

**EU ENERGY SECURITY BEHAVIOR: EXPLORING THE CENTRAL
MOTIVATION**

A Master's Thesis

by

Gökçe Balaban

**Department of
International Relations**

**Bilkent University
Ankara
October 2007**

to My Mother...

“EU ENERGY SECURITY BEHAVIOR: EXPLORING THE CENTRAL MOTIVATION”

The Institute of Economics and Social Sciences
of
Bilkent University

by

GÖKÇE BALABAN

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

in

THE DEPARTMENT OF
INTERNATIONAL RELATIONS
BİLKENT UNIVERSITY
ANKARA

OCTOBER 2007

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.

Asst. Prof. 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.

Assoc. Prof. Ersel Aydınlı
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.

Asst. Prof. Mitat Çelikpala
Examining Committee Member

Approval of the Institute of Economics and Social Sciences

Prof. Erdal Erel
Director

ABSTRACT

THE EU ENERGY SECURITY BEHAVIOR: EXPLORING THE CENTRAL MOTIVATION

Balaban, Gökçe

M.A, Department of International Relations

Supervisor: Asst. Prof. Paul Williams

October 2007

This thesis aims to understand energy security behavior of the EU in the light of two IR theoretical stances: rationalism-neo-realism and constructivism. In order to do that, the study targets the question: “What is the central motivation of EU energy security policies- norms or interests- and how the different IR theories of rationalism-neo-realism and constructivism can interpret EU energy security policies differently”. Power and wealth being the most crucial, interest-based policies refer to the efforts that will promote the material interests, disregarding the normative considerations. Norm-based policies, on the other hand, represent the policies which are resulted from the identity, norms and political culture, and which are sometimes taken at the expense of the material interests. Thus, this thesis proposes two contradictory impulses- interests and norms- for EU energy security behaviour, and tries to understand which one is dominant in energy security decision-making process. Relying on official EU documents and on literature works, this study reaches to the conclusion that in environmental topics, the EU is strongly committed to the norms. However, in the topics considering the supply security such as guaranteeing the present and future energy supplies, and energy diversification- the EU follows more interest-based policies. In conclusion, although the EU is the most committed actor to environmental protection in the world, a fully normative approach is still lacking in EU energy security behavior.

Keywords: Energy Security, EU, Interests, Norms, Neo-realism, Constructivism

ÖZET

AB ENERJİ GÜVENLİĞİ DAVRANIŞI: TEMEL SEBEBİ İNCELEME

Balaban, Gökçe

Master, Uluslararası İlişkiler Bölümü

Tez Yöneticisi: Yrd. Doç. Dr Paul Williams

Ekim 2007

Bu çalışma, AB'nin enerji güvenliği davranışını iki uluslararası ilişkiler teorisi ışığında anlamayı amaçlar: akılcı-neo-gerçekçilik ve inşacı kuram. Bunu gerçekleştirebilmek için, bu tez şu soruyu cevaplamayı hedefler: “AB enerji güvenliği politikaları arkasındaki temel dürtü normlar mıdır, yoksa çıkarlar mıdır ve akılcı-neo-gerçekçilik ve inşacı kuram AB'nin enerji güvenliği politikalarını nasıl yorumlar?” Güç ve zenginlik başlıcaları olmak üzere, çıkar bazlı politikalar normatif etkenleri gözardı ederek maddesel çıkarları destekleyen çabalara tekabül eder. Öte yandan, norm bazlı politikalar, kimlik, normlar ve siyasi kültürden kaynaklanan ve zaman zaman maddesel çıkarlar pahasına benimsenen politikaları yansıtır. Dolayısı ile, bu çalışma AB enerji güvenliği için iki zıt dürtü- çıkar ve norm- öne sürer ve enerji güvenliği karar alma sürecinde hangisinin baskın olduğunu anlamaya çalışır. Bu tez, AB resmi belgelerine ve literatürdeki kaynaklara dayanarak AB'nin çevresel konularda normlarına sıkı sıkıya bağlı olduğu sonucuna ulaşır. Fakat; şimdiki ve gelecekteki enerji arzını garantilemek, enerji kaynaklarını çeşitlendirmek gibi arz güvenliğini içeren konularda AB daha çıkar bazlı politikalar izler. Özet olarak, AB çevre konularında normlarına sıkı sıkıya bağlı olsa da, enerji güvenlik davranışında tümünden normatif bir yaklaşım hala eksiktir.

Anahtar kelimeler: Enerji Güvenliği, AB, Çıkarlar, Normlar, Akılcılık, Neo-Gerçekçilik, İnşacı kuram

ACKNOWLEDGEMENTS

First of all, I am utterly grateful to my supervisor Asst. Prof. Paul Williams for putting up with and being patient about my laziness. His ideas and reviews challenged me to improve my work and try harder. I would also like to thank Asst. Prof. Ersel Aydınli for his time and being my co-supervisor, and Mitat Çelikpala for accepting to be in my thesis defense.

Last, but not least, I am really thankful to my family for their help, Ertuğrul Erol and Hande Şahin for sharing their experiences and ideas with me, Forrest Watson for his endless support and Simge Gülaç for her genuine support.

