energy security" means security of reliable and affordable energy supply. However, even these two major powers have different security considerations. Whereas for Europe, the major debate revolves around how to manage the dependence on imported natural gas, overall imported energy-dependence is an important problem for the US, where the major debate centers on how to achieve energy self-sufficiency (Yergin, 2006: 1).

Realizing the evolving nature of it, Martin et al (1996: 4) observe three phases of development of the "energy security" concept. Accordingly, the first phase involves limiting vulnerabilities to disruptions rising from dependence on imported oil from an unstable Middle East. The longer-term, second phase, includes providing adequate supply for rising demand at reasonable prices, thus favoring the smooth overall functioning of the international energy system. And for the third facet of energy security, Martin et al (1996) mention energy-related environmental challenges and

declare the objective of this stage as forcing the international energy system to operate within the constraints of "sustainable development".⁷

In sum, "reliable, continuous supply of affordable prices" is the commonly described essence of the energy security, which is most appropriate from the consumer perspective. However, it should also be noted that the examined definitions do not give due consideration to environmental concerns. In this regard, the EU is the significant actor that has given relatively greater consideration to environmental concerns in its energy security definitions, as examined in detail below.

2.3. Policies Needed to Secure Energy

In order to secure energy, the most important step that needs to be taken by each party is to realize the futility of energy independence. Although it is a realist aim to be self-sufficient, it is obviously unrealistic. The increasing risks affecting reliable and secure supplies of energy have, however, prompted international actors to devise precautionary policies to reduce their existing levels of vulnerability. As suggested above, the earliest and most popular one of these policies is diversification. Increasing the number and variety of supply sources decreases the impact of disruption in supply from any one source and thus serves the interests of both consumer and producer, for who stable markets and security of demand is the prime

⁷ A development path along which the maximization of human well-being for today's generations does not lead to declines in future well-being (OECD, 2007). It is in a way to have a linkage between environment and development and this linkage was recognized globally in 1980 when the International Union for the Conservation of Nature published the World Conservation Strategy and used the term "sustainable development".

concern (Yergin, 2006: 3). However, as Bahgat (2006: 966) suggests, diversification is not just about diversifying imported supplies and supplier countries, it should also include the mix of primary energy sources. Thus, besides seeking alternative supply sources and diverse transportation routes, most imported energy-dependent consumers often try to create a balanced energy mix in their overall consumption, which often includes more internal energy sources or renewables.

The second principle is resilience, which, in Yergin's (2007: 3) words, involves a "security margin" in the energy supply system. This "security margin" is what allows for the provision of emergency supply in times of shocks and disruptions. According to Yergin (2007: 3), this objective can be achieved by various methods. Sufficient spare production capacity; strategic reserves; backup supplies of equipment; adequate storage capacity along the supply chain; the stockpiling of critical parts for electric power production and distribution and also ready response plans for disruptions that may affect large regions, are among those methods that can offer a greater security margin. The resilience principle is largely about available sources that are needed in times of crisis. Whereas diversification is essentially a long-term objective, resilience involves short-term security protection. That is, a larger number of sources, routes, or energy mixes covers a longer period, while a strategic reserve or spare capacity secures only a shorter period. Yet, at the end, both policies are necessary.

⁸ However, in Kalicki and Goldywn's book, Yergin (2005: 55) mentions just two of these methods, spare production capacity and strategic reserves, as the two forms of "security margin" and explain them in detail. In his definition, spare capacity is extra output that is higher than normal capacity and that can be put into production immediately, whereas strategic reserve is a form of insurance against major disruptions.

The third principle aims to increase cooperation among consumers, among producers or between both consumers and producers. Yergin (2007: 4) points to the importance of integration, in stating that there is only one market, but a large number of parties in this complex system. Bahgat (2006: 966) also highlights that enhanced reliability is needed among countries because they are bound to each other for many years. The cooperation principle also has a long-term dimension. Since it is impossible to go it alone in the energy market, both consumers and producers should pay great attention to establish reliable and long-term cooperation.

Even, long-term agreements are preconditions rather than necessities for some cooperations such as natural-gas contracts, whereas it is not a necessity for the oil ones. This is largely because globalization of the gas market still requires expensive pipelines and LNG terminals. However, if long-term agreements are signed between parties for all types of energy, there will be stability in the market and the disruptions risks due to political reasons will be lessened.

Moreover, the fourth and last of the suggested policies argued by Yergin (2007: 4) is promotion of high-quality information. Such information will help markets to function effectively. Since reality can be distorted and conspiracies arise, making situations more difficult to ascertain, high-quality and correct information is essential. According to Lesbirel (2004: 9), asymmetric information can cause over-reactions to estimated market changes on both sides of the market and cause disruptions. Since any event can lead to a crisis and affect the entire energy market, great attention should be paid to high-quality information.

As a conclusion, it can be stated that there are many diverse policies to secure energy and preserve the energy market. Some of them have long-term effects whereas some has short-term effects. The important thing is not just to have one or two, it is to have a wider range of alternative options available.

2.4. Conclusion

In conclusion, it can be stated that security remains a difficult concept to define. Yet, it seems important to reduce the influence of Cold War and military factors in our conceptualizations of security. Energy should be a crucial new dimension of any post-Cold War definition of security. Due to the increasing importance of energy in all aspects of life and the political leverage inherent in the possession of energy because of limited sources of supply, energy has become closely linked up to security considerations.

"Energy security" with its primary roots in major developed consuming countries has been defined as "security of reliable supply with affordable prices" and closely associated with such policies as diversification, resilient security margins, cooperation and high quality information. As will be shown beginning with the following chapter, the European Union, takes a consumer perspective on "energy security" and articulates its energy policies accordingly.

CHAPTER III

EUROPEAN UNION ENERGY SECURITY

This chapter focuses on energy security in European Union (EU) discourse. It provides basic assumptions on how EU perceives energy security and what it proposes to overcome its members' individual and collective energy challenges. The first part explains the background of "energy security" concept and its evolution. The main question that is addressed here is how has "energy security" increased in importance for the EU. The second part turns to a focus on "energy security" in EU discourse, showing how a series of green papers prepared by the Commission on energy have articulated the Community view on energy and proposed policies on energy. The main question to be addressed in this part concerns how the EU conceives of energy security and whether this conceptualization is typical of major consumer countries or exhibits additional concerns that are more *sui generis* to the EU.

3.1. Background of EU's "Energy Security" Perspective

Starting with the 1973 oil crisis, continuing with the recurring problems arising from the Middle East, and lastly culminating in the Russian-Ukrainian dispute, energy security has emerged as a key focus in international relations. European Union is one of those actors whose members have experienced the negative impacts of these developments. Thus, it has begun giving more careful and explicit consideration to energy security.

The historic event of a successful Arab oil embargo occurring at the end of 1973 and beginning of 1974, and the price shock of 1979 caused the Western European economics, and thus those of the future European Union, to experience unprecedented energy-related problems (Hoffman, 1985: xxiii). Particularly with the 1973-1974 oil crisis, the Western Europe realized a need to limit imported energy. In time, European energy security considerations grew in importance and would gradually emerge as one of the top priorities of the European Union.

The 1973 Arab oil embargo gave future European Union members three main concerns (Morelli, 2006: 3). First, it was realized that more collaboration was needed. Second, it became obvious that greater internalised coordination would be essential to manage supply disruptions and third, it was accepted that the EU needed strategies to avoid being victimized by energy-producing countries. There was recognition of the need for greater diversification. With these lessons taken from eventings originating in the Middle East, the EU shifted more of its energy-related business to Russia and other Eurasian nations (Morelli, 2006: 3). However, the

Russia-Ukraine gas dispute of 2006 and its consequences for the westward transport of gas supplies caused many to question whether Russia could continue to serve as a reliable partner of the EU.

Today, the main energy-security problems of the EU are both internal and external (Belkin, 2007: 1). Internal ones include increasing energy prices, decreasing energy production in the EU, and a fragmented internal energy market. On the other hand, external factors include increasing world energy demand⁹, terrorist threats and perceptions of Russia's intent to use energy as a source of political leverage (Belkin, 2007: 1), much as Arab countries did in late 1973.

Since 1950s, the Union has become less dependent on domestically produced energy source, coal and and became more dependent on imported sources (El- Agraa, 2001: 297). By the time, it has grown highly dependent on imported energy. Union imports over 50% of its energy consumption, and, according to the Green Paper (European Commission, 2006: 3) import dependency is expected to rise to 70% over the next 20-30 years. The Union's internal energy reserves are relatively small and expensive to extract compared to external sources. On the basis of the 1997 data, the North Sea, whose reserves belong mainly to the United Kingdom, produced less than 5 % of world output, and its extracting costs were nearly four times those in the Middle East¹⁰ (European Commission, 2000: 18).

-

⁹ The world energy demand is increasing. "Particularly, growth in China and India has added significant levels of new demand for energy. Even in the energy rich region of the Middle East, growth in population along with economic modernization have resulted in a higher demand for energy. As living conditions and economies in Africa and Latin America continue to improve, the global demand for energy will increase." (Morelli, 2006: 8)

The cost of extracting one barrel of oil in Europe ranges between USD 7–11, compared to a range of USD 1–3 in the Middle East (European Commission, 2000: 18).

Moreover, the Union holds only 2% of total world natural gas reserves. The main EU natural gas producers, the Netherlands and the United Kingdom, supplied just 12% of the Union's natural gas demand (European Commission, 2000: 19). By 2005, 82% of oil and 58% of gas were being imported (Eurostat, 2007: 21). One third of imported oil comes from Russia, whereas 30,5% is from Middle East and 15,8 % is from Norway (European Commission, EU Energy in Figures 2007/2008, 2008: 14). Moreover, 42% of imported gas currently comes from Russia, 25,9 % from the Middle East and 24,2% from Norway (European Commission, EU Energy in Figures 2007/2008, 2008: 14). When 1997 and 2007 period is examined, 8% decline in self sufficiency in oil consumption and 16% decline in Union sourced natural gas is examined (Tekin and Williams, forthcoming 2009: 341). In this context, in conjunction with the aforementioned dramatic events in the energy market, the EU needs to focus more attention to energy security and needs to take foreign-policy actions that are more active in addressing energy issues.

3.2. Examination of EU Discourse on Energy Security through the Green Papers

The Union has started to give more attention to energy security, but, with a growing number of members, some with very different views on the subject, has had to clarify the definition of energy security that it seeks to obtain. In the light of aforementioned challenges, it can be suggested that EU has complex energy security objectives,

involving reasonable prices, reliable suppliers, diversified imports, diverse transit routes, and alternative internal resources.

According to the seminal Green Paper (1994: 5), energy security was originally articulated in general terms, as a policy

...needed to manage policies to ensure the satisfaction of all users needs at the least cost while meeting the requirements of security of supply and environmental protection.

As defined six years later in its Green Paper-Towards a European Strategy for the Security of Energy Supply- (2000: 4), energy security had become more specific:

The European Union's long-term strategy for energy supply security must be geared to ensuring, for the well-being of its citizens and the proper functioning of the economy, the uninterrupted physical availability of energy products on the market, at a price which is affordable for all consumers (private and industrial), while respecting environmental concerns and looking towards sustainable development, as enshrined in Articles 2 and 6 of the Treaty on European Union.

The energy security definition of the Commission can be taken as the most approximate official position of the Union and thus the best indicator of how the Union perceives "energy security".

Thus, it seems clear that, although the EU has a minimum energy-production capacity of its own, as does the United States, another large developed country in an analogous position, the EU's definition of "energy security" largely fits into the consumer perspective. That is, the European energy security definition also seems to involve affordable prices and continuous supply by reliable suppliers. However, the

Union maintains a uniquely salient concern for environmental considerations incorporating this concern into its very definition of "energy security," at least as a parameter limiting the extent to which the EU is committed to pursuing security of supply alone.

Nonetheless, in a basic sense, due to the various potential threats it faces to its economy (and with no unified command to address these threats using military tools), the EU still focuses on the classic consumerist concerns of continuity of sufficient energy supply at affordable prices together with reduction of imported energy dependency. The Green Paper-centered EU discourse on energy security is examined in greater detail in the following section.

3.2.1. European Green Papers on Energy and Energy Security

Green Papers are documents published by the European Commission to galvanize discussion on expressed topics at the level of the European Union. These papers aim to make the relevant parties join in a process of consultation and debate on the identified topic. Green Papers are important in giving rise to legislative developments (Europa, 2007).

On the energy issue, there have been five Green Papers published since 1994 (Europa, European Union Documents, 2007): Green Paper-for a European Union Energy Policy (1994), Green Paper-Energy for the Future: Renewable Sources of Energy (1996), Green Paper-Towards a European Strategy for the Security of Energy

Supply (2000), Green Paper on Energy Efficiency or Doing More with Less (2005) and Green Paper-A European Strategy for Sustainable, Competitive and Secure Energy (2006). These papers help to illuminate the European perspective on energy issues and energy security policies. This discussion will form the background for the next chapter on European common energy policies.

3.2.1.1. The Green Paper-For A European Union Energy Policy (1994)

This is the first of the green papers published on energy. Initially, it declares the importance of energy. Then, after stating the significance of Europe's dependence on imported energy and increasing world energy consumption, it focuses on the importance of security of supply and suggests policies to preserve and enhance it.

According to the 1994 green paper, "energy is central to economic and social activity in the industrialized world" and the energy policy of the Union should be able to deal with the challenges surrounding energy and to ensure "diversity of national and regional energy portfolios for the overall benefit of the community" (European Commission, 1994: 4).

According to estimates contained in the paper, although energy consumption of the Community was expected to grow slowly (1% a year), energy dependence was projected to increase from 50% to 70% by 2020 (European Commission, 1994: 13). On the other hand, community energy production was estimated to fall due to decreasing coal and oil production and slow growth in the role of renewables.

Thusly, the EU was expected to rely more on imports from third countries, mainly those in the Middle East, as well as Russia (European Commission, Green Paper, 1994: 92); therefore, the need to give more consideration to security of supply was underlined.

Security of supply was seminally defined by the Commission (1994: 22) as insurance of future essential energy needs and was to be attained by the "sharing of internal energy resources and strategic reserves under acceptable economic conditions and by making use of diversified and stable externally accessible sources" (European Commission, 1994: 22). The paper suggests that the concept encompasses "physical" security, economic security and continuity of supply and states that although there is a national dimension to securing energy supply, national measures should not be contrary to general or collective objectives (European Commission, 1994: 22). General community measures were needed to articulate the collective framework to determine optimal needed policies and objectives for the Union as a whole.

In terms of Community competencies, the Commission states that, in order to achieve effectiveness and coherence, responsibilities are needed to be exercised through instruments. In this regard, two community policies are centrally important: the establishment of an internal energy market and the management of foreign policy on energy, focused on relations with third-country energy suppliers (European Commission, 1994: 13-14). However, it was important to qualify that Community competencies not influence national choices of fuel mix and do not permit any

discrimination against freedom of investment and free movement of energy services (European Commission, 1994: 32).

This green paper lays out necessary measures to improve security of supply. It justifies the first set of measures, pertaining to the Union's internal arrangements as needed to: create a climate favorable to corporate activity; increase efforts to save energy; to intensify efforts to utilize domestic energy resources in both economic and environmentally acceptable ways, especially in terms of renewable energy; and continue diversifying the sources and origins of Community supplies.

Its second set of measures relates to external energy relations of the Union. For these, the green paper emphasizes the importance of strengthening the flexibility of the energy market via network interconnection and extending networks towards peripheral regions and production areas; strengthening the international cooperation between Community and its external suppliers and increasing energy cooperation with third countries, especially developing ones.

Furthermore, the 1994 green paper focuses on the importance of: strengthening storage and other cooperative security measures addressed to supply interruptions; supporting major investments; and using energy more efficiently and more from domestic sources, which could also be categorized under internal measures (European Commission, 1994: 22). Accordingly, as there are some particularly important measures in order to secure supply of energy and as aforementioned framework, the Community was thought to require acting with significantly

enhanced competencies in order to draw the framework to determine the needed actions.

Other than calling for a more detailed study on the security of supply and examining the supply situation vis-a-vis the main energy sources of the Community--coal, oil, natural gas and electricity, the Commission also underscored the salience of environmental protection, the necessity of efforts to decrease CO₂ and the need to use energy sustainably and efficiently (European Commission, 1994: 23-25).

Thus, energy security emerged as an increasingly important consideration for the imported energy-dependent Union, specifically for the Commission, which took on a greater responsibility for drawing up framework for member states to achieve greater convergence in national objectives and policies, and thus, enhanced collective energy security.

3.2.1.2. Green Paper-Energy for the Future: Renewable Sources of Energy (1996)

As its title indicates, this green paper has a particular and unique focus on the importance of renewable energy sources. It declares EU objectives on renewables, and after identifying obstacles in the way of greater renewables use, suggests possible ways to overcome these obstacles (European Commission, 1996: 11).