TABLE OF CONTENTS

ABSTRACT.....	iii
ÖZET	iv
ACKNOWLEDGMENTS	v
TABLE OF CONTENTS	vi
CHAPTER 1: INTRODUCTION	1
1.1 THE SUBJECT OF THE STUDY.....	1
1.2 THE PURPOSE, THEORY, AND THE METHODOLOGY OF THE STUDY.....	3
1.3 DELIMITATION OF THE STUDY.....	6
1.4 THE OUTLINE OF THE STUDY.....	8
CHAPTER 2: EU ENERGY SECURITY DISCOURSE	11
2.1 ENERGY SECURITY: THE CONCEPT	12
2.2 ENERGY SECURITY: EU DISCOURSE	14
2.3 UNDERSTANDING EU ENERGY SECURITY DEFINITION.....	17
2.3.1 Studying Security	17
2.3.1.1 Cold War Security Studies	19
2.3.1.2 Post-Cold War Security Studies	20
2.4 CONCLUSION	24
CHAPTER 3: EU ENERGY SECURITY POLICIES.....	25
3.1 EU ENERGY SITUATION.....	27
3.2 INTERNAL ENERGY POLICY OF THE EU	29
3.2.1 The Green Paper of 2000 on “Towards a European Strategy for the Security of Energy Supply”	29
3.2.2 The Green Paper of 2006 on “A European Strategy for Sustainable,	

Competitive and Secure Energy”	39
3.3 EXTERNAL ENERGY POLICY OF THE EU	42
3.3.1 The Objectives of EU External Energy Policy	42
3.3.1.1 Diversification	45
3.3.1.1.1 Alternative Natural gas Routes	47
3.3.1.2 Energy Dialogues and Partnerships	52
3.3.1.2.1 The EU-Russia Energy Dialogue	52
3.3.1.2.2 The Euro-Mediterranean Energy Partnership	56
3.3.1.2.3 INOGATE	61
3.4 INTERPRETATIONS	63
CHAPTER 4: EU ENERGY SECURITY BEHAVIOR	67
4.1 RATIONALIST-NEO-REALIST PERSPECTIVE	68
4.2 CONSTRUCTIVISM	73
4.3 THE ANALYSIS OF EU ENERGY SECURITY POLICY	75
4.3.1 EU Energy Security Behavior: Exploring the Central Motivation...	75
4.3.2 EU Energy Security Behavior: Theoretical Interpretations	81
CHAPTER 5: CONCLUSION	84
BIBLIOGRAPHY	88

CHAPTER 1

INTRODUCTION

1.1 The Subject of the Study

The EU is the largest energy importer and the second largest energy consumer in the world. Being a resource-poor region and a huge consumer makes the EU dependent on foreign supplies. At present, two-thirds of the consumed oil and gas, and half of the consumed energy in the Union are imported (Kalyuzhnova, 2005: 60). It is expected that the share of imports in total consumption will increase to 70% in the next thirty years (Green Paper, 2006). If the current trends continue, the EU will import 60% of its gas only from Russia and 90% of its oil only from imports by 2030 (Euractive, 2007).

Being overwhelmingly dependent on few resources- such as oil and gas, and on few suppliers- as with Russia in gas and the Middle East in oil, is an energy security problem for the EU, since this dependence carries the risks of unstable energy supply and higher energy prices, which have been identified as threats in the 2006 Green Paper. To mitigate the risks associated with energy security,

diversification of resources and finding new suppliers seem to be the most appropriate policies in providing energy security.

However, there are some normative considerations in the Union policies, which stand as potential obstacles against diversification of both resource and suppliers. For one thing, the EU has a strong commitment to protecting the environment by using environmentally friendly resources, which might prevent diversifying resources. As an example, coal emissions produce a high level of CO₂, so its share of the total energy consumption of the Union should not be expected to increase unless clean-coal technologies are developed. Secondly, the EU has normative considerations in its foreign policy with respect to human rights, democracy, good neighborly relations, etc. As energy policy with other countries is a secondary topic of foreign policy, these normative ideas can be restrictive factors in diversifying suppliers since they might affect EU relations with potential importers.

In short, there is a dichotomy in EU energy policy: on the one hand, there are security problems of being dependent on a few resources and suppliers, the effects of which could be manifested as irregular and unstable supplies and sharply volatile energy prices. As the EU Commission has underlined in the 2000 and 2006 Green Papers, these problems can be mitigated by diversification of resource types and suppliers. On the other hand, the EU has normative considerations both in its energy policy, such as protecting the environment, and in its foreign policy, such as promoting human rights, democracy and good relations with its neighbors, which seem to contradict the above-mentioned policies that are intended to maximize the interests of the Union.

1.2 The Purpose, Theory, and Methodology of the Study

This study poses a puzzle about the energy security policies of EU: what is the central motivation behind the formulation of EU energy policy, given the somewhat contradictory impulses towards energy security, on the one hand, and in realizing normative goals of protecting the environment and promoting human rights, democracy and good governance on the other hand. Based on this puzzle, this study poses its research question as follows: “What is the central motivation of EU energy security policies- norms or interests- and how different IR theories of rationalism-neo-realism and constructivism can interpret EU energy security policies differently?”