This paper draws attention to the obvious fact that renewable energy is an underutilized source by EU countries. Renewable sources constituted 6% of the Union's total energy consumption mix in 1996 (European Commission, 1996: 3). 11 Yet, the share should increase in order to reduce import dependence and to protect environment with reduced CO₂ emission. The most significant obstacles in the way of the development of this resource are the high costs of its exploitation and the lack of confidence in investing in this sector (European Commission, 1996: 4).

In order to overcome these problems, the Commission suggests four policies, including delineating a common goal in terms of increasing the contributions of renewables, enhancing cooperation among member states, harmonizing member-state policies on development of renewables, and strengthened monitoring of progress towards realizing these goals (European Commission, 1996: 5). It should be noted that, due to more recently emergent food scarcity concerns, the Union downgraded its efforts to increase the share of biofuels in overall energy consumption (Euractive, 2008).

The paper underscores the multiple benefits of renewable sources. These contribute not only to decreased import dependency and environmental qualities, but also to competitiveness, employment and regional development of the Community (European Commission, 1996: 19). In terms of enhancing the competitiveness of the Union, the Commission suggests two advantages of using renewables (European

¹¹Although, the Community use renewables with 6% percentage, there are some members states that use more, such as; Austria, Sweden, Finland, Portugal. They use respectively 24.1, 24.0, 19.3 and 17.5 renewables, whereas United Kingdom, Belgium, Luxembourg and Netherlands have small renewable percentages, respectively 0.6, 0.8, 1.3 and 1.4 (European Commission, 1996:12).

Commission, 1996: 21-23). First, when costs of other energy sources, such as nuclear, oil, gas, together with their impacts on the environment and reduced dependency on imports, are examined, it seems that using renewables may make their users more economically competitive. Second, according to Commission, price fluctuations on imported fuels do not affect the renewables' prices and together with the increased opportunity for the export of renewable technologies, this stable price provides economic and competitive advantages for the Union. For example, Brazilian ethanol fuel programs can be exported as renewable technologies.¹²

Moreover, the Commission emphasizes the advantages of renewables for regional development and employment. According to the Commission (1996: 23-24), many less developed regions have renewable energy production potential and the promotion of renewables in these areas will carry employment to these regions and will support small and medium size enterprises. According to the survey mentioned in the green paper, employment in the renewable sector is five times higher than in fossil fuels (European Commission, 1996: 23). Thus, besides contributing to independence and environmental qualities, it also has positive economic and developmental impacts.

However, the Commission also notes the formidable obstacles to promoting renewables. One, renewables are costly (European Commission, 1996, 25). Furthermore, the investors seem averse to investing in renewable energy due to long-term payoff periods and uncertainty about future market demand (European

¹² Brazil obtains ethanol fuel from sugar and so produce cheaper and internal fuel. According to World Bank in 2006, Brazilian ethanol costs about \$1 a gallon, whereas gasoline cost \$1, 50 a gallon (Luhnow&Samor, 2006).

Commission, 1996: 26). Furthermore, unevenly distributed knowledge and problems arising from seasonality of production¹³ lessen its attractiveness. Nonexistent technical standards and the unwillingness of local residents to accept siting of renewable production in their areas also represent barriers to increased use of renewables. However with appropriate regulations and increased knowledge and education, renewables could become more widely and commonly used.

In order to do this, as stated above, the Community needs to determine a consonant set of EU-wide goals. For example, there must be a percentage for the whole Community to attain (European Commission, 1996: 29). Moreover, according to Commission (1996: 30), there needs to be monitoring and assessment of situation, with the possibility of adjusting objectives.

Thereafter, the policies should be implemented. It is better to have Community-level legislation, although industry, users and Member States have significant importance in the implementation of these policies (European Commission, 1996: 28). As most of the measures are taken by the Member States in accordance with the principle of subsidiarity, effective direction is required from the Community in order to tighten cooperation between member states (European Commission, 1996: 28).

The importance of coherent and effective community legislation and policies cannot be overemphasized. First of all, the Commission aims to create an internal energy market with renewable energy sources to occupy a prominent role therein (European

32

¹³ Particularly, for the wind and solar energy, the supply variability between day and night and seasons are significant problems, However, they can be solved by various methds, such temelatics applications and energy storage system (European Commission, Green Paper, 1996: 26)

Commission, 1996: 33). The Commission (1996: 34-38) proposes "renewable energy credits", internalization of cost and fiscal harmonization; state aid to promote renewables 15; and lastly, determination of standard minimum requirements for renewable technologies.

The Commission also advocates specific financial support for renewables, as in the 1993 ALTENER programme, which aims to promote use of renewable energy sources (European Commission, 1996: 38). Furthermore, the Commission stresses greater support for research and development (European Commission, 1996: 39). It also favors promoting renewables in less developed regions (European Commission, 1996: 42). The Commission (Green Paper, 1996: 44) also touches on the importance of renewables in agricultural policies. It states that, "the production of renewable energy sources represents a considerable potential for additional sources of income and reduction of CO2 emission in the agriculture and forestry sectors" (European Commission, 1996: 43).

In addition, the Commission mentions the importance of renewables in the Union's external relations (European Commission, 1996: 45). According to it, the Community should support the use of renewable energy usage in third countries, because this can moderate the demand for scarcer fossil fuels and thus extend the life of these more limited sources. On the other hand, increased usage of renewables in

¹⁴ "A certain percentage of a Member State's electricity requirements will have to be met by renewables, enforced on each individual retail electric supplier" (European Commission, Green Paper, 1996:35). By this way, the use of renewables is enforced by the Community.

¹⁵ According to Commission information state aids include "national research and demonstration programmes; tax incentives; direct subsidies, low interest financing; development aid for small and medium sized enterprises active in renewables; lower VAT-rates for electricity based on renewables, state guaranteed interest loans, etc" (European Commission, 1996:36).

third countries will also enhanced the economic competitiveness of the Union, which will be enabled to sell renewable technologies to other countries, as Brazil does not with sugar cane-derived ethanol.

As with the 1994 Green Paper, the 1996 documents also underlines the importance of energy security and advances internal and external policy proposals in order to deal with energy threats, such as a coherent internal legislation and increased relations with third countries. Accordingly, it can be concluded that both green papers on energy published up to 2000 indicate rising imported energy dependency and the correspondingly enhanced need to pay attention to energy security. Yet, whereas the first one offers a general framework for dealing with dependency on energy imports, the subsequent one focuses more on the specific potential ameliorative role of renewables. Even the external policy suggestions in the latter paper focus on promotion of renewable energy in third countries, largely in the context of larger Union security objectives.

3.2.1.3. Green Paper-Towards a European Strategy for the Security of Energy Supply (2000)

This Green Paper concentrates on the European energy security and the policies needed to enhance it. This paper, as in the 1994 document, reiterates the known facts about how the European Union is consuming more energy, and, since Community production is insufficient, how import dependency is rising and projected to grown

from 50% to 70% in 20-30 years (European Commission, 2000: 2). It again uses this context to stress the need for concrete action plans.

According to Commission (2000: 2), in order to preserve energy security, the Union should aim to ensure the well-being of its citizens, the smooth functioning of the economy, availability of energy products in an undisrupted way at affordable prices and consideration for environmental quality and sustainable development (European Commission, 2000: 2). However, it is stated that the Commission (2000: 2) aims not to maximize energy efficiency and minimize dependence, but only to reduce the risks of dependence.

According to Green Paper, energy demand is rising throughout the Community (European Commission, 2000: 14-16). Secondly, rising energy demand increases dependency on imports, but the EU lacks any common to free all of its members from dependency on certain single suppliers of particular energy sources (European Commission, 2000: 21-23). Thirdly, as imported energy passes through transit countries, the challenge of ensuring security of supply is complicated by the emergence of New Independent States (European Commission, 2000: 24). Fourthly, despite member state economies' better capability of dealing with price volatility, the Community recognizes its inability to foresee geopolitical events and control world markets and the speculative forces that profit from these markets (European Commission, 2000: 27). As the last one, the Commission (2000: 80) states that if concrete target measures are not adopted, it is not possible to have environmental, efficient and renewable energy technologies in the short run.

These aforementioned challenges have driven the evolution of the Commission's energy security perception. More specifically, the Union moved from focusing on the challenges from increasing energy demand and increasing import dependency to addressing dependence on transit countries and volatile markets, all in an environmentally sustainable way.

The Commission suggests new policies in Green Paper 2000. First of all, it suggests balancing supply and demand policies (European Commission, 2000:3). Second, it calls for concrete changes in consumer behavior via new taxation measures, penalties for environmentally harmful energy uses and new conservation and diversification policies, particularly for the transport and construction industries (European Commission, 2000: 3). On the other hand, it advocates revamping energy supply policies in order to reconcile rising energy needs with sometimes competing environmental, political, social, technical and economic objectives (European Commission, 2000: 80). Lastly, it again recommends developing new and renewable energy technologies, diversification, energy efficiency, conservation and greater decoupling of economic growth from energy consumption (European Commission, 2000: 80).

The 2000 Green Paper catalogues a host of energy security risks. One set stems from physical disruptions, which can occur permanently, when an energy source is exhausted or production is stopped, permanently or temporarily (European Commission, 2000: 64). The permanent ones can be addressed by product substitution, but temporary ones may be more disastrous for the economy (European Commission, 2000: 64). Economic risks stem from market price fluctuations

(European Commission, 2000: 64). Erratic fluctuations may also generate social risks, which may also occur due to instability in energy supplies caused by geopolitical factors, such as worsening relations with producers or sudden events (European Commission, 2000: 65). Finally, risks can be raised by damage to the environment from accidents and pollution (European Commission, 2000: 65).

In this context, two main measures are proposed by the Commission (2000: 68-74): controlling the growth of demand and managing supply. On the former, two particular policies are proposed. The first one involves empowering horizontal policies aimed at finalizing the internal market, particularly in gas and electricity; using energy taxes to improve efficiency; adopting energy-saving schemes and developing new technologies (European Commission, 2000: 14-16). The second addresses sectoral policies in order to incentivized greater use of rail, water and and public modes of transportation and to generate more energy savings in buildings (European Commission, 2000: 70).

In terms of managing supply, the Commission proposes three main measures to reduce dependence. The first one focuses on augmenting internal supplies (European Commission, 2000: 71). In this context, it suggests development of less polluting energy sources, such as renewables and nuclear energy, and preservation of access to strategic resources (European Commission, 2000: 71-72). The second measure focuses on maintaining competition and suggests a greater role for the Commission in tightening competition rules (European Commission, 2000: 72). Finally, the Commission targets the securing of external supplies (European Commission, 2000: 73). If the Union cannot reduce dependency, it will continue to face vulnerability to

external supply volatility. It emphasizes that the Community should leverage its political and economic power to guarantee flexible and reliable external supply from producer countries through existing supply networks (European Commission, 2000: 73-74).

More specifically, as for its external relations, the 2000 paper indicates that the Union needs to continue dialogue with producer countries, which will promote the improvement of price mechanisms, the reaching of agreements and the use of reserve stocks for common benefit (European Commission, 2000: 73). The dialogue should broadly include all matters of common interest, even the environment and technology transfer (European Commission, 2000: 74). On the other hand, since it is recognized as being just as important as guaranteeing the basic pricing and duration-related details of supply from producer, energy transit should be ensured with long-term agreements and improved relations with suppliers. Therefore, construction of new oil and gas pipelines is needed in order to bring new energy supplies from places like the Caspian Basin and Mediterranean and better grid facilities are needed for transboundary electricity transactions (European Commission, 2000: 73).

Compared to the previous two papers, Green Paper 2000 is closer to the 1994 one. Whereas the 1996 document had a specific focus, the 1994 and 2000 papers offer a more general framework. When compared to the document of 1996, however, Green Paper 2000 takes any even broader approach to what is needed for improved EU energy security. As such, it represents an improved instrument to help the Union to deal with energy security challenges, particularly energy dependency.

3.2.1.4. Green Paper- On Energy Efficiency or Doing More with Less (2005)

As is obvious from the name, this green paper focuses on promotion of energy efficiency. As the paper relates, beginning with the 1973 oil embargo, Community members started to think about reducing energy consumption in order to be less dependent on oil. Thereafter, because of the increased use of cars, higher use of energy in buildings and rising energy prices, reducing energy consumption in a cost effective manner became a central challenge for many import-energy dependent states (European Commission, 2005: 12). According to the green paper (European Commission, 2005: 4), the Commission aims to save 20% of Community energy consumption. Commission believes that this conservation will also contribute to Community's competitiveness and employment while preserving the environment. On the other hand, reflecting the evolution of EU-level thought and discourse, the Commission (2005: 5) points out that energy efficiency will also contribute directly to security of supply.

As a first step, the Commission (2005: 13) suggests improvement of the regulatory regime by introduction of greater market transparency. Moreover, it underlines the importance of financial instruments and energy services in increasing energy efficiency (European Commission, 2005: 14). Moreover, greater action by public authorities, national or EU, should also be realized and consumer consciousness raised, by means of regulated price changes. The thinking behind this proposal is that, if the prices paid for consumed energy reflect all externalities, like pollution or even the risk of being dependent on unstable or unreliable external suppliers, they

can be incentivized to use energy more efficiently (European Commission, 2005: 14). Consumer consciousness also involves information and education, not merely the use of official tax and pricing incentives. However, the Commission (2005: 16) does not suggest information and education merely for consumers, but also for industrial customers, energy efficiency experts and service providers.

Since the responsibility of the Union is not clearly stated in this area, the green paper expresses the urgency of a concrete Action Plan (European Commission, 2005: 16). According to the European Commission (2005: 16-17), an Action Plan is necessary in order to activate all the players, including national governments, regions, municipalities, industries and individuals, covering all energy producing and consuming sectors and players.

In this context, the Community indicates that it should place energy efficiency at the core of its concerns and embed it within other Community policies (European Commission, 2005: 17). In order to be successful in this integration, firstly, research and development should be supported and all best practices and technologies should be promoted. Even particular national Action Plans should be developed in order to promote best practice at all levels (European Commission, 2005: 17-18). Better use of taxation and state aids¹⁶ are also advised (European Commission, 2005: 18-20). Public purchasing should consider energy efficiency goals. More energy-efficient products should be chosen (European Commission, 2005: 20). Furthermore, as was the case for renewables, more investment should be made to improve energy

¹⁶ The state aids are needed to be in favor of energy efficiency and in accordance with Community proposals on environmental protection (European Commission, 2005: 20).

efficiency by means of support given in European financing framework (European Commission, 2005:20-21). As a second aim of attaining Community action on energy efficiency, the Commission (2005: 21) states the importance of specific energy policy measures. These measures focus on buildings, domestic appliances of energy efficiency policies by Member States, limiting the fuel consumption of vehicles and consumer awareness raising (European Commission, 2005: 21-24).

On the other hand, besides Community level regulations, the Commission (2005: 25) focuses on the importance of national level regulations, even to the point of stating that national level regulations are more appropriate to encourage energy efficiency. For national level regulations, the Green Paper (1995: 25-28) stresses regulation of network activities, regulation of supply activities, electricity generation¹⁷ and white certificates¹⁸. However, the Commission (2005: 32-33) suggests that Community and national measures can be effective if only they can be implemented locally. Therefore, regional and local measures are to be encouraged by specific financing measures (European Commission, 2005: 32).

Moreover, energy efficiency has an international dimension, that is, every import dependent country aims to reduce its dependency, an objective that can be facilitated by achieving gains in energy efficiency. According to the European Commission

_

¹⁷ For the electricity generation, promotion of distributed generation and co-generation are particularly emphasized (European Commission, 2005:27-28)

[&]quot;White certificate systems have been partially implemented in Italy and the UK, are under preparation in France, and are being considered in the Netherlands. These are systems where suppliers or distributors are obliged to undertake energy efficiency measures for final users. Certificates corroborate the amount saved, giving both energy value and lifetime. Such certificates can, in principle, be exchanged and traded. If the contracted parties cannot then submit their allocated share of certificates, they can be required to pay fines that may exceed the estimated market value" (European Commission, 2005:28).

(2005: 33), energy efficiency is central to European cooperation with third countries. Besides the geopolitical and strategic significance of energy efficiency, it is expected to enhance the competitiveness of EU products. As an energy efficiency leader in the contemporary era, the Union can export its knowledge and thus exploit new opportunities for its industries (European Commission, 2005: 34). First of all, the Commission (2005: 34) suggests that energy efficiency should be integrated into its international cooperation. Secondly, it suggests factoring energy efficiency into the Neighborhood Policy and EU-Russia cooperation (European Commission, 2005: 35). Thirdly, the Commission (2005: 35) suggests making energy efficiency part of its development policy. Lastly, it advices backing efforts by International Financing Institutions to incorporate energy efficiency into their technical assistance to third countries (European Commission, 2005: 35-36).

As was the case for the 1996 Green Paper on Renewables, this paper also adopts a specific focus on enhancing energy security through another largely internally generated measure, enhanced energy efficiency, which can nonetheless be externally applied as well. Different from the 1994 and the 2000 green papers, this one specifically focuses on the specific importance of energy efficiency and on ways to bring it about. As with the 1996 Green Paper, in the 2005 document, even external relations are examined in terms of how they can be promoted by internally-focused objectives and measures over which the Union has theoretically greater policy and political control.

3.2.1.5. The Green Paper- Towards a European Strategy for Sustainable, Competitive and Secure Energy (2006)

Like its predecessors, this Green Paper starts by clarifying the energy security challenges facing the Union before proceeding to suggestions and options. These suggestions and options form the basis for a new comprehensive European Energy Policy to meet three core objectives of energy policy, sustainable development, competitiveness and security of supply (European Commission, 2006: 4).

In order to indicate where priority action is needed, the Commission identified six priority areas in the Green Paper. The first area is discussed under the heading "energy for growth and jobs in Europe: completing the internal European electricity and gas markets." In this area, open markets are deemed necessary in order to help Europ to overcome its energy problems. A truly competitive single European electricity and gas market is identified as central to bringing prices down, improving security of supply and enhancing industrial competitiveness (European Commission, 2006: 5). Within the first priority area, some necessary actions are clarified in order to complete the internal energy market. These can be listed as developing a European energy grid code; proceeding with a priority European interconnection plan; increasing investment in generation capacity; advancing new initiatives to ensure a level of playing field, particularly regarding the unbundling of networks from competitive activities; and boosting competitiveness (European Commission, 2006: 6-7).

This green paper discusses the second priority area under the title of "an internal energy market that guarantees security of supply ensuring solidarity between member states." This priority area focuses on two main objectives, the first being to enhance security of supply in the internal market and the second being to rethink the EU's approach to emergency oil and gas stocks available to prevent disruptions. In order to achieve these objectives it is proposed to have a European Energy Supply Observatory; improved network security; a mechanism for solidaristic responses; common standards to protect infrastructure; and revision of Community legislation on oil and gas stocks (European Commission, 2006: 8-9).

The third priority area consists of more sustainable and efficient diverse energy mix. Thus, the freedom of each member state and company to choose its preferred energy mix is permitted; however, it is also stressed that the choices of each member state impact the energy security of its neighbors and of the Community as a whole.

In this respect, a Strategic EU Energy Review is identified as essential. This review proposal would offer a uniform framework for taking national decisions on energy mix, covering all aspects of energy policy and analyzing the full cost-benefit ratios of each different energy source (European Commission, 2006: 9). As a result, it may generate pressure for agreement on overall Community-level strategic objectives and the appropriate balancing of the goals of sustainable energy use, competitiveness and security of supply, and most prominently, preserving the right of Member States to make their own energy choices (European Commission, 2006: 9-10).

In terms of the fourth priority area, the Green Paper suggests a series of measures to address climate change. Energy efficiency and increasing use of renewables form the core of the Commission's suggestions in this area. In addition, the Commission gives substantive content to an Action Plan on energy efficiency to be adopted by the end of that year, effectively incorporating the proposals articulated by the 2005 Green Paper. The Action plan proposes concrete measures to save 20% of the energy that it would otherwise consume by 2020. Additionally, the Commission declares that it will prepare a Renewable Energy Road Map and suggests that the carbon capture and geological storage are alternative options for tackling climate change, particularly for those member countries that choose to continue use of coal (European Commission, 2006: 10-12).

Later, the Commission also declares that development and deployment of new energy technologies are also significant in providing security of supply, sustainability and industrial competitiveness. Commission also states that, in order to achieve the aforementioned objectives, a strategic energy technology plan is needed by the Union (European Commission, 2006: 13-14). This plan will ensure European industries remaining the world leaders in the generation of new technologies (European Union, 2006).

Finally, the Commission emphasizes the importance of common external energy policy. It states that, faced with certain energy challenges, Europe needs a coherent external policy in order to be more effective in the international arena and to tackle common problems together with energy partners. In order to achieve the aforementioned aims, the Union needs to adopt a common vision and speak with

single voice on the international scene. The Strategic EU Energy Review is expected to establish a framework for the common vision and to constitute an action plan for the European Council to monitor progress and identify new challenges (European Commission, 2006: 14).

In addition, the Commission proposes a number of key goals and instruments: developing a clear policy on securing and diversifying energy supplies; sustaining energy partnership with producers, transit countries and other international actors; increasing dialogue with major energy producers and suppliers; developing a pan European Energy Community; reacting effectively to external crisis situation; integrating energy into other policies with an external dimension; and using energy to promote development (European Commission, 2006: 15-17).

Like its 1994 and 2000 versions, Green Paper 2006 also focuses more broadly on enhancing energy security, not just by pursuing specific ends like increased usage of renewables or energy efficiency. Thus, the Green Paper 2006 is also a more comprehensive road map for the Union to reach enhanced energy security. By way of conclusion, it can be stated that all five Green Papers on energy prepared by the European Commission since 1994, albeit reflecting the perceived salient necessities of their respective time periods, have a common aim of reducing the risks and vulnerabilities entailed in growing EU dependency on imported energy. Moreover, whether these are addressed as primary, secondary or tertiary topics, all green papers underscore the importance of internal measures, particularly renewables, energy efficiency and more coherent EU-level policy. It is important to note that, common

energy policy and improved EU-level decision-making have become predominant Commission foci.

3.3. Conclusion:

In this chapter, a brief analysis of energy security in European discourse was made using the Green Papers on energy. No less that any other import -dependent energy consuming economies, the EU aims to secure its energy supply. Past experiences have certainly made the Union more anxious and more urgently focused on developing coherent and unified internal and external energy policies, as articulated in the most recent Green Paper of 2006.

Thus, it can be concluded that the Commission has realized the necessity, if not the means, of promoting a common EU energy policy. Although there have been prototypical efforts to develop common energy policy, as in the establishment of Coal and Steel Community and Euratom, the need for a more comprehensive common energy policy was never felt until much more recently, as global interdependence and EU dependency on foreign energy suppliers has increased so dramatically. Additionally, common energy policy is an endeavor reflective of the perception that integration in other sectors led to more economic success. In this respect, the Union has sought to develop a more integrated energy security policy and to take more unified stances in the international arena.

CHAPTER IV

EUROPEAN ENERGY SECURITY POLICY

The increased security considerations of the Union on energy related issues made the Union more desirous of having policies to deal with energy security challenges. Specifically, efforts on integrated common energy policies have accelerated. This chapter examines European energy security policies.

In the first part of this chapter, the common energy policy efforts of the Union will be examined in historical context vis-a-vis changing energy security challenges. In the second section, internal energy policies will be studied. Although, this second part is a similar study to chapter 3, it includes more specific study of stated internal energy policies. In this context, this part focuses on three green papers which has more concrete internal energy proposals; Green Paper- For A European Energy Policy (1994), Green Paper- Towards a European Strategy for the Security of Energy Supply (2000) and Green Paper- Towards a European Strategy for Sustainable, Competitive and Secure Energy (2006).

Finally, the external energy policy of the Union will be assessed. After delineating the external policy objectives of the Union, the Union's corresponding relations with major and alternative energy suppliers, Russia, Middle East, Norway and Caspian region countries will be examined.

4.1. Development of Common Energy Policy of the EU

Although the genesis of the EU, going back to the 1951 European Coal and Steel Community (ECSC) and the Euratom treaty of 1957, was in fact energy-related in large part, the European Community Treaty still lacks general competencies with respect to EU energy policy (Geden and Marcelis, 2006: 4). A common energy policy has not yet been attained, so energy policy still resides largely under the respective purviews of individual EU Member States. Yet, clear efforts to obtain a coherent policy have been underway, if never actually reaching full fruition, for a long time.

The European Energy Policy was initiated with the ECSC, the seminal phase of the European Union (EU), and extended via the common policies established for the Euratom (Ege et al. 2004: 10). 19 Since the 1950s, commencing with coal, measurable

_

¹⁹ The 1951 Treaty of Paris creating the European Coal and Steel Community and the 1957 Treaty of Rome establishing Euratom were dedicated to the coal and nuclear sectors. The 1951 ECSC Treaty made clear that coal is dominant in the energy balance of member states and by tackling_coal most EC energy supply and demand issues were mentioned. On the other hand, the 1957, Euartom Treaty aimed to increase cooperation for the development of nuclear power, and suggested nuclear power as the main source of future energy requirements. Both of the treaties, were in principle, led towards the

effort has taken place in order to obtain a common policy for the broader energy sector. Then, following the foundation of these new communities, a common energy market was first attempted in 1959. Then, after 1960, efforts increased to have a more stable energy policy.

First effort to have a regular energy policy was observed in 1962, with the preparation of an energy policy memorandum by the Commission. Then in 1964, member states reached an agreement and signed a protocol on energy problems. Later, in 1968, the Commission accelerated initiatives on energy and established a directive on energy, stating that "each member state has to have a minimum petrol stock" (Ege et al. 204: 13).

By this time, due to rising concerns over energy security after the 1967 Arab oil embargo and due to changing energy security perceptions, the importance of having a common energy policy became more obvious (Canbolat, 2002: 208). Particularly, the oil crisis of 1970s led to fundamental shifts in the concerns of the member states for energy security and future Union energy policy. The 1973 oil embargo highlighted the EU need to diversify its source of energy supplies in order to reduce its level of dependence on any one area of the energy world. In 1988, the initial step on developing an Internal Energy Market (IEM) was taken, but the IEM was actually launched by means of a four-directive package in 1989 and internationalized in the form of the European Energy Charter (Matlary, 1997: 21). Despite the oppositions

c

creation of free and integrated markets in the energy sector (El-Algraa et al. 2001: 296). Both of the treaties has the plan that integration in the energy sector would lead to further political integration (Matlary, 1997: 16)

from energy-sector interests and governments²⁰, work on the IEM proceeded from 1988 to 1995. The Union launched an initiative to promote energy cooperation among member states and to diversify energy supply as part of the 1991 Energy Charter Declaration (Morelli et al. 2007: 3). This led to the Energy Charter Treaty, which was signed in 1994 and entered into force in 1998.²¹ The Energy Charter Treaty has since been signed by 51 nations in addition to the EU (Morelli et al. 2007: 3).

Since the signing of the Energy Charter Treaty, EU tried to develop a coordinated approach to energy policy and security. Significantly, the Commission has tried to shape a European energy policy by exercising its responsibility on the internal gas and electricity market, encouraging the development of alternative supplies and trying to establish more collaborative external relations with current and possible energy suppliers (Morelli et al. 2007: 4). The 1995 White Paper combined all competencies attributable to the Community in all three energy-related treaties and in the European Union Treaty. By doing this, it was decided that if any policy is perceived as an obstacle in the way of EU goals, EU-level policies will take priority to national level policies (Oktay et al 2006: 161). Furthermore, the 1994 Green Paper stated that the IEM is needed in order to develop a security of supply policy and to integrate the environmental criteria into energy policy. Yet, at the end, it did not lay out a supranational role for the Commission (Matlary, 1997: 63).

_

²⁰ Although, governments knew the advantages of the IEM, due to the fear to loose national control over energy policy, they opposed a complete IEM.(Matlary, 1997:21)

²¹ "The aim of the Charter is to promote an efficient energy market through the price mechanism, with due attention being paid to the environment" (Matlary, 1997:54). On the other hand, McGowan (1996:177) suggests that the Charter is a strategic initiative based on West's interests in order to ensure secure and increasing supplies of gas and oil from the East, and the interest of East in protecting large flows of investment capital, hard currency earnings and key technologies of West.

Despite the efforts mentioned above, there was still need for more a coordinated energy policy. Particularly, Germany's inattention to, or disregard for, the energy and security needs of the Baltic States and Poland in the bilateral agreement that it signed with Russia in 2005 and in the Russia-Ukraine dispute, made the necessity of coordinated external energy policy more obvious. These development led to questioning of long-term security of energy supply and the member states recognized that EU needs to diversify its sources of supply and to develop both a broad common internal energy policy and an external energy strategy. Following the Russian-Ukraine gas crisis, EU Energy Commissioner Piebalgs stated that Europe needs "a more cohesive policy on security of energy supply" (Morelli, 2006: 5). Then, the 2006 Green Paper stated the importance of these necessities more clearly and laid out the policy options for a common European energy policy (Morelli, 2006: summary).

Yet, in the end, the Union still lacks a common energy policy. Energy policy in Europe is still largely a national prerogative and although most member states have similar problems and challenges, national policies diverge in important ways (McGowan, 1996: 17). Viewing energy as a national concern and fearing loss of sovereignty over this vital policy interest, member states are still reluctant to cede national control over energy.

Due to differences in territorial possession of various natural resources, structures of energy sectors, political choices, security considerations and interests of each member state, it is difficult to achieve a common energy policy. As Commission

President Barroso indicated, "the Union has the required size and required instruments but it lacks the political will to forge a common European energy policy" (Geden and Marcelis, 2006: 11). Yet, this does not erode the internal and external energy policy necessities of the Union and the efforts of the Commission to reach a common energy policy.

4.2. Internal Energy Policy of the EU

Since there is no clear and coherent energy policy regulation of the Union, the Green Papers on energy, particularly the ones about internal policy of the Union, will be cited to demonstrate the Commission's attitude on energy policy. The Green Paper-For a European Union Energy Policy (1994), the Green Paper- Towards a European Strategy for the Security of Energy Supply (2000) and Green Paper- A European Strategy for Sustainable, Competitive and Secure Energy (2006) are significant green papers in order to understand the Unions's proposals on internal energy policy. As aforementioned, this part is similar to the third chapter; however it will be a more detailed study in order to understand the internal energy policy of the Union.

The Green Paper 2006 is a particularly useful guide to understanding the Union's internal policy. Its clear analysis, grouped under five headings (excluding the sixth one, which deals with external policy), covers all necessary EU policies needed to understand the EU approach to internal energy policy. This green paper, with its basic objectives of sustainability, competitiveness and security of supply, also

exhibits the main aims of EU's internal energy policy. In this regard, the Green Paper 2006 will be the main guideline of this part.

As mentioned in the Green Paper 2006, the internal energy policy of the Union aims to achieve sustainability, competitiveness and security of supply. In order to attain these aims, the first priority area of the Union is completing the internal European electricity and gas markets. With the Commission's (2006: 5) words, a truly competitive single European electricity and gas market is necessary to bring prices down, improve security of supply and increase competitiveness. According to Green Paper 2006, in order to achieve a fully integrated market, the Union should regard preferred supplier and attitudes towards market liberalization as key structural problems other than the obvious fact of national differences in energy mix. Actions are needed for development of a European energy grid, enhancing the interconnection plan, investment in generation capacity to ensure a level playing field and achieving a more significant unbundling of networks, and boosting the competitiveness of European investment (European Commission, 2006: 6-7).

Going back in time, Green Paper 2000 also pointed out the importance of an integrated European energy market. It mentions the integrated European energy market as one of two challenges of the EU and in order to overcome this challenge, suggests achieving a fully working internal market. For Green Paper 2000, as in 2006, the main point is to create cooperation between internal parties, which can be achieved by defining a European plan for enhancing internal infrastructure (European Commission, 2000: 60).

For this to happen, the Commission suggests to have an advisory body. According to Commission, the advisory body is aimed at influencing all national regulations in order to assist the Commission in the proper functioning of the internal market (European Commission, 2000: 61). As Green Paper 2006 does, Green Paper 2000 supports creation of new interconnection infrastructure.

However, from the perspective of the 1994 Green Paper, it can be seen that the aforementioned propositions are not new. The Green Paper 1994 also mentioned the importance of establishing an internal energy market. The Commission also states in 1994 that, general community measures are needed to construct a framework to determine the necessary policies and objectives. It also focuses on the importance of cooperation between regulatory authorities and network managers, development of interconnections and need for harmonization (European Commission, 1994: 33-34). The Green Paper 1994 also signifies the importance of creating the needed climate for economic investment.

The Green Paper 2006 laid out the second priority area as establishment of an Internal Energy Market that guarantee security of supply and solidarity between member states. Although this priority area seems similar to the first one, its concrete focus is to enhance security of supply in the internal market and to rethink the EU's approach to emergency oil and gas stocks available to prevent disruptions. With this second priority area, the Commission suggests having a European energy supply observatory that can monitor demand and supply patterns and alert members of shortfalls in infrastructure and supply (European Commission, 2006: 8). The main aim here is to improve network security; develop mechanisms to prepare and ensure

solidarity; protect infrastructure and make revisions to existing Community legislation on oil and gas (European Commission, 2006: 8-9).