While protecting the environment is an internal policy norm (Bretherton and Vogler, 2006), protection of human rights, democracy and good governance are external, as well as internal, policy norms of the Union (Manners, 2002: 240-241; Manners, 2005: 11-12). The environment is related to energy because fossil fuel consumption emits high levels of CO₂, which threatens the environment. The EU policies on the environment, thus, can best be understood by analyzing the EU’s consumption of resources and by looking at the efforts to reduce CO₂ emissions. The foreign policy norms are related to energy policy in the foreign supplies of the EU- that is, whether the inability to comply with these norms by suppliers is a preventive factor in the EU’s imports. Thus, this study will explore the existence of the internal and external energy policies of the Union and will analyze whether internal and external norms of the EU in energy are applied to the determination of EU energy policy. The answer will shed more light on the EU’s energy security behavior: is it based on norms as well as interests, or is it solely based on interests?

At first, it might be hard to understand how policy concerning a material commodity such as energy could be explained instead by the independent influence of norms and values. Since decisions about energy reflect policies, and there are potentially multiple reasons behind certain policies, norms and values could be the main causal factor in energy policies. The approach, which will explain the role of norms in the security behavior of the actors in this study, will be constructivism. In constructivist literature norms are defined as “collective expectations about proper behavior for a given identity” (Katzenstein, 1996; Wendt, 1996; Checkel, 1998; Farrell, 2002). As norms are “for a given identity”, norms are social practices and inter-subjective (Farrell, 2002: 49). Therefore they cannot be taken as given, or they cannot be the same for each actor. In other words, they are not imposed by the structure but are rather constructed by agents and structures. At the same time, norms also constitute agents and structures. Thus, norms are at the core of the social construction process and this is how they become important in decision-making. As the world is social for constructivism, and the norms are social practices and they constitute the agents, they also constitute and regulate the behavior of the agents (Jepperson, Wendt and Katzenstein, 1996: 54). Moreover, norms do not only shape the identity of the actors, but they also shape their interests. As the interests are not independent of the social structures and social practices, norms “give interests their content and meaning”(Adler, 2000: 103).

By contrast, rationalism and neo-realism would best explain the role of interests in the energy policy. Rationalism in IR, tries to put forward the reasons for the policies of the actors. Rationalism, based on rational-choice theory, claims that when faced with several courses of action, states (or actors) usually do what they believe is likely to have the best overall outcome (Ward, 2002: 25). During the

development of the IR field, “the best overall” outcome is usually associated with material interests (Fearon and Wendt, 2002: 57) and that is why rationalism is linked to neo-realism and neo-liberalism, which emphasize the role of material interests-power and wealth- in the foreign and security policy decision-making processes (Checkel, 1998: 326). Yet, neo-liberalism, unlike neo-realism, focuses on the role of the norms in decision-making process. Accordingly norms “are intervening variables between assumed interests and behavioral outcomes” (Katzenstein, 1996: 25). In other words, norms in neo-liberalism are used strategically to further self-interest (Katzenstein, 1996: 17). Thus, norms are used to reinforce the material interests in neo-liberalism, and from this perspective, neo-liberalism differs from constructivism. Yet, despite the differences between the two approaches, to not create confusion in answering the research question of this study, neo-liberalism will be excluded from rationalism, and only neo-realism will be studied. For neo-realism norms, identities, beliefs and culture have “no independent explanatory power” and they are “at best derivative of the distribution of capabilities”(Katzenstein, 1996: 17).

Thus, when the research question of this study is posed in terms of central theoretical debates, it will be as follows: “How the different motivations of EU energy policy can be interpreted differently by IR theories of rationalism, neo-realism and constructivism?” This thesis is then based on the belief that the most appropriate theories to use in answering the research question of “Whether EU energy security is based on norms or interests” are constructivism and rationalism-neo-realism. Therefore, this study will analyze and interpret the policies of the Union according to outcomes expected by constructivism and rationalism-neo-realism.

As methodology, the thesis will rely mainly on the textual analysis. To understand the interests and rationales of the EU, official documents and papers will be analyzed. Moreover, critical review of the literature will allow for surveying and compiling different comments and interpretations of Union policies into an integral whole. The study will also utilize descriptive statistical data when analyzing the energy situation of the Union.

1.3 Delimitation of the Study

This study treats the EU as a monolithic actor in energy policy, although in reality energy policies differ among member states. However, these national differences are not addressed in this study because the EU is seen by itself and by third parties as a single actor in energy policy. To explain why this is the case, a small discussion of EU “actorness” (Vogler and Bretherton, 2006) will be given here.

In international law, to be an actor is to have legal personality, which is accorded to recognized states. From that perspective, the EU, according to international law, does not have a legal personality since it cannot conclude international agreements. However, the interpretation of the international law is not sufficient to decide on actorness in international relations, since in practice an actor’s real identity may be sharply divergent from the legal understanding.