On the other hand, in order to guarantee security of supply, Green Paper 2000 also suggests the importance of controlling demand. Besides consistent policy on oil and gas stocks that will reduce the risks related on supply dependence, Green Paper 2000 points out the importance of controlling demand growth. Taxation, legislated energy saving schemes and development of new technologies are proposed as methods of curtailing demand.

Even earlier in time, Green Paper 1994 also states the importance of security of supply and solidarity among member states and the corollary need to strengthen the storage and cooperative security measures aiming to cope with supply interruptions (European Commission, 1994: 22).

The third priority area of the Green Paper 2006 is to have more sustainable, efficient and diverse energy mix, by which decreased dependency on foreign supply will also be attained (European Commission, 2006: 9). As constantly declared, member states are left free to choose their energy mix, but should take into account that choices of each have impact on energy security of its neigbors and of the Community as a whole.

According to Green Paper 2006, freedom of member states to choose their energy mix should be balanced with by need of the Union as a whole to have a diverse energy mix that meets its core energy objectives (European Commission, 2006: 9-

10). What is needed is to determine the energy sources that lead to sustainability and security, to improve the internal availability of those that contribute to sustainable development. Afterwards, the member states should select their own energy mix among the energy sources that are consonant with the general energy objectives of the Union. Similarly, the Green Paper 1994 suggests intensifying efforts in order to improve domestic energy resources in both economically and environmentally acceptable ways (European Commission, 1994: 22). For this Green Paper, it is important to diversify sources and origins of Community supplies, particularly by using more renewable energy sources (European Commission, 1994: 22).

Actually, renewable sources the most often cited energy source in order to attain sustainability and security, not only in the 1996 paper devoted to these sources of energy. Green Paper 2000 also mentions the significance of renewables. The Commission (2000: 42) even named the renewable energy sources in the Green Paper 2000 as "political priorities" due to its mentioned importance in sustainability and security. Since renewables contribute to indigenous means of energy production, they by implication lead to diversification and thus security of supply. Moreover, since the renewables have zero or low carbon emission levels, they contribute to a more environmentally sustainable form of diversification. Among the renewable sources such as hydroelectricity, biofuels, wind energy, solar power and geothermal, biofuels are targeted as a significant alternative in the fuel market (European Commission, 2000: 44).

Conversely, there are energy sources that also promote diversification, such as nuclear energy and coal. Yet they are called as "undesirables" due to their heavily

negative connotations (European Commission, 2000: 31). Although it has minimal carbon emissions, nuclear energy is not preferred due to its suggested health risks and environmental damages. On the other hand, due to cheaper prices of imports (relative to its domestic production cost) and the flexibility of contracts, indigenous coal is not a preferred energy source. The pollution generated by coal at every stage of production and utilization is undesirable (European Commission, 2000: 35).

Every energy source has advantages and drawbacks. Even the highly preferred energy sources, oil and natural gas, are not desirable in terms of their largely external supply origins (for EU members). What is important for the Union is to make the member states choose their own energy mix, which for some, do involve nuclear and coal. However, the Commission wants them to consider the Union's larger objectives on energy, such as sustainability and security, in their energy mix choices.

The fourth priority area thus involves the objectives of sustainability and security. It focuses on the necessity of an integrated approach to tackle climate change. In this context, energy efficieny and increased usage of renewables are the main proposals addresses to climate change. For energy efficiency, the Commission suggests long term campaigns with the target of increased energy efficiency in buildings and transport sector, which needs more investment.

In terms of energy efficiency, the Green Paper 2000 identifies transport as an obvious priority goal. According to Commission proposals in this paper, the imbalance between roads, railways and seaborne modes of transport is significant. The highest oil-consuming and CO₂-emitting form of transportation, the highway,

should be counterbalanced by greater emphasis on rail and sea transport. According to Green Paper 2000, there is need for revitalization of railways, development of short sea shipping and inland waterways, together with reorganization of road transport and increased urban transportation (European Commission, 2000: 71). Furthermore, the Green Paper 2000 identifies a need to make users more concious about energy consumption in order to control demand. Assuming that it is hard to make everyone conscious, it suggests ways to control demand such as taxation, legislation, energy-saving schemes and development of new technologies. These can be also be termedenergy efficiency efforts directed at climate change, for which the Green Paper 1994 also suggests legislation at the community level.

The fifth and the last priority area in the Green Paper 2006 concerning the Union's internal energy policy is creation of a strategic European energy technology plan in order to attain most of the aforementioned priorities. According to the Commission, development and deployment of new energy technologies can help to provide security of supply, sustainability and industrial competitiveness. The development of new technologies will also help the EU to achieve energy efficiency and low carbon emission. The Green Paper 2000 also declares the need for development of new technologies as one of the most effective instruments for controlling demand, while the Green Paper 1994 also stresses the importance of technology.

Thusly, it can be concluded that there is not a clear set of EU energy policies that are applied to every member state. By looking the green papers published by the Commission on energy, particularly the ones published in 1994, 2000 and 2006, a general assumption can be made about the Union's internal energy policy approach.

The latest green paper on energy, published in 2006, specified five priority area of the Union about the internal energy policy in order to attain its primary objectives. All the priority areas are similar at some point because all are needed to attain same objectives: sustainability, security of supply and competitiveness. The member states are free in their energy mix preferences and there are no clear mandates in European internal energy policy. But the important point is to make every consumer in the Union and every member state conscious of energy policy objectives and priorities of the Union as a whole and to balance their preferences with the Union's. However, in order to attain the aforementioned objectives, it is also needed to balance internal policies with the external ones.

4.3. External Energy Policy of the EU

Being in need of reliable, affordable and sustainable flow of energy, and being dependent on imports from unstable regions and suppliers, the EU is expected by the Commission to give weight to energy policies in all their aspects, internal and external. To have all necessary internal regulations and policies is not enough if these are not complemented by the required external policies. The important point is to realize that coherence is central to achieve Union objectives: "There should be coherence between the internal and external aspects of energy policy and between energy policy and other policies that affect it" (Communication from the Commission to the European Council, 2006: 2).

The Green Paper 2006 also makes it obvious that a coherent external energy policy is crucial to ensuring energy security, with the European Council supporting the Commission's arguments and suggesting that a coherent and focused external EU energy policy would enhance the collective external energy security of the Union (Paper from Commission/SG/HR for the European Council, 2006:1).

EU external relations director general, Eneko Landaburu (2007: 3) has stated that there is an ongoing effort in the Commission to improve Union energy relations with its main external energy partners, whether producers or transit countries. With its increasing dependency on energy imports, the Union needs more focused and coherent external energy policies (Landaburu, 2007: 3).

In this respect, the initial step should be to determine external energy policy objectives and priorities. The main objective of the external energy policy, as declared in the Green Paper 2006, is to guarantee security supply, ensure sustainability and enhance competitiveness. In this respect, it needs to speak with one voice, to enhance member-state coordination to achieve a coherent, focused and effective energy approach, and to establish a network of energy correspondents from Commission services, Commission delegations in third countries and representatives from the Member States (Landaburu, 2007: 4-5).

However, it is not enough to have a common vision--the Union needs concrete policies. First of all, it needs to have a clear policy on securing and diversifying energy supplies (European Commission, 2006: 15). In this respect, the upgrading and construction of new infrastructure for energy supplies, particularly new gas and oil

pipelines and liquefied natural gas (LNG) terminals, can help to attain this policy objective (European Commission, 2006: 15). As implied by the famous remarks by Churchill, diversification of energy, whether by supplier, source or transporter country, is commonly seen as a cornerstone of effective policy initiatives to secure energy. As Belkin (2007: 9) states, for EU, "over 20 years, one of the most important energy security challenges will be its ability to diversify the sources and modes of its energy imports". For Morelli (2006: 10), as also indicated in European Commission (2006: 15), diversification can be improved by turning EU's attention to energy resources other than Russia, such as the Caspian region, the Middle East and North Africa. Accordingly, EU needs to enhance its relations with various energy supplier and transporter countries.

The second external policy suggested in the Green Paper is to enhance energy partnership with producers, transit countries and other international actors, such as Russia, Norway, Ukraine, Caspian basin, Mediterranean countries, OPEC, Gulf Cooperation or other consumer countries such as US and China. There are two prioritized ways in order to attain this policy objective. First of all, it is important to intensify dialogue with major energy suppliers, Russia being a particular focus for the Commission. Secondly, it is important to develop a pan-European Energy Community. This can increase security of supply for the EU together with its neighbors via developed "common trade, transit and environmental rules, market harmonization and integration" (European Commission, 2006: 16). A pan-European energy community is also important to "promote the best long-term use of community investment through the established networks" (European Commission, 2006: 16).

A third policy concerns effective response to external crisis situations. In order to "react quickly and in a fully coordinated manner" to external crisis, the Commission suggests acquiring the necessary mechanisms, namely, an early warning monitoring mechanism (European Commission, 2006: 16). This objective serves the need of the Union for a common stance and single voice in a crisis situation. The fourth suggested external policy pertains to making the EU's energy security more coherent. The Commission states the importance of integrating energy into other policies having external dimensions. With this objective, the Commission suggests to embed energy security priorities in all bilateral or multilateral agreements or external relations of the Union, on issues such as "climate change, energy efficiency, renewables resources, research and development of new technologies and investment plans" (European Commission, 2006: 16). As the last and the fifth policy objective, the Commission suggests promoting development through energy initiatives, including energy efficiency and renewable energy programmes.

In the light of the aforementioned study, it can be concluded that an external energy policy of the Union is vital in order to attain its security objectives. Without balanced and coherent internal and external energy policy initiatives, it is hard to enhance energy security. Particularly for an imported-energy dependent actor such as the EU, quality of external relations with producers, transit countries or other consumers is critical. A more detailed study of EU's relations with major energy suppliers and different paths of transporting energy follow below.

4.3.1. EU Relations and Partnerships with Its Major Energy Suppliers

While studying the energy security of the EU, it is important to study its external relations and partnerships with major energy suppliers and diversified energy sources. As an imported energy dependent actor, European Union suffered notably from the Russia-Ukraine dispute of 2006. Being heavily dependent on a single supplier, namely Russia, the Union bore some of the impact of the dispute, as the Ukraine passed on much of the burden of the Russian cutoff to successively westward consumers in Europe. In this respect, due to Russian efforts to obtain control of pipeline exports the Union started to give more consideration to energy security policies and realized the importance of diversifying energy imports and transit routes more (Tekin and Williams, forthcoming 2009: 340).

4.3.1.1. EU-Russia Energy Relations

Due to the increasing gap between the EU's energy production capacity and its growing demand, it relations with the world's largest exporter of natural gas and second largest oil exporter, Russia have become a crucial security factor (Bahgat, 2006: 968). Particularly, due to Europe's highest dependency ratio on Russia²², its partnership with the latter has become a major focus of EU energy policy. However, it is not a unilateral dependency: Russia needs EU just as much as the EU needs Russia, and the partnership between them needs to be examined in this context.

²² In 2006, 33% of the imported oil and 42% of the imported natural gas was from Russia (European Commission, EU Energy in Figures 2007/2008, 2008: 14).

As EU wants non-discriminatory and fair treatment from Russia and a long-term trustful energy partnership, Russia also wants to maintain the demand for its energy in the EU market (External Energy Relations-From Principal to Action: Communication from the Commission to the European Council, 2006: 4). Russia exports nearly half of its remaining oil and gas, after its consumption, to the EU (Tekin and Williams, forthcoming 2009: 342). According to Commission words;

Russia wants a stronger presence in the EU internal energy market, ensured long term gas supply contracts, the integration of electricity grids and free trade for electricity and nuclear materials, as well as acquisition and control of downstream EU energy assets (gas and electricity) and EU investments and technology for the development of the Russian energy resources(External Energy Relations-From Principal to Action: Communication from the Commission to the European Council, 2006:4).

In short, as Bahgat (2006: 969) suggests, cooperation rests on a simple bargain, "Europe's investments in return for Russia's oil and gas." In such a relationship of mutual dependency, partnership between them gains more consideration and needed to be institutionally controlled. In this respect, the Energy Charter Treaty and the EU-Russia Energy Dialogue are significant institutional mechanisms aimed to address collective energy relations between them (Belkin, 2007: 11).

As a first step in the cooperation between EU and Russia, the Energy Charter Treaty derives from the experiences of Cold War. Experiencing the drawbacks of ideological and political divisions, the two powers wanted to erase such kind of divisions and promote cooperation in the energy sector (Bahgat, 2006: 968). Russia, in need of substantial investment in order to use its rich energy resources, and the

EU, in need of diversified energy sources, was appropriate partners for energy cooperation. Thus, in keeping with this mutual interest, two parties signed the Energy Charter Treaty in 1994. The treaty's provisions were focused on energy investment, free trade in energy materials, and freedom of energy transit, reduced environmental damages and resolution of disputes. Having all necessary points in order to establish a trustful cooperation, the treaty was signed in 1994 and came into effect in 1998 (Bahgat, 2006: 968). Yet, Russia has not ratified the treaty. According to Belkin (2007: 12), unless Russia ratified the treaty and gave some concessions, Europe's energy security will be largely under Russian control. Even the 2006 Green Paper acknowledges the importance of the ratification of the Energy Charter Treaty and states that efforts should be intensified in order to secure rapid ratification of the Treaty by Russia (European Commission, 2006: 15).

In lieu of a working Energy Charter, the EU-Russia Energy Dialogue represents the most effective instrument for regulating their energy relations. Belkin (2007: 12) describes this dialogue as the first fruits of the energy dialogue launched between Russia and EU at the Paris Summit in October 2000:

...to raise all issues of common interest relating to the energy sector, including the introduction of cooperation on energy saving, rationalization of production and transportation infrastructures, European investment possibilities, and relations between producer and consumer countries (Grant and Barysch, 2003:1).

According to Eighth Progress Report of EU-Russia Energy Dialogue (2008) intensified cooperation in the energy area, including sustainability and reliability of production, distribution, transportation and efficient use of energy can be achieved through the main instrument of the EU-Russia Energy Dialogue.

The first report of 2001 laid out the basic initiatives of the dialogue. The short term initiatives included legal security for long term supplies, new strategic transport infrastructure of common interests, improvement of energy production and transport legal framework, security of transport network and energy efficiency. Long-term initiatives included an investment support scheme, cooperation in the field of climate change, technology cooperation, trade in electricity, energy efficiency and renewables, corporate governance and fast-track dispute settlement procedure.

The best known evidence for the relative success of this dialogue consists of the "setting up of a center for energy technology in Moscow in 2004; the negotiations to improve safety for transportation of oil by sea and most significantly, the construction of the north European pipeline" (Bahgat 2006: 969). Furthermore, Russia's signature and ratification of Kyoto Protocol, in accordance with efforts to tackle climate change, may also be listed as indirect evidence of the success.

Thus, it can be concluded that mutual dependence between two powers, EU and Russia, reinforced further efforts to cooperate. Starting with the Energy Charter Treaty of 1994 and enhanced by the EU-Russia Energy Dialogue of 2000, efforts strengthened the cooperation between them.

However, the cooperation does not function smoothly. Problems originating from both sides put obstacles in the process of operation. The first of the problems has arisen from the EU side. With 27 member states, each with different attitudes and action plans, it is hard to compromise on how to best proceed vis-à-vis Russia.

Despite efforts towards a common energy policy, there is still no concrete and binding energy policy. Some member states, such as Germany and Italy, maintain their own bilateral energy deals with Russia, whereas others, such as Poland and Baltic states, harshly criticize these bilateral deals as new forms of appearament (Morelli, 2006: 13)

On the other hand, Russia sees energy as an important political force and uses it as a political tool, which is detrimental to its energy partners, essentially the EU. Particularly, the close ties between the two related energy giants of Russia, Gazprom and Rosneft, with the government, make it obvious how energy and political goals can become intertwined. The Russia-Ukraine dispute of 2006 demonstrates that Russia can use its energy power as a political tool to influence EU energy security.

If the EU can establish a common energy policy, it may be able to take precautions against being damaged by Russia's political energy manuevers. It can lessen its dependence on Russian energy by diversifying its dependence on other regions, or it can adapt to the behavior and practices of Gazprom so as not to have problems with Russian government, which heavily influences the strategies pursued by its major energy companies (Morelli, 2006: 14). In order to be free of dependence on external influence, it is more prudent to lessen dependence on Russia and increase diversification of suppliers over time.

4.3.1.2. EU-Middle East Energy Relations

Middle East is a broad region, comprising the countries of the Persian Gulf and North Africa that also comprise the majority of OPEC members. With the largest proven oil and natural gas reserves, Middle East is the most important energy-producing region of the world (Bahgat, 2006: 973). Although it is not the most important one, the Middle East is the EU's second largest energy supplier. As the most important energy-producing region of the world, the Middle East, unlike Russia, is also connected to a wider range of major consuming markets, including Europe, the US and the Far East (Bahgat, 2006: 973).