The rise of international organizations, corporations and institutions has created the necessity of rethinking the legal criteria of actorness. This study

assumes that the fundamental aspect of being an actor is others' perceptions of the actor. In other words, if third parties consider an institution- not only the state- as an actor, the most important precondition of being an actor is satisfied. Moreover, the actor should also exhibit a degree of autonomy in relation to its external environment, and its internal constituents (Vogler and Bretherton, 2006: 16). In other words, an actor should be capable of formulating policy purposes and making decisions. In short, this study assumes that there should exist a shared understanding about actorness between third parties and the actor itself.

Under these circumstances, to comment on the manifestation or reproduction of EU actorness in its energy policy, it is necessary to examine the nature and extent of the shared understanding. For one thing, the Commission formulates the purposes of the Union's energy policy by initiating policy and modifying proposals (Matlary, 1997: 137). This means that the Commission is able to craft the purposive character of the EU's energy policy. Moreover, the EU is seen as an important global actor in energy by third parties. Many third parties consider the EU as a single actor rather than a loose collection of separate entities, when discussing their energy policies. The EU-Russia Dialogue and the energy policies under the European Neighborhood Policy(ENP) are both the examples of this. Moreover, an increasing number of studies in energy literature about EU energy policy also show how the academic world views the EU as a single actor in energy.

In conclusion, in this study, the EU will be treated as a monolithic actor in energy because it can take purposive actions by formulating policy and making decisions and because there is an overall acceptance of the EU as a global energy actor by third parties.

1.4 The Outline of the Study

Chapter 2 accomplishes two tasks. First, it lays out EU definition of energy security. Second, it makes a brief analysis of Security Studies to give the general picture, before the in-depth analysis of rationalism/constructivism that will take place in Chapter 3. The analysis of Security Studies will also be helpful in understanding EU energy security discourse. This chapter will start with an analysis of the literature's definition of energy security concept. After EU discourse on energy security is presented, it will be analyzed more closely to gain a clearer idea of what motivates EU energy security behavior. This task will be accomplished by relying on the brief analysis of Security Studies. The conclusion will indicate that the EU has a broadened security understanding in its energy security definition. The reasons for broadened security- whether based on norms or interests- and the policies to achieve this, which will be analyzed in Chapter 3, will be useful to resolve the puzzle laid out in this study. Thus, exploring the EU's broadened energy security definition is the first step in understanding EU energy security behavior. One should also notice that, in this Chapter, only the energy security definition of the Union, rather than policies, will be given, since the latter is the topic of the Chapter 3.

Chapter 3 seeks to explore EU energy policies. In the first section of the chapter, the EU's energy situation will be analyzed to better understand its policies. Next, official documents of the Union will be analyzed. There will be two foci here: one is the internal policies and policy objectives and the other is the external policies and policy objectives. The former aims to analyze the policies that the Commission has tried and is trying to achieve within the Union. Therefore, this task

can best be understood by analyzing Commission Green Papers of 2000 and 2006, which are the most appropriate discursive resources for comprehending the energy policies of the Union. In external policies, on the other hand, EU diversification efforts and bilateral relations with producer countries and regions will be given priority focus. In that sense, for the former, the EU's projects to diversify its energy routes, the potential energy suppliers to the EU and the potential energy transport routes will be explored. For the latter, the EU-Russia summits along with the EU-Russia Energy Dialogue, the Euro-Mediterranean Energy Partnership Process and the ENP will generally present the best source of analysis to understand EU external energy policies. In sum, the aim of this Chapter is not to comment on or interpret policies, but only to describe their discourse.

The main analysis of this study will take place in Chapter 4. Based on discussions of the policies described in Chapter 3, this chapter will concentrate on the motives- norms and interests- behind these policies and will aim to put forward which motive is dominant in EU energy policy. The theoretical debate informing the study will also be incorporated in this chapter. Having traced back the motivations, the chapter will interpret EU energy policy in the light of two IR theories: constructivism and rationalism-neo-realism.

In the final part, this study reaches to the conclusion that in the policies concerning the environment, norms are dominant in EU energy security behavior. Indeed, in environmental protection, the EU sometimes takes decisions, which directly conflict with its material interests. However, in the issues related to supply security, material interests are superior to norms, since the EU considers its material interests before its norms. Based on this assumption, from a constructivist perspective, the EU is strongly committed to its environmental norms in its energy

policy, and the environmental policies can be explained by constructivism. On the other hand, from a rationalist and neo-realist perspective, the EU thinks its material interests before its norms in its supply security. As a conclusion, while supply security policies of the Union's energy policy can be explained by rationalism and neo-realism, environmental policies can be interpreted by constructivism. This also shows that, although the EU is the most committed actor in environmental protection in the world, a fully normative approach is lacking in EU energy security behavior.

CHAPTER 2

EU ENERGY SECURITY DISCOURSE

The first part of this chapter analyzes EU discourse on energy security. How the EU defines its energy security, what are the policy objectives of the EU in energy are the main questions that will be answered in the first part.

The second part of the chapter makes a brief analysis of the Security Studies. Giving the general picture in Security Studies is necessary to better understand the IR theories of neo-realism and constructivism, which will take place in the final analysis. Relevant for security studies are the Cold War and the post-Cold War, with each belonging to different philosophical traditions. For the Cold War Security Studies the states are the main referent objects of the security and the Security Studies mainly focus on the study of threat, use and control of the military force (Smith, 2000: 35). However, after the Cold War, new security threats have been emerged. These new security threats are analyzed by the post-Cold War Security Studies through looking at the different referent-objects other than states, such as ethnic groups, individuals, women, environment, etc. Thus, in this period, the view of states as the main referent object has become less prevalent.

The final part of this chapter analyzes EU energy security definition based on the brief analysis of Security Studies. Accordingly, EU energy security

definitions focus on the threats that can affect the states and the environment. This is quite different than the literature definitions, which mostly focus on the state security side. Thus, this chapter puts forward that EU energy security definition epitomizes the post-Cold War security approach, rather than a pure Cold War understanding of security.

2.1 Energy Security: The Concept

Energy security definitions are based on energy's importance in so many facets of security, including military and economic ones. This section explores the energy security definitions in the literature and tries to underline the common points of these definitions, which will give the basic understanding of the energy security concept.

Energy security definitions basically point out how the actor can be secure in energy issues. Thus, the definitions explicitly propose policies. For instance, Bahgat (2006: 965) defines energy security as the sustainable and reliable supplies at reasonable prices and he sees the diversification of both energy types and supply resources as the main route to energy security. This definition, then, argues that, by obtaining sustainable and reliable energy at reasonable prices, actors can achieve energy security. To state the matter differently, it finds the policies that would achieve sustainability and reliability of energy supplies at reasonable energy prices as the most appropriate ones. Thus the conditions that provide energy security also describe the political objectives that should be pursued.

The International Energy Agency (IEA) defines energy security as an adequate, affordable and reliable supply of energy (IEA, 2003). Most of the other definitions generally rely on this definition. Kalicki and Goldwyn (2005: 9) define energy security as follows:

... in its most fundamental sense, energy security is assurance of the 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, gas and their future equivalents and adequate infrastructure to deliver those supplies to markets.

Constantini et al also make a similar definition. According to them energy security is defined as the availability of a regular supply of energy at an affordable price (Constantini et al., 2007: 210). For Barton et al., energy security is “a condition in which a nation or all, or most, of its citizens and business have access to sufficient energy resources at reasonable prices for the foreseeable future free from serious risk of major disruption of service” (Barton et. al, 2004: 3-13). Slightly different from these definitions, in 1993 IEA Ministers agreed on the elements of energy security as the diversity, efficiency and flexibility within the energy sector (IEA,1993).

Based on these definitions, it can be assumed that there is a general tendency to equate energy security with supply security. There are many writers who discuss energy security as supply security. Yergin explains why this is the case: “diversification of supply is the starting point for energy security since widening the sources of supply lessens the impact of any particular disruption and provide

opportunities for compensating supplies” (Yergin, 2005: 57). Thus, energy security in the literature basically emphasizes supply security, which is the regular, sustainable, diverse supply of energy resources for the foreseeable future at affordable price.

2.2 Energy Security: EU Discourse

The aim of this section is to understand the energy security concept from EU perspective. Energy policy in the EU was mostly a national concern in the Cold War period, because “the strategic importance of the energy sector was so great that national governments didn’t want to share their sovereignty with a higher authority” (Matlary, 1997: 12-13). However, this understanding was challenged by internal and external developments in the post-Cold War era. Internally, the adoption of Single European Act in 1986 gave the Commission greater interdependence and a large role to European Parliament (EP) (Matlary, 1997: 20). Since then, the Commission started to take more action to break up national monopolies in energy by trying to establish an Internal Energy Market (IEM) and a Common European Energy Policy (CEP). Externally, with the dissolution of Soviet Union, the EU was forced to coordinate and formulate policy to deal with this region (Matlary, 1997: 6). The Iraq crisis in 1990 also alarmed the EU into developing common policies against common threats. In other words, the changing internal and external environments in the post-Cold War period triggered greater efforts to formulate energy policy at the Union level.

Today, the energy security of the Union can best be understood by looking at the EU Commission's papers, since the Commission is the lead institution in formulating energy policy. In 1995 a Green Paper on the CEP set out the main policies of energy as follows: furthering of the IEM, the development of security supply policy and integration of environmental criteria into energy policy (Matlary, 1997: 63). On 29 November 2000, the EU published a new Green Paper under the name of "Towards a European strategy for the security of energy supply". This Green Paper describes the present and future challenges in energy security and the appropriate policies to overcome them. Import dependency is identified as the most important threat in the energy security of the EU (Green Paper, 2000). The Green Paper also mentions the "new challenges" that the EU will have to face. One of them is the environmental concern that will affect resource consumption choices, since fossil fuel burning is threatening the environment. The other one is establishing the internal energy market, which hasn't completely been achieved so far despite the Commission's efforts.

Based on these threats, The Green Paper of 2000 puts forward its energy security (or 'strategy' as called in the paper) as:

... to ensure, for the well-being of its citizens and for the proper functioning of the economy, the uninterrupted physical availability of energy products on the market at a affordable price for all consumers, whilst respecting environmental concerns and looking towards sustainable development.