The Persian Gulf countries (Bahrain, Iran, Iran, Iran, Kuwait, Qatar, Saudi Arabia and United Arab Emirates) hold over half of the world's oil reserves and produce 31% of the world's oil as well as nearly half of world total gas (Morelli, 2006: 17). With the development of liquified natural gas (LNG), gas exports from Persian Gulf have increased. However, most of Gulf oil is directed to East or to the United States, not to the EU. Yet, this does not erode EU's interest in the region (Bahgat, 2006: 974). In the last several years, economic and trade agreements with energy implications have indeed increased between Gulf and the EU (Bahgat, 2006: 974). Although, authoritarian monarchies are seen as problem for the Western powers, their being "well-run" in the Gulf region does not create a concern for the EU (Youngs, 2007: 11). Due to the energy potential of the region, the Union wants to have increased and stable energy relations with the region. In this respect, EU-Gulf Cooperation Council Dialogue has created an inchoate base between the Gulf and EU since 1988 (European Commission, The EU& Gulf CooperationCouncil)

Moreover, energy relations with North Africa and Mediterranean coast countries have steadily improved over the years. Particularly, with the establishment of Euro-Mediterranean Energy Partnership in 1995, relations of the Union with the region were strengthened (Morelli, 2006: 17). It comprises 35 members, 25 EU Member States and 10 Mediterranean Partners (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestinian Authority, Syria, Tunisia and Turkey) (Director General for Energy, The Euro-Mediterranean Energy Partnership). The EU aims to achieve a stable environment for energy investments and energy security, whereas Mediterranean and North African countries aim to tap a lucrative channel for investment and technical assistance (Bahgat, 2006: 974). The partnership seeks to augment economic and financial cooperation, and since energy is priority for economic well-being, the partnership has gained an energy dimension.

In the Euro-Mediterranean Conference of Energy Ministers in 1998, security of supply, competitiveness and environmental protection were put forward as the objectives of Euro-Mediterranean partnership on energy (Euro-Mediterranean Partnership). Furthermore, Energy Directorate states three priority areas as for the partnership:

...harmonization and integration of energy markets and harmonization of legislation, sustainable development in the energy sector and initiatives of common interest in three areas; infrastructure extension, investment financing and research and development (The Euro-Mediterranean Energy Partnership).

4.3.1.3. EU- Norway Relations

Norway is the third largest energy exporter to the EU after Russia and Middle East. According to the latest survey of Energy Information Administration, Norway holds 6.895 trillion barrel of oil and 104.568 trillion cubic feet natural gas of world proven reserves (Energy Information Administration, 2008). The Union is dependent on Norway for 15,8 percent of its oil and 24,2 percent of its gas (European Commission, 2008:14).

Moreover, "the United States Geological Survey has estimated that almost 25% of the globe's yet discovered resources are located in the Arctic Sea" (Morelli, 2006: 19). In such a context, Norway emerges one of the most important potential energy suppliers of the world and of the EU. However, for the Union, it has a more significant meaning. Norway is an important partner for the Union's energy security policies, notably in terms of diversification policy objectives. Particularly, Norway's participation to the LNG export market has created new opportunities for the Union in order to cooperate with its northern neighbor on energy security (Belkin, 2007: 19). It made Norway's importance on energy security more explicit for the Union.

European Commission's president Barroso's statements underscore most succinctly what Norway means for the Union. According to Barroso (2008), Norway is a very close partner of the Union and shares Union's values and policy objectives on various policy areas, particularly on energy security issues;

...Our energy and climate change relationship is no less special. Norway is an essential gas supplier, for example, exporting all its produced gas to the EU. It is also fundamental to our security of energy supplies. In fact,

if all our external suppliers were as sure and reliable as Norway, energy security would be much less of an issue within the EU today!

Besides being a reliable partner, Norway has also made significant efforts on environment and renewables, included among the EU's priorities on energy security. Norway and the Union, jointly or individually, try to set examples for the rest of the world to emulate, on energy and climate change (Barroso, 2008). European Energy Commissioner Andris Piebalgs underlines the importance of Norway as such:

Norway is not only an important energy supplier to the EU, it is a partner in developing an energy policy for Europe to meet the new challenges facing us. In particular, we have a common view on the need not only to develop new sources of oil and gas supplies, particularly in the Arctic region, but also to actively and positively address climate change in a way that provides concrete benefits for our citizens. This can be done notably through better technology such as carbon capture and storage and through energy efficiency, as well as by promoting renewable energy. An effective collaboration between the EU and Norway on these and other energy issues can make a real contribution (EU-Norway Energy Dialogue, 2005).

With such a reliable partner as Norway, the Union can diversify its energy sources as much as possible away from unreliable ones that do not share its other core values. Being so close to EU membership twice, yet spurning membership itself, Norway is very close to the Union. As Barroso (2008) states "Norway is as integrated into EU structures as it is possible to be without actually being a Member State." In this respect, having a partner like this is vital for the Union's energy security considerations.

4.3.1.4. EU-Caspian Region Energy Relations

Due to energy security considerations, the significance of the Caspian region increased for the imported-energy dependent actors. Highly focused on the oil and gas potential in the region, imported-energy dependent actors have sought ways to enhance the relationship with the region since the collapse of Soviet Union. European Union is one of the actors that have increased its involvement in the Caspian basin region²³.

The Union aims to have close relations with region. For this purpose, it tried establish certain type of mixed agreements, called partnership and cooperation agreements, extending from mercantile trade and investment protection to protection of intellectual property rights (Alekperov, 2004: 118). Cooperation of the Union and the Caspian states has largely been shaped around TACIS program (Technical Assistance to CIS countries), including the INOGATE project (Interstate Oil and Gas Transport to the Union) (Alekperov, 2004: 118). It is with this project that the Union's relations with the region were formalized in 1995 (Bahgat, 2006: 971).

The INOGATE programme represents the third leg of the EU's effort to complete its internal market. Since the internal market relies for its efficacy on enhanced external relations, there should also be regulations on external relations with energy suppliers. In this context, EU has aimed to develop its partnerships with energy suppliers and in

²³ The Caspian basin is shared by five countries; Azerbaijan, Iran, Kazakhstan, Russia and Turkmenistan. However, while talking about the increased relations with region in order to diversify energy dependency, Russia will not be included. Since energy relations with Russia is detailly examined and since the dependency on Russia is highly huge for the Union, Russia will not be implicated for the "Caspian region" conception of this part.

order to attain this goal, it has actualized three broad initiatives. The first was the EU-Russia Energy Dialogue, the second one was the Euro-Mediterranean partnership and the third was INOGATE (Kalyuzhnova, 2005: 67).

INOGATE programme aims "to promote European investment in the Caspian Sea/ Central Asian states in return for their cooperation in supplying energy to the EU member states" (Bahgat, 2006: 971). In other words, it aims to develop certain "comprehensive, negotiable proposals" in order to have new investments for new pipeline routes and for enlarging the existing ones (Alekperov, 2004: 118). In this framework, interstate oil and gas transportation systems are prioritized. Although, the INOGATE Umbrella agreement entered into force in 2002, it has not functioned smoothly due to the problems arising from the region and the EU's limited influence over these problems (Bahgat, 2006: 971).

Caspian region with its promising energy potential can be advantageous if major "hurdles" about the region, ethnic conflict and legal status of Caspian Sea, can be overcome (Bahgat, 2004: 116).²⁴ It is believed that export pipelines can spur economic development and bring peace and prosperity to the region in the long term, but it is not certain competition over pipelines will lead to the resolution of extant problems (Bahgat, 2004: 126). Consequently, the actors interested in this region find themselves in a struggle to overcome the challenges of the region.

_

²⁴ Ethnic conflict arising from the region and the problems about legal status of Caspian sea will be explained in detailed in the next chapter.

In conclusion, Caspian basin region is one of the most important energy supply region of the contemporary world order. Although the hydrocarbon deposits it owns do not match those of the Middle East and it is likely to become just a new "North Sea", the region is significantly important in terms of the diversification of sources (Bahgat, 2005: 14 and Olcott, 1999: 307). Particularly, with Azerbaijan and Kazakh energy resources, the imported-energy dependent countries aim to diversify their dependency. If the challenges can be dealt and if the economic benefits fully materialize for the investor companies, the operating and projected pipelines will be key to this diversification. In this context, it can be suggested that, "bringing Caspian energy online is seen as one of the most significant developments of this decade" (Rabinowitz et al., 2004: 20, quoting Ivanovich, 1998).

As a result, imported-energy dependency has made major consuming actors vulnerable. Being dependent on unreliable partners is most risky. With its heavy external dependency, the Union is in need of reliable and diversified energy partners. Russia is the most important energy partner of the Union. Having mutual interest, the parties have developed a partnership since 1990s. However, being dependent on EU in order to export its energy, has not compelled Russia to adopt the EU terms of the partnership. Besides not ratifying Energy Charter Treaty, Russia proved that it is not a reliable partner in 2006 with the dispute between Russia and Ukraine. Russia cut off gas exports, which made the Union more concerned about its energy security and diversification. In this context, besides solidifying relations with the Middle East, the Union has tried to improve its relations with Norway and the Caspian region countries.

Although the Caspian is seen as an important alternative energy supplier, however, its existence as a landlocked region requires a large number of transboundary pipelines and new transit routes in order to export the energy from this region to Europe. In this context, energy transit countries have also gained more consideration.

4.4. Conclusion

Experiencing the negative consequences of energy's usage as a political tool during the 1973-1974 oil crisis and 2006 Russia-Ukraine dispute, energy security has gained more consideration for the EU and consequently the Union realized the need for more weight to common energy policy. In this regard, speaking with a single voice on internal and external policies gained more consideration in order to attain sustainability, security of supply and competitiveness. However, to speak with a single voice is not enough, coherence and balance between internal and external policies is also a priority in order to be successful and to attain all objected policies. An internal policy without backing by the corollary external measures cannot be successful. That is, diversifying energy mix or furthering efficient energy uses is not enough if stable relations with diversified suppliers cannot also be attained. As the next chapter shows, if the Union does not have regulated and enhanced relations with the transit countries, some part of the "energy security" puzzle is missing and needed to be filled.

CHAPTER V

TURKEY'S IMPORTANCE IN EU'S ENERGY SECURITY AND TURKEY'S POSSIBLE FUTURE MEMBERSHIP IN THIS CONTEXT

Diversification of energy sources and energy suppliers has been examined until now, but now it is necessary to turn to diversification of transit countries. The Union has not much alternatives, actually it has few alternatives in terms of diversifying its mix of energy transit countries. It is bound to three major transit countries in the end, Ukraine, Turkey and Belarus. Among them, although Ukraine is the most important transit country to transport gas of the Union's main energy supplier, Russia, Turkey needs to be considered in more detail (Commission of the European Communities, 2003: 13).

As a candidate member of the Union, Turkey has been endeavoring to enhance its relations with the Union. Being close to all major energy suppliers of the Union,

except Norway and the western parts of North Africa, Turkey has the potential to constitute an energy hub to diversify routes of exported/imported energy. Accordingly, this chapter focuses on Turkey's importance as an energy hub for EU's energy security and its possible membership to EU in this context.

The first part of this chapter examines the energy pipelines passing via Turkey and the ones ending in Turkey, yet with the potential to be extended to Europe. This part studies routes from East to West and from North to South. In the second section, challenges to Turkey's role in this regard are examined. The challenges originate both from the suppliers and from the EU. In the third part, the effects of Turkey's being an energy hub on Turkey's accession process are examined and in the light of the aforementioned framework, Turkey's possible membership is evaluated.

5.1. Pipeline Passing Via Turkey

Due to the increased security concerns of contemporary world, imported-energy dependent countries are increasingly looking for opportunities to diversify their energy sources. It can be done in terms of source, supplier or diversified transit routes. Thus, transit countries have gained as much attention as the energy suppliers themselves. Particularly, due to Middle East and Caspian Basin countries being among the most significant energy suppliers of the Union and due to their geographic locations, diversified transit countries and energy routes have increased in (Kalyuzhova, 2005: 69-70). In this framework, Turkey, a potential route for

European energy imports from the Middle East and Caspian Basin via pipelines or sea, has gained undeniable consideration.

Geographical advantages have afforded Turkey the opportunity to play the role of supplier of energy resources, to be an energy supermarket and as Bahgat suggests, to be an "energy-bridge" (Biresellioğlu, 2007; Bahgat, 2002: 317). It is in this respect that Turkey's importance to the EU, which is trying to diversify its energy resources, has increased. Besides having access to major sea transport routes, like the Black Sea and Mediterranean, Turkey feeds and probable to feed Europe with many oil and gas pipelines. Since, there are many pipelines passing via Turkey, this part will examine them under two directions, the ones expanding between East-West and North-South.

5.1.1 East-West Corridor:

5.1.1.1. Baku-Tblisi-Ceyhan Crude Oil Pipeline (BTC)

BTC pipeline project is the first of a series of projects that will decrease the dependency of the Caspian region on the Russian Federation and enhance the energy security of Europe (Arslanalp, 2008). Although, oppositions arose due to cost and insufficient economical benefits, the BTC pipeline began construction on September, 2002 (Bahgat, 2004: 119; Williams and Tekin: 2008: 391). It was opened on May 25, 2005 in the Sangachal terminal near Baku. However, the inauguration ceremony of the BTC pipeline was held on July 13, 2006 (İpek, 2006: 3).

BTC pipeline is one of the most important pipeline projects that enhance Turkey's significance in terms of energy security. Particularly, with problems on Iraqi oil production and exports, the BTC pipeline's "commercial rationale" enhanced (Williams and Tekin, 2008: 384)²⁵. In total, BTC pipeline is 1768 km in length and runs from Baku to Tblisi and then to Ceyhan marine terminal, the Mediterranean coast of Turkey, where the oil is loaded to tankers for transportation. In its full capacity, which was scheduled for 2009, the pipeline would carry one million barrels a day, one percent of the world's daily oil requirement (Bacık, 2006: 301)

The pipeline is politically and economically important to connect landlocked Azerbaijan to Western markets. It was planned to provide an alternative for the continuous flow of oil and gas independent from Russia (Udum, 2001: 10). It is in this respect that it has gained support from the Caspian region and the European Union. It also enhanced the strategic position of Turkey vis-à-vis both the Caspian region and Europe (Arslanalp, 2008). On the other hand, it made Turkey more secure by decreasing traffic in Bosphorus Straits. Ceyhan is also seen as an advantageous port due to its capability of handling large tankers and favorable weather conditions together with nearness to European markets (Rabinowitz et al., 2004:30). Furthermore, BTC pipeline signals Turkish determination to be an east-west energy corridor (Oktay and Çamkıran, 2006: 165).

_

²⁵ With the Iraq war, the oil infrastructure fell under occupation and felt the negative consequences of various sabotages and disrepair. Thusly, other pipeline projets such as BTC gained momentum for world markets in order to reach additional oil supply (Williams and Tekin, 2008: 384).

²⁶ The highly oil loaded tankers passing Bosphorus has always been a concern for Turkey and even energy importers and exporters, which care the environment. Since EU is an instution having highly environmental concerns, the decrease in the Bosphorus passege will also make Europe content.

5.1.1.2. Kirkuk-Ceyhan Oil Pipeline

This pipeline, which is 600 mile length, is the largest crude oil export line of Iraq. Due to the expansion of projects and the completion of the second line, the pipeline had the capacity of 1,65 million barrels per day (bpd) before the First Gulf War (Orekli, 2003:8). However, the Kirkuk-Ceyhan pipeline was officially closed since the invasion of Kuwait by Iraq 17 years ago. Yet, some exports have been allowed for the last twenty years (BBC News, 2000).

Since the Iraq war, the actual use of the pipelines has fluctuated considerably. Due to the attacks, the days that the pipelines has been shut down have exceeded the number of days that they are open. The maximum flow through the pipelines since the war began has been 750,000 bpd (Fink, 2006: 2). Now, repair of pumps and metering stations in Iraq are needed in order to increase exports to pre-1990 levels (Orekli,2007:8)²⁷. There are some efforts to revitalize the project with the peaceful and stable Iraq but they are probable to be sustained in the long-run. The rearrangements in order to revitalize the project can be called "pipe gas to EU" and "liquified natural gas to US" (İpek, 2006: 5).