Four years later, the Commission (EC, Study on Energy Supply Security and Geopolitics, 2004) defined energy security as:

... the ability to ensure that future essential energy needs can be met, both by means of adequate domestic resources worked under economically acceptable conditions or maintained as strategic reserves, and by calling upon accessible and stable external sources supplemented where appropriate by strategic stocks.

In 2006, the EU published another Green Paper on 'European Strategy for Sustainable, Competitive and Secure Energy'. Although there is not any direct definition of the energy security concept in this paper, the Commission defines an array of threats and political objectives related to the energy issue. Accordingly, higher prices, unstable energy supply and changes in Europe's climate are listed as threats. At the same time, the basic pillars of Europe's energy policy are seen as sustainability, competitiveness and secure energy. Therefore, it can be assumed that for the EU 2006 Green Paper, energy security can be described as having stable, regular and sustainable energy supplies at reasonable prices, while respecting environmental concerns.

In conclusion, based on the Commission definitions, the basic tenets of EU energy security can be described as the integration of the market, security of supply, affordable prices and respecting environment.

2.3 Understanding EU Energy Security Definition

The energy security definitions of the literature and the EU show general similarities. Regular, sustainable, stable supplies at affordable prices are seen as the basic tenets of energy security. However, the EU, unlike most of the literature works, integrates environmental security and environmental threats into its own definition of energy security. This distinct characteristic is important to note since it gives an idea about EU energy security behavior. While the academic literature implicitly point out states as the main actors in energy policies, the EU realizes a broader type of energy security by integrating environmental security with it. To clarify the point, Security Studies will be analyzed briefly.

2.3.1 Studying Security

Security is usually defined as a “contested” or “ambiguous” concept in Security Studies (Helga Hafferdorn, 1991: 3; Baylis, 2005: 254). However, its being a contested concept does not come from the difficulty of making the definition; to the contrary, security is usually defined as “freedom from threats to core values” (Baylis, 2005: 254; Booth, 1991: 319). Yet, the difficulty of studying security for IR students stems mainly from the disagreement over the “referent object” of the security. Referent objects need to be analyzed because “security as a concept, clearly requires a referent object, for without an answer to the question ‘The security of what?’ the idea makes no sense” (Buzan, 1991: 26). For Buzan, Weaver

and De Wilde, referent objects are “things that are seen to be existentially threatened and that have legitimate claim to survival” (Buzan, Weaver, de Wilde, 1998: 36). They also point out that, ‘the referent object is that to which one can point and say, “It has to survive, therefore it is necessary to...”’(Buzan, Weaver, de Wilde, 1998: 36). In other words, referent object is a part of the units of security analysis.

Studying the referent object is important because the answer that is given to “the security of what” changes the understanding of security. For example, for those who consider states as the referent objects of security, the threats that interest states- mainly military and economic- become important, and thus the relevant policies for this situation are shaped according to protect the state around the state security. On the other hand, if individuals are considered as the referent objects, then a wider array of political, economical, environmental and social threats enter into the agenda. Thus, the differences in the referent object of security determine the differences of security approach and the understanding of security.

Relevant for security thinking, two main historical periods are the Cold War era and the post-Cold era, with each belonging to different philosophical traditions. Although each of these periods also show differences within themselves, it is appropriate to classify them in a dichotomous way for methodological and analytical convenience.

2.3.1.1 Cold War Security Studies

The distinctiveness of the Cold War Security Studies comes from its overemphasis on nation-states as the primary referent objects of security. As there is no higher authority than states to regulate the relations between states, that is called anarchy by Cold War security scholars, security is the primary obligation of states (Baylis, 2005: 256). As the world is anarchic, “Security Studies assume that the conflict between states is always a possibility” (Walt, 1991: 212) and thus “states are preoccupied with survival, power and security” (Smith, 2000: 35). To achieve survival, states would inevitably develop offensive military capabilities to defend themselves, which will make each one dangerous to the other (Baylis, 2005: 256). Thus “Security Studies may be defined as the study of the threat, use and control of military force” (Nye and Lynn-Jones as quoted in Walt, 1991: 212).

The disproportionate focus on states as the main referents of security and the military as its dominant dimension started to be challenged during the Cold War. Bilgin (2004: 20-23) proposes three mainstream types of thinking as the main critics of Cold War security thinking throughout this period: Alternative security thinking, with its criticism of basic Cold-War security premises; peace research, with its focus on individuals, social groups and the emergent global society as the referents of security; and Third World Security thinking, which tries to include economic, political, and environmental issues to the security agenda. Yet, one of the most impacting critique of Cold War security thinking was established by Barry Buzan.

In *People, States and Fear* (1991), Buzan argues for a broadened view of security, which will include not only military relationships, but also political, economic, societal, and environmental issues. In that sense, Buzan proposes the

broadening of Security Studies. As mentioned above, Buzan wasn't the only or first writer to propose broadening the security agenda. Nevertheless, Buzan distinguished himself as a voice from within the discipline of security studies, as opposed to Peace Researchers or Third World experts (Bilgin, 2005: 26).