5.1.1.3. South Caucasus (Shah Deniz) Natural Gas Pipeline (SCP)

SCP pipeline is projected to bring Azeri gas through Georgia to Turkey. It runs parallel to the BTC oil pipeline along most of the route before combining with

²⁷ Iraq suffers from 900,000 and 450,000 daily barrels losses output and export shortfall, respectively, compared to prewar levels (Williams and Tekin, 2008: 393)

Turkey's national gas pipeline grid at Erzurum (İpek, 2006: 4). The gas contract between Turkey and Azerbaijan was signed on March 12, 2001, and envisagages a fifteen-year gas trade between the two (Bacık, 2006: 299). The gas trade started in 2004 in the framework of the contract and the pipeline completed by the end of 2006. However, due to the problems, the gas started to be pumped on July, 2007 (BP, 2008). Total capacity is planned to reach 6, 6 billion cubic meters by 2009 (Winrow, 2005: 93). Technical problems arose during construction, but it is known that most important reasons for the problems were Russian policies about gas prices that it imposed on Azerbaijan and Georgia (Pamir, 2007: 21). At full potential, it was planned to be the most important route for exporting gas from the second largest gas exporter of Caspian region, Azerbaijan (Alekperov, 2004: 120). This pipeline will help Azerbaijan to deliver gas to Turkey and Europe along a route that does not run through Russian territory (Winrow, 2005: 93).

5.1.1.4. Turkey-Greece- Italy Natural Gas Pipeline

This pipeline developed as part of South Eastern Gas Ring interconnecting gas network of Turkey and Greece. According to the Natural Gas Sales and Purchase Agreement of Turkey and Greece, signed in December 2003, the pipeline was supposed to be an extension of the natural gas pipeline from Turkey to Greece and to Italy by an offshore pipeline (İpek, 2006: 5). It will carry Caspian region natural gas to Europe. The project's significance is that it originated with European states and was thusly supported by EU-TEN (Bacık, 2006: 300).

The total capacity of the project, finished in 2007, will reach 11 billion cubic meters by 2012, and it is planned to carry 8 billion cubic meters of this gas to Italy (Bacık, 2006: 300). 209 to 300 km of the pipeline is planned to be on Turkish territory (Akçollu, 2006:25). The whole pipeline reaching Italy is expected to be finished by 2012 (Borgen, 2008).

5.1.1.5. Nabucco Natural Gas Pipeline

This project aims to transport natural gas from the Caspian and Central Asian regions to Europe via Turkey, Bulgaria, Romania, Hungary and Austria (European Parliament, 2006). The project had the political backing from the European Commission on June 26, 2006. It is planned to have 31 billion cubic meters capacity and to be in operation by 2011 (İpek, 2006: 4) Nabucco is one of the most strategically important projects that will enable Turkey to become the main export route for natural gas to Europe (Arslanalp, 2008). Energy Commissioner Piebalgs declared the Nabucco pipeline as "essential to Europe and the EU's most important gas supply project" (Tekin and Williams, forthcoming 2009:340). The construction of the projet was expected to start in 2009, however it has run into difficulties (Williams and Tekin, 2008:396). Hungary and Austria agreed with Gazprom on rivalry transport and storage projects, on the other hand Turkey did not want French company Gaz de France, due to French opposition to Turkey's accession, as the seventh member of the consortium (Williams and Tekin, 2008: 396). These problems put the project in jeopardy however Commission President Barosso, has been struggling to amend the situation (Williams and Tekin, 2008: 396).

5.1.1.6. Trans-Caspian Oil and Gas Pipeline Projects

There are two trans-Caspian pipelines that is projected to be the part of east-west energy corridor (İpek, 2006: 4). First one is the trans-Caspian Kazakhstan-Azerbaijan-Turkey oil pipeline and the second one is the trans-Caspian Turkmenistan-Turkey-Europe gas pipeline project that has been in the planning stages since 1991. The first project aims to carry oil of the Kashagan fields of Kazakhstan with BTC pipeline to Western markets, and was projected to start in 2008. The pipeline was expected to carry 500,000 barrels of Kazakh oil per day with tankers from Aktau on the North Sea to Baku (İpek, 2006: 4). The second project was agreed in 1991 and the important step of the pipeline was taken in a Natural Gas Sale and Purchase Agreement between Turkey and Turkmenistan in 1999 (İpek, 2006: 4). It would deliver 16 bcm/y of Turkmen gas to Turkey and possibly another 14 bcm/y to Europe. The pipeline is intended to respond to Turkish and European needs (Bacik, 2006: 300). However, due to the disputes over the legal statute of Caspian Sea and due to demands of the now deceased authoritarian dictator Niyazov ("Turkmenbashi"), major financial Western firms withdrew from investment (Winrow, 2005: 92). The payment and price issues were the main handicaps reaching front of an agreement that eventually failed (Bahgat, 2004: 122).

On the other hand, due to unfulfilled demands of Niyazov, Turkmenistan signed a 25-year-agreement with Russia, giving Russia the right to buy 80 bcm Turkmen gas by 2009 (Winrow, 2004: 31). Thusly, Turkmenistan became bound to Russian energy market. With this agreement, there is not much energy left that can be sold to

other energy demanders for those 25 years. Otherwise, Turkey would have been a gateway for piping Caspian gas to European consumers (Bahgat, 2002: 324).

5.1.1.7. Iran-Turkey Natural Gas Pipeline

This pipeline project has been planned in order to supply Turkish gas demand. It was agreed to be built in 1996 and has been active since December 2001 (Bacık, 2006: 301). Iran is the second largest energy exporter to Turkey after Russia. It was decided to increase Iran's share in Turkey's imports from 11% to 20% by 2020 (Arslanalp, 2008). This pipeline is also intended to serve Europe via extension, thus helping to diversify Europe's energy suppliers in the future.

5.1.2. North-South Corridor

5.1.2.1. Egypt-Turkey Natural Gas Pipeline

The project aims to bring Egyptian natural gas to Turkey. It was expected to bring 4 billion cubic meters of Egyptian gas to Turkey (Bacık, 2006: 299). Although the first political agreement was signed in February, 2000, the contract between two parties was signed in March 2001 (Bacık, 2006: 299). However, the project was canceled after a long period of indecision. New initiatives has been observed in the relations between the two parties based on the framework agreement signed on March 17,

2004. With this new framework, the Arab Gas Pipeline is planned to expand along Egypt-Syria-Turkey corridor to reach Europe (İpek, 2006: 5). Syrian and Turkish energy ministers even signed an agreement in June, 2003 to cooperate on gas and oil (Bacık, 2006: 299).

5.1.2.2. Samsun-Ceyhan Bypass Oil Pipeline

Samsun-Ceyhan oil pipeline is a North-South alternative to using the Turkish Straits to transport oil. The pipeline project was opposed by many not have the capacity to fully relieve tanker-traffic pressure on the Straits, yet Turkey insisted on the project and suggested that it would be more economic and practical (Dikbaş, 2005). With this pipeline 60 million tons of year of Kazakh and Russian oil will be transported by pipeline to Ceyhan Terminal, in addition to that supplied by BTC (Ministry of Foreign Affairs, 2006). The most important advantage of the project will be the enhancement of the security of Bosphorus navigation as intended.

5.1.2.3. Blue-Stream Gas Pipeline

This North-South pipeline differs from the other ones. Unlike the others, it is not projected to reach Europe. In 1998, Russia and Turkey signed an agreement for the sale of 565 billion cubic feet (bcf) of Russian natural gas per year, which is nearly equal to 16 billion cubic meters gas. With the aim of implementing the agreement, the Blue Stream Pipeline Company was created in order to construct a pipeline

between the two countries via the Black Sea (Dikbaş, 2005). The Blue Stream gas pipeline was officially inaugurated on November 17, 2005 (Bordonaro, 2005). The pipeline has three main parts. The first part is 222 mile and crosses Russia from Izobilnoye to Dzhugba on the Black Sea Coast. The first part is called the Russian onshore section. The second part, a submarine section of 235 miles on the bottom of the Black Sea, connects Dzhugba to Samsun on the Turkish coast. The last part is 300 mile link from Samsun to Ankara (Power and Interest News Report, Economic Brief: The Blue Stream Gas Pipeline, 2005). Although this pipeline was not planned to for extension to Europe, there have been discussions on using it to bring Russian gas to Europe (Winrow, 2004: 24). In that case, Europe will have an alternative way to ship gas from Russia. If such a project can be actualized, in a possible repetition of the Russia-Ukraine dispute, Europe can obtain Russian gas supply via Turkey.

In conclusion, the completed projects and the projected ones will all enhance Turkey's role as an energy hub, although not necessarily in the same way. In this context, Turkey gains a more strategic position vis-à-vis European energy security. Turkey is now seen as a possible key transit route and energy hub for European energy demand, with its potential to transport the energy supply from world's important energy suppliers, Caspian Basin countries, Russia, Middle East countries and Egypt. This strategic position seems to be beneficial for Turkey's possible membership. Turkey has been trying to be a member for a long time. It has faced many challenges until now. It has overcome some and has not been able to overcome others. However, being an energy hub seems to give the power to Turkey that it has needed for a long time.

Being in need of a reliable and continuous energy supply, the Union may admit Turkey as a member in order to enhance its energy security. However, Turkey is not a real energy hub yet. Although, all of the projects and Turkey's reliability are considerable, there are some challenges, arising from the suppliers and the European Union on the way of Turkey's being an energy hub for the Union and thus a future member.

5.2. Challenges Ahead for Turkey to be an Energy Hub:

As mentioned above, Turkey occupies a strategically important geographic position. It lies between the world's most important energy demanders and suppliers. In this respect, Turkey may be central to various energy projects and expected to be a part of more. However, to have established pipelines or projects is not enough to make Turkey an energy hub and to make energy supplies flow smoothly. Various challenges lie ahead for Turkey to be an energy hub and for energy demanders to reach their expected energy. Some of the challenges arise from the energy suppliers and some arise from the European Union itself. This part examines the challenges ahead of Turkey to be an energy hub.

5.2.1. Challenges Arising from the Energy Suppliers

5.2.1.1. Geopolitics of Kazakh oil

Kazakhstan has been seen as an important energy supplier for the projects originating from the Caspian basin. It was a party of the Istanbul Declaration and a signatory during the OSCE Summit in November 1999 in order to support the construction of BTC pipeline. It supported the idea of building a seabed pipeline to connect Kazakh oil to the BTC. Furthermore, the Kashagan field was one of the main reasons to build the trans-Caspian pipeline. This field is the biggest offshore oil discovery anywhere in the world in the last thirty years (İpek, 2006:7). Yet, due to the slow progress and disagreements in the Kashagan project, Kazakh leaders were unwilling to start building a trans-Caspian pipeline (İpek, 2006:8).

Additionally, relations between Kazakhstan and China made the trans-Caspian project even more complicated. Central Asian countries, Kazakhstan, Turkmenistan and Uzbekistan, being dependent on Russia in terms of utilizing Russian pipelines to export their resources, sought out new ways to break free from Russia (Arslanalp, 2008). Particularly, Uzbekistan and Kazakhstan adopted multivectoral foreign policies involving not only the West but also China in order to overcome the dependency on Russia and in order to maximize their security (Kimmage, 2006). Thusly, strategic partnerships with Russia, China and the US became more abundant (İpek, 2006:8).

The Kazakh relation with China is a formidable challenge to completing the trans-Caspian pipeline. These relations started with the agreement signed in June 1997 by China National Petroleum Corporation (CNPC) and Kazakhstan for a proposed \$3,5 billion, 1,800 mile pipeline to China (Bahgat, 2004: 120). In December 2005, an oil pipeline from Atasu in northwestern Kazakhstan to Alashankou in northwestern China was finally completed. It is suggested that at the initial stage, half of the oil will come from Russia, due to the insufficient Kazakh fields, and it will mean a closer Chinese-Kazakh-Russian energy cooperation that has the potential to put the trans-Caspian oil pipeline project into disarray (İpek, 206: 8).

In order to balance the influence of Russia and China, US regional security policy suggestions were taken into consideration and involvement of Azerbaijan increased with this American encouragement (Arslanalp, 2008). An agreement was signed by Azerbaijan and Kazakhstan on June 2006 to pump Kazakh oil into the BTC pipeline and a project to build a gas pipeline from Kazakhstan to Azerbaijan was announced. This achievement can be linked to the US interest in having increased relations with Azerbaijan, not to Kazakhstan willingness.

5.2.1.2. Geopolitics of Turkmen oil

Turkmenistan is another energy supplier that has stymied energy cooperation efforts. Energy cooperation efforts between Turkey and Turkmenistan started on May 1999. They signed an agreement to ship Turkmen gas to Turkey and Europe by 2002. Furthermore, in November 1999, Azerbaijan, Georgia, Turkey and Turkmenistan signed an intergovernmental declaration on the legal framework pertaining to the Trans-Caspian Gas Pipeline route, starting from Turkmenistan and running through Azerbaijan, Georgia and Turkey (Bahgat, 2004: 122).

However due to problems arising from Turkmen President Niyazov's leadership, the plans stagnated. Under the authoritarian rule of Niyazov, political and economic reforms were nearly non-existent and majority of the multinational oil companies withdrew their investment from Turkmenistan (İpek, 2006:9). Due to that investment climate and export capacity constraints, even major multinational oil companies Shell and ExxonMobil closed their operations in Turkmenistan (Orekli, 2003).

However, due to the concerns about energy security in the global energy market, incentives to develop huge Turkmen gas fields and to extend the Azerbaijan-Turkey gas pipeline remain in place (South Caucasus Pipeline, SCP) (İpek, 2006: 9). Yet, the problems were not solved yet.

Moreover, disputes over the legal status of Caspian Sea have also prevented the trans-Caspian shipment of Turkmen gas, as it has blocked a pipeline from Kazakhstan as well. There is an ongoing dispute over the legal status of the Caspian Sea since the emergence of newly independent states following the collapse of Soviet Union. Although it is known to be an important step in resolving the of landlocked states' dependence on Russian transit routes, it is obviously difficult to reach a solution about the legal status of Caspian Sea, which also involves Russia as a littoral riparian state. Indeed, Russia and Iran have maintained that Caspian is an inland lake subject to joint control by all littoral states, while Azerbaijan, Kazakhstan and Turkmenistan contend that it is a sea (İpek, 2006: 9). If Caspian Sea were to be accepted as a sea, it would be applicable for regulation by United Nations

Convention on the Law of Sea, which permits littoral-state activity in exclusive economic zones stretching to 200 miles offshore (Rabinowitz et al., 2004: 31).²⁸

Azerbaijan, Kazakhstan and Turkmenistan accept UNCLOS regulations and want to legitimate recognition of their rights to the part of the sea that they own. However, for Russia, while it is better to have sovereign rights over certain parts of the water, the central part should remain common property (Bahgat, 2005: 6). On the other hand, Iran, which has fewer oil and gas reserves, wants to have a collective approach and equal division of seabed resources (Rabinowitz et al.2004: 32). A common solution has not been reached yet, except for the general consensus that the Caspian Sea needs to be divided among the parties.

In such a context, Turkmenistan turned to the Russian market and on April 2003 signed a 25-year agreement (Winrow, 2004: 31). According to the agreement, Russia will receive up to 80 bcm/y of Turkmen gas by 2009 and thusly Russia will continue to serve as the key transit country for the Turkmen gas exports (Orekli, 2003).

5.2.1.3. Bans on Re-export and Re-selling

Another important challenge ahead of Turkey becoming an energy hub resides in the agreements that ban Turkey from re-exporting the imported gas to the third parties (except for the agreements with Azerbaijan) (Pamir, 2007: 21). The agreements on

²⁸ UNCLOS suggests that a state may claim just 12 nautical mile territorial sea and 20 nautical mile exclusive economic zone (Rabinowitz et. al., 2004: 31).

Azeri gas contain the option of reselling which will let Turkey to export the gas that it imports from Azerbaijan to Europe. On the other hand, Russian gas does not have a resale option²⁹ as is the case for Iran (Arslanalp, 2008). In such a context, Petroleum Pipeline Corporation (BOTAŞ) of Turkey or other important companies, have to renegotiate contracts with the gas supplier and obtain an export license from the Energy Market Regulatory Authority (EMRA) (Winrow, 2004: 31). Future natural gas sale and purchase deals need the approval of the EMRA. Thus, it is not possible for Turkey to re-export the gas that it buys from major energy suppliers without their permission, and Turkey cannot be an energy hub over the logical opposition of energy suppliers, who want to capture the bulk of rents from the transactions involved.

5.2.1.4. Ethnic Conflict

The ethnic conflicts in the Caucasus region create another challenge for Turkey. The energy transit through the highly volatile region such as northern and southern Caucasus remains as potentially a crucial security problem (Winrow, 2005: 89). Many of the suggested oil and natural gas export routes pass through areas with conflicts that remain unresolved. Some of the new pipelines offer hope of long-term prosperity but the continuing instability and the numerous flash points of the region have made potential investors think before investing in the construction of the suggested pipelines (Bahgat, 2004: 117).

_

²⁹ Russia is the predominant supplier of the European gas market and it exports its gas through its own pipelines (Arslanalp).

Most of the conflicts are in the Trans-Caucasus part of the Caspian region. The conflicts in Ngorno-Karabakh, Georgia and Chechen Republic of southern Russia all blocked the development of export routes from the Caspian region (Bahgat, 2004: 117). For example, in the northern Caucasus, conflict between Russian forces and Chechen guerillas show no long-term promise of abating, while radical and violent Islamic groups are trying to destabilize regions neighboring Chechnya. Accordingly, the amount of the gas exported from the Caspian region has been highly influenced by the ethnic conflict arising from the region and in such a scenario exports from this region are relatively smaller than in a region at peace. Thusly, energy passing via Turkey is compromised and Turkey's becoming an energy hub becomes less probable.

5.2.1.5. Increasing Turbulence in the Middle East

Progress on the Iraq-Turkey and Egypt-Turkey natural gas pipeline projects also depends on stability in the region (İpek, 2006: 10). However, due to the instability and insecurity, pipelines are vulnerable to physical interference and the success of pipeline networks is limited (Ryan, 2002).

Iraq is a good option to diversify EU energy dependency and knowing this potential, Turkey negotiated with Iraqi officials on a framework agreement in December 1996.³⁰ However, due to the UN economic sanctions on Iraq, the project could not be inaugurated and it was decided to be postponed until the sanctions were lifted (Winrow, 2004: 34). Today, Turkey hopes to revive the project. Although prospects for transportation of Iraqi natural gas to Europe improved in theory after the removal of the Saddam regime, due to the instability in the region, "[d]e facto occupation of Iraqi is an obstacle ahead the projected plans" (Pamir, 2007: 21). In order to have efficient pipelines, the Middle East should regain its stability and as İpek (2004: 10) suggests "historical case studies of cross-border natural gas pipelines shows that it is not possible to expect peace dividend from cross-borders pipelines". In order to reach the energy resources of the region, before establishing necessary pipelines, at the initial stage, the peace is needed in the region (Europa, European Union Documents).

5.2.1.6. Russian Ambitions over Black Sea-Caspian Region

Beside of the above mentioned challenges, the Russian ambitions to preserve control of various energy transportation routes and maintain influence in the Black-Sea-Caspian region may also be stated as another obstacle ahead Turkey. Up until now, Russia has been the dominant energy supplier to European energy market. Even the Caspian states' energy has been transported largely through Russian pipelines. Because the aforementioned projects that make Turkey an energy hub frontally challenge Russian dominance, Russia obviously opposes them in order to preserve its control over various energy transportation routes (Winrow, 2005, 91). Its opposition

_

³⁰ The framework agreement was arranged to construct a \$ 2,5 billion, 1,380km, 10bcm/y capacity pipeline to carry natural gas from five fields in northwestern Iraq to southeastern Turkey.

to Baku-Ceyhan Pipeline and Nabucco project exemplify Russian efforts to maintain its predominant position as regional energy supplier (Bacık, 2006: 297 and Winrow, 2007: 223).

5.2.2. Challenges arising from European Energy Market

There are also challenges stemming from the European side. It is obvious that, Turkey's strategic value here depends on becoming an energy hub and thus to some extent on the interests of the relevant energy suppliers. But the demand side is obviously crucial as well. In this respect, Union policies and demand need further consideration. The most important challenge arising from the Union is having 27 different member states each with unique views of the collective situation. On the other hand, largely national energy markets, dominated by few companies, also creates another significant challenge (İpek, 2006: 6). However, the most important deficiency remains lack of a coherent energy policy.

These different perceptions and desires of member states affect Turkey's possible energy hub role. Due to different energy policy expectations and due to different policies, the pipelines passing and expected to pass via Turkey become harder to realize, as they rely on collective will and financing from European sources. Examining the competing interests and different energy policies by four EU member states--United Kingdom, France, Germany and Poland --will give some impressions about different opinions inside the Union and their affects.

The first main difference among the member states concerns the energy mix. Since each member state is free to choose its own energy fuel, there are different energy situations in member states.

Share of Total Primary Energy Supply in 2004-(excludes electricity trade)

| MEMBER STATE Source | GERMANY | FRANCE | UK | POLAND |
|---------------------|---------|--------|-------|--------|
| Oil | 36,0% | 32,8% | 35,9% | 23,4% |
| Gas | 22,6% | 14,3% | 37,5% | 12,8% |
| Coal | 24,6% | 5,0% | 16,1% | 58,6% |
| Nuclear | 12,5% | 41,6% | 8,9% | N/A |
| Renewables | 4,2% | 6,2% | 1,6% | 5,2% |

Source: International Energy Agency (IEA)

The table shows that four member states should have different policy preferences. Oil is the most important energy source for Germany, gas for the UK, nuclear for the France and coal for the Poland.

On the other hand their opinions on the fuels are also different. While Germany perceives the nuclear plants as dangerous and plans to phase out nuclear power gradually by closing down plants, France still invests heavily in nuclear energy. The numbers on Polish nuclear energy use are not available but it is known that, with "The Energy Policy of Poland up to 2025", which is published in January 2005, Poland plans to augment power generation from nuclear sources (Geden and Marcelis, 2006: 8). Having different energy-mix preferences indicates that natural

gas or oil coming from Caspian or Middle East or others does not mean the same to each member and cannot be expected to be supported by all.

Another important point on which to compare the opinions of member states is their perception of energy security. Since the need of a common energy policy stems from the need to ensure energy security, understanding the perception of the concept is important. In general terms, it can be stated that four member states directly link energy security to security of supply (Geden and Marcelis, 2006: 9). Germany has emphasized that energy security is one of the key objectives of German policy, to be dealt with mainly by securing supply. On the other hand, France also stated in the 2005 law on energy policy that one of the objectives of the law is to ensure energy security. Poland also links energy security to security of supply and states that independence from external suppliers is the most important aim in the energy policy. Lastly, the UK has also declared that energy security is challenged by being dependent on imported energy (Geden and Marcelis, 2006: 9-10).

However, to have same perceptions on energy security does not mean that each member state supports the same policy tools in order to deal with energy security. Some may support the increased relations with Russia, which reduce Turkey's importance, whereas some may support diminishing Russian dependency and focusing on alternative energy suppliers.

Views on energy dialogue with Russia can be examined in the context of four member states' opinions. France and the UK mention that in the relationship with Russia, it is necessary to apply all rules that are jointly agreed on freedom of transit

and permanent and non-discriminatory access to transit infrastructures. They believe that applying the agreed rules will improve the security of supply as well as transparency of gas market and ratification of Energy Charter Treaty (Geden and Marcelis, 2006: 18).

On the other hand, Germany made a choice to rely on mainly Russia when it comes to energy supply. Representatives of German energy corporations state that the participation in Russian shipment companies will give them an unrivalled position. Germany aims to develop economic relations with Russia, particularly in the energy supply area (Geden and Marcelis, 2006: 18). Conversely, Poland fears the special relationship between Russia and Germany, and even supports a European level energy policy. If Union adopts policies similar to Germany, Turkey's becoming an energy hub remains a dream. On the other hand, if the Union chooses the opposite policy option, such as Poland's, it become strongly possible for Turkey to be an energy hub.

Moreover, the member states have different views on diversification, which is closely linked with Turkey's future position. Although, all member states agree on the need of diversification, they have different views on the appropriate method. The needs of the members states, their geographical positions, existing links with foreign countries and other similar issues, together shape their perceptions and expectations about diversification. Some of them support diversification of suppliers, some focus on diversification of fuels and some focus on both (Geden and Marcelis, 2006: 20). Among the four member states countries, Poland focuses on geographical diversification of suppliers, whereas the UK, France and Germany prefer

diversification of fuels and sources. In this respect, if the Union prefers to diversify its energy supply by geographical location, Turkey gains priority. However, if it chooses merely to diversify energy by source, such as increased nuclear and coal energy, then Turkey loses its role as an energy hub.

Another important energy policy to examine different views of member states is the energy cooperation with major producers, transit countries and consumers. Member states generally agree on intensification of energy cooperation as part of external policy. In this respect, the idea of creating a pan-European energy Community, including for example Turkey, Ukraine, as well as Norway or Algeria, is among the most important of the planned energy cooperations. Moreover, cooperation with Middle East and North African countries is also seen as essential (Geden and Marcelis, 2006: 22). The UK mentions that dialogue with alternative supplier, transit and producer countries should be developed and supported by other three. However, Poland seems to be focusing its diplomatic efforts more on its eastern and southern borders (Geden and Marcelis, 2006: 22). The important point here is the common tendency toward increased dialogue with alternative energy suppliers, which increases Turkey's significance vis-à-vis the Middle East and Caspian.

However, the most important principle to examine is the enthusiasm for concerted action. After the Ukraine-Russian energy crisis, it became obvious that a common energy policy and speaking in unison might be necessary and all member states realized that to act in the EU-level about the energy policy would be more efficient (Geden and Marcelis, 2006: 14). Among the four, Germany stated that a long-term EU-wide strategy would be necessary to co-ordinate national approaches on energy

sources and market access issues. The UK also supports acting for a European policy on energy but does not want to transfer all competencies. Even France, known to be conservative, also pushes for a common external energy policy, whereas Poland, like the UK, supports the idea yet does not want to transfer all competencies. If a common energy policy is attained, Turkey will probably be positively affected. Because the Commission's opinion is positive about enhancing Turkey's role as an energy transporting country and if a common policy is achieved, effects of different opinions on Turkey's importance will probably be reduced. Without a common energy policy favoring diversification of energy by supplier and transit country, increased gas and oil demand from diversified suppliers, and reduced relationship with Russia, Turkey is less likely to emerge as an energy hub.

In conclusion, Turkey is an important partner for European Union in order to enhance its energy security. Being en route to Europe from many energy suppliers, Turkey occupies an important strategic position. Various energy pipelines, operating or just projected, show that Turkey has an increasing importance for European energy security policies and it is near to be an energy hub. However, there are multiple challenges arising from the suppliers and the European Union in front of Turkey to be an energy hub. Under current circumstances, Turkey has emerged as an inchoate energy hub and is likely to influence its accession relations with European Union in this direction. However, it is obvious that although Turkey's strategic position gives it a considerable advantage in its ongoing struggle for EU membership, its situation faces competing imperatives.

5.3. Interpretation of European Union and Turkey Relations in the context of Union's Energy Security Consideration and Turkey's Possible Energy Hub Role

Turkey and EU have a long-lasting history extending back to 1960s, when Turkey applied for the first time in 1959 and first official agreement was signed Ankara in 1963. Since that time, Turkey has been struggling to be a European member and for this aim trying to fulfill the Union obligations. The relations between two parties have developed due to Turkey's success and stagnated for some time due to Turkey's failures.

Although little way has been taken compared with the time period, that Turkey has been struggling, some significant steps have also been taken. The 1999 and 2004 Union decisions were historical steps for Turkey. In 1999, the Union accepted Turkey as an official candidate and by the 2004 Helsinki Council, accession talks with Turkey were to be opened by October 2005. Yet, the earliest time that Turkey could be accepted for membership was to be 2013, and it is mostly proposed to be nearer to 2020, more distant and discouraging deadline for Turkey.

Every member state has to fulfill specific European obligations contained in the "acquis communautaire", which is also the case for Turkey. However, Turkey seems to be struggling with additional unseen and unofficial criteria. However, due

_

³¹ The acquis is the Community patrimony, the body of common rights and obligations which bind the member states together. It includes the content of the Treaties, legislation, international agreements, and other measures (Cini, 2003: 415)

to Union's increased energy security considerations, the alternative energy suppliers, rather than Russia, became more momentous. Thusly, Union began to give more importance to diversified energy transit countries, including Turkey and so Turkey has gained a significantly importance for the Union. Particularly, with the Russian energy cut due to the Russia-Ukraine dispute in 2006, EU realized the need for more diversification and more reliable partners. Accordingly, Turkey's significance for the Union as a relatively secure and independent actor became more obvious (Tekin and Walterova, 2007: 87).

As a candidate country, being part of many pipeline projects, Turkey's seems to have gained considerable weight for possible EU membership. Although, several challenges are stand in front of Turkey's being an energy hub, there are various possible pipelines that will enhance Turkey's significance and membership chance. Even, when various European documents are examined, Turkey's importance as an energy transit country, possible to be an energy hub, is clearly underscored.

The Communication from the Commission to the European Council on external energy relations (Europa, 2006: 5) stated that Turkey is a crucial energy hub for supplies from the producer regions and is strategically important for the EU's energy security. The document suggests that, due to the enlargement process, cooperation on pipeline projects and the rapid alignment of Turkey with EU energy standards and policies will make it easier for Turkey to become an energy hub serving Europe. The Commission even suggests to the European Council to help Turkey to become an energy hub (Paper from European Commission to European Council, An External Policy to Serve Europe's Energy Interests, 2006). The Commission's suggestion is

most likely to be achieved only by Turkey's membership. On the other hand, Green Paper (2006: 16) also stresses Turkey's importance as an essential strategic partner. Even the European Parliament states in its "EU-Turkey relations in the field of energy document" (2006: 3) that Turkey's political-strategic importance and EU's considerations will have an important role in Turkey's future EU membership and in their closer relations.

Thusly, Turkey's importance is growing. Turkey is expected to carry approximately 120 billion cubic meter of gas, which will make Turkey third largest gas supplier for Europe (ManeEstrada, 2005: 3782). Arslanalp (2008) argues that Turkey's importance may decrease if Russia starts to comply with the European Energy Charter and if Middle Eastern countries choose to export their gas by transforming it to LNG. However, he also states that the expectations remain high for Caspian resources and therefore Turkey has good chance to become an artery for the European gas market (Arslanalp).

While being an energy hub is obviously not the sole requirement for joining the European Union, it may be what breaks the glass ceiling in front of Turkey's possible membership. Turkey's strategic position will not obviate other necessary conditions for becoming a European member, yet it can preclue possible new conditions that the Union might suggest for Turkey or it can help to win over contentemporary European members that are likely to oppose Turkish membership. Turkey will hasten the process toward membership due to its increasing energy importance. As Turkish

Energy Minister Hilmi Güler stated, it is possible to witness Turkey's entrance into the EU with pipelines (Bacık, 2006: 34).

CHAPTER VI

CONCLUSION

This study aimed to unravel European Union's energy security considerations and Turkey's increasing importance relative to these considerations. Turkey's possible Union membership is evaluated around increased European energy security considerations and Turkey's being an energy hub.

Increased energy need in all terms and fields of our lives made energy sources considerably important and thusly made "energy security" an inextricable concept of contemporary international relations. Whether energy supplier or consumer, energy security means something for all actors and made them struggle to preserve it. European Union is one of these actors. As other energy consumers, the Union also aims to have uninterrupted, affordable energy, but also with respect to environment and sustainable development. With this regard it aims to maintain necessary policies.

Diversification; having security margin in terms of strategic reserve or adequate storage capacity along the supply chain; cooperation and high quality information, are in general the needed policies to enhance energy security for consumer actors and thus for the European Union. Among the suggested policies, diversification is the mainly perceived as the most important policy to enhance energy security and it can be achieved by diversifying energy sources or energy suppliers.

For diversification of source, Union proposes to use different energy mixes and not to depend merely on gas or oil. On the other hand, about the diversification of supplier, Union suggests to have increased external energy relations with alternative suppliers. Particularly, with the experiences of 2006 Russia-Ukraine dispute, alternative energy suppliers, such as Middle East, Norway, Caspian Basin countries and Mediterranean countries, has become more valuable for the Union. In this regard, the transit countries and thus Turkey have had enhanced importance for the Union. Turkey is one of the most considerable transit countries that has become momentous and has gained significant power and Turkey's energy transit country role is what seems to give it the required power to be a European Union member.

When it is examined, it is seen that Turkey and EU have a long-lasting history extending back to 1960s, when Turkey applied for the first time in 1959 and first official agreement was signed Ankara in 1963. Since that time, Turkey has been struggling to be a European member and for this aim trying to fulfill the Union obligations.

As every member country, Turkey also has to fulfill some requirements to be a European Union member and to obtain the equal rights with others. However, Turkey seems to be struggling with additional unseen and unofficial criteria. According to the developments up until now, it seems that, even if Turkey is able to fulfill all obligations, there is a glass ceiling in front of Turkey's membership.

Yet, now Turkey has a new strength. Due to changing security considerations of the Union, Turkey has gained greater importance. It is not about Turkey's strong military power, but about Turkey's geostrategic position. As mentioned during the whole study, and as menitoned in various European documents, European Union has increased its efforts to increase its energy security level and in this regard, it needs reliable partners that it can diversify its energy supplies. Accordingly, located as a strategically important energy transit country, Turkey acquired the greatest chance to be an energy hub in the future and thus a European member.