Other than broadening the security agenda, Buzan's work also proposed alternative referent objects of security. In his words:

The search for a referent object of security goes hand-in-hand with that of necessary conditions. One soon discovers that security has many potential referent objects. Those objects of security multiply not only as the membership of the society of states increases, but also as one moves down through the state to the individual level, and up beyond it to the level of international system as a whole (Buzan, 1991: 26).

While Buzan's focus on states as the main referent for security was duly criticized by Critical Security thinkers, in Booth's words, Buzan's work "remains the most comprehensive theoretical analysis- in broadening security- of the concept in international relations literature" (Booth, 1991: 317).

2.3.1.2 Post Cold-War Security Studies

The common point of the post-Cold War Security Studies is their emphasis on referent-objects other than states. For post-Cold War Security Studies, although states are still referent-objects of security in the post-Cold War era, they are no

longer the main referent objects. Rather, in this era, individuals, ethnic groups and minorities, global society, women, etc., are regarded as the main referent objects of security according to different respective bodies of thought.

There are a few reasons why states have no longer been treated as the main referent objects in the post-Cold War. For one thing, “Cold War Security Studies were the product of the Cold War” (Bilgin, 2005: 17). Accordingly:

... the adoption of a state-centric approach to the study of security was done in the attempt to introduce some neatness and clarity to the complexity of studying international phenomena for the purposes of building ‘scientific’ discipline. This was not only because the complex task of dealing with human beings would not have produced the neat and tidy analysis a ‘science’ of Security Studies was thought to demand, but also because the perceived urgency of Cold War concerns made it difficult for its students to undertake the complex analyses of peoples required (Bilgin, 2005: 19).

Therefore, with the end of the Cold War, scholars of Security Studies has started to focus more on “complex” analyses of the field.

Second, security problems newly emerging in the early 1990’s have also helped scholars of Security Studies to concentrate more on non-state referent objects. Thus, the focus has shifted from states and military threats to newer problems and actors. Ethnic conflicts in Bosnia, Kosovo and Rwanda shifted the focus to societal security and made ethnic groups and minorities the referent objects of security. Human rights abuses in various parts of the world, along with increasing poverty, migration and terrorism, have tilted the focus towards

individuals in Security Studies. Global warming and environmental degradation are also considered as new threats to global society, which has also become research field in the Security Studies. In short, in the post-Cold War period:

The threats to the well-being of individuals and the interests of nations across the world derive primarily not from a neighbor's army but from other challenges, such as economic collapse, political oppression, scarcity, overpopulation, ethnic rivalry, the destruction of nature, terrorism, crime and disease (Booth, 1991: 318).

Thus, the view of states as the main referent objects of the security along with overemphasis on military threats and capabilities has become less prevalent in the post-Cold War studies.

Based on this brief analysis of Security Studies, it can be surmised that EU energy security represents a combination of Cold War and post-Cold War security understanding. It includes Cold War security understanding because in the energy security definition of the EU, though not explicitly mentioned, states are the referent object; in other words, they are the unit of security analysis for EU energy security. The reason is that states are centrally affected by the threats that energy poses- as from irregular, unstable supply and high prices.

However, states are not the only referent objects in EU energy security definition and that is why EU energy security also includes post-Cold War security understanding as well. As the EU emphasizes environment and individuals as the part of its energy security, these actors have also become the referent objects of EU energy security.

At first it might be difficult to understand how the environment can be a referent object. However, environment is surely considered as a referent object for

environmentalist groups. Accordingly, environment is a referent object because human and animal survival is contingent on environmental systems' integrity (Buzan, Weaver, De Wilde, 1998: 38). Based on the above understanding, this study also takes environment as a referent object.

The focus on environment by the EU also means that individuals are indirectly the referent objects of EU energy security, since environmentally detrimental energy resources threaten human security. Most fossil resources produce greenhouse gases when burned and these gases affect the environment negatively and cause global warming (Jackson and Sorensen, 1999: 251). Global warming means severe air pollution and rising sea levels, a direct threat to half of the world's population, which lives in coastal areas (Jackson and Sorensen, 1999: 251). Moreover, global warming might also threaten the individuals' security by changing climates and bringing droughts and degradation of fertile soils.

Moreover, individuals are also directly defined as referent objects of EU energy security in the Green Paper of 2000. As is mentioned above, in 2000, EU defined its energy security as "...to ensure, for the well being of its *citizens*,...the uninterrupted physical availability of energy products on the market at an affordable prices for *all consumers*...." (Green Paper, 2000).

By taking the environment and indirectly individuals into consideration in its energy security definition, the EU is demonstrating that its conception of energy security reflects a broadened security approach. As has been shown above, in the post-Cold War era, Security Studies started to analyze a broad range of topics besides the military and economic threats towards states. They have also focused on referent objects other than states. Thus, by including environment and individuals, the EU manifests a broadened security understanding in its energy security

definition. Such an understanding will, of course, have implications for EU policies. What policies does the EU implement to realize the broadened security understanding, and for what reasons? Is it based on rational reasons or normative reasons? These questions will be answered in the next chapters and will give the insight into EU energy security behavior.