As mentioned in the fifth chapter, Turkey is involved in many pipeline projects. Some of them have been established whereas some are just in the planning stages. However, if most of the projects are actualized, Turkey will become a very essential energy hub for European energy supply. It is obvious that the process will not function smoothly. There are and will remain challenges arising from the unstable supplier regions and well as those arising from the Union. The challenges arising from the suppliers such as geopolitics of Kazakh oil; geopolitics of Turkmen oil; bans on re-export and re-selling option of Turkey; ethnic conflict in the energy supplier regions; increasing turbulences in the Middle East and Russian ambitions over Black Sea and Caspian Region together with challenges arising from the Union

with 27 different views, can create obstacles in front of Turkey's being an energy hub. Yet, it is clear that, even if not all of the projects are actualized, the materialized ones will give Turkey its relative power, compared to its previous situation.

Thusly, it can be concluded that, although, energy security has been in the agenda of the Union for a long time, 2006 was a milestone for energy security considerations of the Union and thus Turkey. With the Russian energy cut due to the Russia-Ukraine dispute, EU realized that it needs more diversification and more reliable partners. This thesis suggests that as a possible energy hub for the European Union, Turkey seems to have a new opportunity and strength. Due to EU's increasing energy security considerations and due to increased importance of diversification, Turkey has become considerably important and an indispensable partner. If energy continuous to be as significant as today, if Europe keep going to be an import-energy dependent actor and as the most important one if Turkey can overcome challenges ahead of it and can be an energy hub, it is highly probable for European Union to accept Turkey as a member state.

SELECT BIBLIOGRAPHY

1) BOOKS

- Adams, Neal. 2003. Terrorism & Oil. Tulsa: Pennwell.
- Barry, Buzan. 1991. *People, States and Fear: An Agenda For International Security Studies in the Post-Cold War Era*. Hemel Hempstead: Harvester Wheatsheaf.
- Barton B. and et.al. 2004. Energy Security: Managing Risk in a Dynamic Legal and Regulatory environment. Oxford: Oxford University Press.
- Bilgin, Pınar. 2005. Regional Security in the Middle East: A Critical Perspective. New York: Routledge.
- Canbolat, İbrahim. 2002. Avrupa Birliği (3rd ed.). İstanbul: Alfa.
- Cini, Michelle. 2003. European Union Politics. New York: Oxford University Press.
- Clawson, Patrick. 1995. Energy and National Security in the 21 Century. Washington D.C.: National Defense University Press.
- Ege, Yavuz, and Tuğrul Arat, et.al. 2004. AB'nin Enerji Politikası ve Türkiye (1st ed.). Ankara: Europa Bridges of Knowledge Programme.
- El-Agraa, Ali M. 2001. *The European Union: Economics and Policies*. Prentice Hall. 1980. (Reprint). Singapore: Pearson Education.
- European Commission. 2007. Energy, Transport and Environment Indicators. Pocketbook. Eurostat. Luxembourg: Office for Offical Publications of the European Communities.
- Goldemberg, J., Johansson T.1995. *Energy as an Instrument for Socio-Economic Develoment*. New York: United Nations Development Programme Publications.
- Hoffman, G. Walter. 1985. *The European Energy Challenge: East and West.* Durham, NC: Duke University Press.

- Jan H. Kalicki, and David L. Goldywn (eds).2005. *Energy & Security*. Washington: Woodrow Wilson International Center Press.
- Lipschutz, Ronnie (ed). 1995. On Security. New York: Columbia University Press.
- Maachou, Abdelkader. 1982. OAPEC: An International Organization For Economic Cooperation and An Instrument for Regional Integration. Paris: Berger-Levrault
- Martin W., Imai R., and Steeg H. 1996. *Maintaining Energy Security in a Global Context*. New York: Trilaterel Commission.
- Matlary, Janne. 1997. Energy Policy in the European Union. New York: St. Martin's Press.
- McGowan, Francis (ed.) 1996. European Energy Policies in a Changing Environment. Germany: Physica-Verlag.
- Quandt, William. 1981. Saudi Arabia in the 1980s: Foreign Policy, Security, and Oil. Washington D.C.:Brookings Institution.

2) ARTICLES:

- Alekperov, Gourban. September 2004. "Energy Resources of the Caspian Region and the Significance of Turkey for Europe's Energy Security," *The Quarterly Journal* 3(3): 115-123.
- Bacık, Gökhan. June, 2006. "Turkey and Pipeline Politics." *Turkish Studies* 7(2): 293-306.
- Bahgat, Gawdat. 2002. "Pipeline Diplomacy: The Geopolitics of the Caspian Sea Region," *International Studies Perspetives* 3: 310-327.
- Bahgat, Gawdat. 2004. "The Caspian Sea: Potentials and Prospects," *Governance* 17(1):115-126.
- Bahgat, Gawdat. 2005. "Energy Security: The Caspian Sea," *Minerals & Energy* 20(2): 3-15.
- Bahgat, Gawdat. 2006. "Europe's Energy Security: Challenges and Opportunities," *International Affairs* 82(5): 961-975.
- Costantini, V., F.Gracceva, A.Markandya and G.Vicini. 2007. "Security of Energy Supply: Comparing Scenarios from a European Perspective," *Energy Policy* 35: 210-226.

- Downs, S. Erica. 2004. "The Chinese Energy Security Debate," *Chinese Quarterly* 177: 21-41.
- İpek, Pınar. Spring 2006. "The Aftermath of Baku-Tbilisi-Ceyhan Pipeline: Challenges Ahead for Turkey," *Perceptions* 11(1): 1-19.
- Kalyzhnova, Yelena. 2005. "The EU and the Caspian Sea Region: An Energy Partnership?," *Economic Systems* 29: 59-76.
- Lesbirel, S. Hayden. 2004. "Diversification and Energy Security Risks: The Japanese Case," *Japanese Journal of Political Science* 5(1): 1-22.
- Mane-Estrada, Aurelia. 2006. "European Energy Security: Towards the Creation of the Geo-Energy Space," *Energy Policy* 34: 3773-3786.
- Oktay, Ertan and R. Funda Çamkıran. 2006. "Avrupa Birliği'nin Enerji Güvenliği Açısından Türkiye'nin Önemi," *Avrupa Araştırmalar Dergisi* 14(1): 153-172.
- Olcott, M. Brill. 1999. "Pipelines and Pipe Dreams: Energy Development and Caspian Society," *Journal of International Affairs* 53(1): 305-319.
- Pamir, Necdet. March, 2007. "Enerji Arz Güvenliği ve Türkiye." *Stratejik Analiz* 83: 14-24.
- Rabinowitz, P., M. Yusifov, J. Arnoldi and E. Hakim. 2004. "Geology, Oil and Gas Potential, Pipelines, and the Geopolitics of the Caspian Sea Region," *Ocean Development& International Law* 35: 19-40.
- Roberts, John. 2004. "The Turkish Gate: Energy Transit and Security Issues," *Turkish Policy Quarterly* 3(4):17-45.
- Ryan, Patric. June 2002. "Middle East Pipeline Systems." *Perspectives* 18(6): Editor's Note.
- Tuchman, Jessica. Spring 1989. "Redefining Energy," Foreign Affairs 68: 162-177.
- Tekin, Ali, and Iva Walterova. Spring 2007. "Turkey's Geopolitical Role: The Energy Angle," *Middle East Policy* XIV(1): 84-94.
- Tekin, Ali, and Paul Williams . Forthcoming March, 2009. "EU-Russian Relations and Turkey's Role as and Energy Corridor." *Europe-Asia Studies* 61(2): 339-358.
- Udum, Şebnem. December 2001- February 2002. "The Politics of Caspian Region Energy Resources: A Challenge for Turkish Foreign Policy," *Perceptions* 6 (4): 36-61.
- Williams, Paul and Ali Tekin. Summer, 2008. "The Iraq War, Turkey and Renewed Caspian Energy Prospects," *The Middle East Journal* 62 (3): 383-397.

- Winrow, M. Gareth June 2007. "Geopolitics and Energy Security in the Wider Black Sea Region," *Southeast European and Black Sea Studies* 7(2): 217-235.
- Winrow, M. Gareth. 2004. "Turkey and East-West Gas Transportation Corrdior," *Turkish Studies* 5(2): 23-42.
- Winrow, M. Gareth. Autumn 2005. "Energy Security in the Black Sea-Caspian Region," *Perceptions* 10(3): 85-98.
- Yergin, Daniel. Mar/Apr 2006. "Ensuring Energy Security," *Foreign Affairs* 85(2): 69-82.

3) EUROPEAN UNION DOCUMENTS

- Communication from Commission/SG/HR for the European Council. 2006. *An External Policy to Serve Europe's Energy Interests*. Available at http://ec.europa.eu/dgs/energy transport/international/doc/paper solana sg en ergy en.pdf, last accessed October 2008.
- Commission of the European Communities. 2003. On the Development of Energy Policy for the Enlarged European Union, Its Neighbours and Partner Countries.
- Europa. *Eight Progress Report*. 2007. EU-Russia Energy Dialogue. Available at http://ec.europa.eu/energy/russia/joint_progress/doc/progress8_en.pdf, last accessed November 2008.
- European Commission. 2000. *Green Paper- Towards a European Strategy for the Security of Energy Supply*. Luxembourg: Office for Offical Publications of European Communities. Available at http://ec.europa.eu/energy/green-paper-energy_supply_en.pdf, last accessed November 2008.
- European Commission. 2005. *Green Paper on Energy Efficiency or Doing with Less*.

 Brussels. Available at http://ec.europa.eu/energy/efficiency/doc/2005_06_green_paper_book_en.pdf, last accessed November, 2008.
- European Commission. 2006. *An External Policy to Serve Europe's Energy Interests*. Available at http://ec.europa.eu/dgs/energy_transport/international/doc/paper_solana_sg_energy_en.pdf, last accessed November, 2008.
- European Commission. 2006. External Energy Relations- From Principles to Action.

 Communication from the Commission to the European Council. Brussels:

 Europa. Available at

- http://ec.europa.eu/external_relations/energy/docs/com06_590_en.pdf. November 2008.
- European Commission. 2006. *Green Paper- A European Strategy for Sustainable, Competitive, and Secure Energy.* Brussels. Available at http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0105:FIN:EN:PDF, last accessed November, 2008.
- European Commission. *EU Energy in Figures 2007/2008*. Available at http://ec.europa.eu/dgs/energy transport/figures/pocketbook/doc/2007/2007 en ergy en.pdf, last accessed November 2008.
- European Commission. *The EU& Gulf Cooperation Council*. Available at http://ec.europa.eu/external_relations/gulf_cooperation/intro/index.htm, last accessed October 2008.
- European Parliament. 2006. *EU-Turkey Relations in the Field of Energy*. Available at http://www.europarl.europa.eu/meetdocs/2004_2009/documents/fd/dtr20060425_06/d-tr20060425_06en.pdf, last accessed October 2008.
- European Union Documents. Green Papers. Availableat http://europa.eu/documents/comm/green_papers/index_en.htm, last accessed October 2008.
- Glossary. 2007. Europa. Available at http://europa.eu/scadplus/glossary/green_paper_en.htm, last accessed October 2008.
- Glossary. OECD. Available at http://www.oecd.org/glossary/0,3414,en_2649_37425_1970394_1_1_1_1,00.ht ml, last accessed December 2008.

4) UNPUBLISHED WORKS

- Barosso, Jose-Manuel. 2008. "The EU/Norway Partnership: a European Approach to Energy Security and Climate Change." Paper presented at Europe Conference. February 25.
- Belkin, Paul. 2007. "The European Union's Energy Security Challenges." Report for Congress by Congressional Research Service. May 7.
- Fink, Daniel.2006. "Assessing Turkey's Future As an Energy Transit Country". Research Notes of Washington Institute For Near East Policy. July.
- Gault, John. 2002. "The European Union: Energy Security and the Periphery." Occasional Paper for Geneva Center for Security Policy Workshop. August.

- Geden, O., C. Marcelis, A.Maurer. 2006. "Perspectives for the European Union's External Energy Policy: Discourses, Ideas and Interests in Germany, the UK, Poland and France." Working Paper for German Institute for International and Security Affairs. December 17.
- Grant, C., Barysch K. 2003. "The EU-Russia Energy Dialogue." Briefing Document for Centre for European Reform. May.
- Landaburu, Eneko. 2007. "Europe's External Energy Relations: Present and Future Challenges." Keynote speech presented at the Public Hearing on "Towards a Common European Foreign Policy on Energy," held by Committee on Foreign Affairs of European Parliament, February 28.
- Morelli, Vince L. 2006. "The European Union's Energy Security Challenges." Report for Congress by Congressional Research Service. September 11.
- Orekli, N. Cem. 2003. "Turkey's Energy Strategy in a New Era: Time to Re-Look." Opinion Paper for TUSIAD. December 16.
- Winrow, M. Gareth. 2003. "Turkey as an Energy Transit State." Paper presented at Black Sea: Energy and Environment Conference. May 15.
- Youngs, Richards. 2007. "Europe's External Energy Policy: Between Geopolitics and the Market." Working Document for Centre for European Policy Studies. November

5) ONLINE INFORMATION SOURCES

- Akçollu, Yeşim. November, 2006. "Major Challenges to the Liberalization of the Turkish Natural Gas Market." Oxford Institute for Energy Studies. Available at http://www.oxfordenergy.org/pdfs/NG16.pdf, last accessed December 2008.
- Arslanalp, Mert. "Turkey's Energy Policy and Global Trends Series." Dispolitikaforumu. Available at http://www.dispolitikaforumu.org/index2.php?option=com_docman&task=docview&gid=23&Itemid=6, last accessed at October 2008.
- Biresselioğlu, Mehmet Efe. 2007. "Turkey: Europe's Emerging Energy Corridor for Central Eurasian, Caucasian and Caspian Oil and Gas." *Turkey, US Foreign Policy*. Balkananalysis.com. Available at http://www.balkanalysis.com/2007/01/20/turkey-europe%E2%80%99s-emerging-energy-corridor-for-central-eurasian-caucasian-and-caspian-oil-and-gas/, last accessed October 2008.

- Dikbas, Kadir. 2005. "The Samsun-Ceyhan Pipeline." Alexander Gias&Oil Connection. December 8. Available at http://www.gasandoil.com/goc/company/cnc54922.htm, last accessed December 2008.
- Luhnow, D., Samor, G. 2006. "As Brazil Fills Up on Ethanol, It Weans Off Energy Imports." January, 16. Yale Global Online. Available at http://yaleglobal.yale.edu/display.article?id=6817, last accessed November 2008.
- Ministry of Foreign Affaris. June, 2006. "Turkey's Energy Strategy." Econturk. Available at http://www.econturk.org/Turkisheconomy/energy_turkey.pdf, last accessed December 2008.
- "Economic Brief: The Blue Stream Gas Pipeline." 22 November 2005. Power and Interest News Report. Available at http://www.pinr.com/report.php?ac=view_report&report_id=403&language_id=1, last accessed December 2008.
- "EU Norway Energy Dialogue." 6 July 2005. *Dokumentarkiv*. Available at http://www.regjeringen.no/nb/dokumentarkiv/Regjeringen-Bondevik, last accessed November 2008.
- "Euro-Meditarranean Energy Partnership." Director General for Energy. Available at www.auptde.org/NewSite/UploadFiles/Activityfile/153.ppt, last accessed October 2008.
- "Euro-Mediterranean Partnership." 2003.Climate Action Network Europe. Available at http://www.climnet.org/Euromed.htm, last accessed December 2008.
- "South Caucasus Pipeline." 2008. BP. Available at http://www.bpgeorgia.ge/go/doc/1339/150568/, last accessed December 2008.
- "World Proved Reserves of Oil and Natural Gas, Most Recent Estimates." 2008. Energy Information Administration. Available at http://www.eia.doe.gov/emeu/international/reserves.html, last accessed December 2008.

6) WEBSITE NEWS

BBC News. 2006. "Tehran Warns of Fuel Disruptions." June, 4. Available at http://news.bbc.co.uk/2/hi/middle_east/5045604.stm, last accessed December 2008.

- Kimmage, Daniel. 2006. "Central Asia: The Fate of Multivectoral Model." June, 2. Available at http://www.rferl.org/content/article/1068870.html, last accessed December 2008.
- Borgen, Haps. 2008. "US Department of State: It's Amateur Hour for Energy Policy." May, 5. Avaiable at http://www.neurope.eu/articles/86282.php, last accessed December 2008.
- Bordonaro, Federico. 2005. "Blue Stream Opens New Horizons for Russia." November, 23. Available at http://www.atimes.com/atimes/Central_Asia/GK23Ag01.html, last accessed December 2008.
- BBC News. 2000. "Turkey to Reopen Iraq Pipeline." October, 11. Available at http://news.bbc.co.uk/2/hi/europe/967293.stm, last accessed December 2008.