2.4 Conclusion

In this chapter, a brief analysis of Security Studies and EU energy security discourse was analyzed. As a conclusion, it was shown that in its energy security definition, the EU has not limited itself to traditional security premises. It is true that member-states establish a part of EU energy security because EU energy security at present is based on the energy security of its member states. Since the EU does not have any institution that might be directly affected by energy problems, member-states are the most important actors in energy security. Yet, contrary to the literature, which mainly equates energy security to supply security, and thus takes states as the only referent objects of energy security, the EU integrates the environment and individuals into its energy security definition. Accordingly, the threats that are directed against environment and individuals are seen as the challenges of energy security. In that sense, in terms of conceptualizations, the EU implements a broader energy security understanding, since it takes into consideration referent objects other than states. Thus, EU energy security epitomizes the post-Cold War security approach, rather than a pure Cold War security understanding.

CHAPTER 3

EU ENERGY SECURITY POLICIES

During the Cold War period, nation-states mainly had the leverage in the energy policy in the EU. Yet, this started to change, and the Commission started to take more control in energy policies starting from the late 1980s. There were some internal and external reasons for this development. Internally, with the adoption of the Single European Act (SEA) in 1986, a new movement appeared in completing internal market by regulating decision-making mechanism. “The introduction of qualified majority voting on the matters affecting the internal market meant that EC could now adopt measures that were subject to a certain degree of disagreement” (Matlary, 1997: 19). In other words, SEA transferred decision-making power to the institutions of the European Community (EC) and thus the EC has acquired much more leverage on energy policy. Being aware of the fact that the internal market would not be achieved without the energy market, the Commission added the energy field to the internal market discussions.

External conditions in the late 1980s also increased the importance of a common approach to energy. The dissolution of the Soviet Union and the opening of Central and Eastern Europe brought the necessity of dealing with this region. “In the energy field, this meant that EU suddenly had to coordinate and formulate

policy to deal with this region and restructuring of its energy sector” (Matlary, 1997: 6). Moreover, the increasing importance of environmental policy created the obligation of directing it along with the energy policy. The Gulf Crisis, at the same time, made EU decision-makers question the reliability of suppliers, and the security of supply in the long-term.

Based on these internal and external developments, EU energy policy started to be formulated based on three objectives: security of supply, competitiveness (opening of the markets), and sustainability (environmental considerations). This chapter analyzes the policies of the Union, or in other words, what does the EU do to achieve the objectives in energy? The main aim of this Chapter is to underline EU energy security policies, by which understanding EU energy security behavior will be possible.

In the first section, EU energy situation will be described to better comment on the policies. EU consumption and import dependency will be the focus. In the second section, the internal policies will be analyzed, starting with the first conceptual energy paper of the Commission: the Green Paper of 2000. The Green Paper of 2006 will also be analyzed in details under the internal policy. In the third section, external policies of the Union will be the focus. Here, two important external policies of the Union, diversification and energy dialogues/partnerships will be analyzed. Under the diversification, EU efforts to diversify its natural gas routes will be the focus. In energy dialogues and partnerships section, EU relations with present and potential suppliers will be put forward. Namely, the EU-Russia Energy Dialogue, the Euro-Mediterranean Energy Partnership and the relations with Mediterranean countries in the European Neighborhood Policy (ENP), and INOGATE will be given priority.

3.1 EU Energy Situation

The aim of this section is to present an analysis of EU energy situation¹ in order to better understand the energy policies of the Union, which are going to be discussed in the next section. Empirical data and statistics of International Energy Agency (IEA), British Petroleum (BP), EU Energy Outlook, EU Green Paper, World Energy Outlook and US Energy Department will be relied on to accomplish the task.

The most significant energy characteristic of the EU is that it is a resource-poor region. It holds 0.6% of oil resources and 2% of natural gas resources, which are the two main fossil resources that are consumed in the world and in the Union (EIA, 2005). These limited reserves are concentrated in the North Sea, owned mainly by the Netherlands and United Kingdom (Bahgat, 2006: 963). Crude oil production is dominated by the UK (Research and Markets, 2007). The other countries with significant crude oil production are Romania, Italy, Germany and the Netherlands, and ten of the EU-25 member states have no oil production at all (Research and Markets, 2007). As for natural gas, the main producer is the UK, followed by the Netherlands. Only Denmark, the Netherlands and the UK produce more gas than they consume, and ten EU countries have no gas production at all (Research and Markets, 2007). What is more, after the North Sea's crude oil production peaked in the 1990s, oil production has been declining in the Union. The decline is also foreseen for natural gas. Natural gas will fall in the EU from 225

¹ What is meant by energy situation is the production and consumption levels, import dependency, resource and import allocation.

billion cubic meter (bcm) in 2010 to 147bcm in 2030 (Kjarstad and Johnson, 2007: 873).

Conversely, the EU is the second largest energy consumer in the world after the USA. With such scarcity of resources and second largest consumer, the result is that the EU is the largest energy importer in the world. At present, two-thirds of the consumed oil and gas and half of the consumed energy in the Union are imported (Kalyuzhnova, 2005: 60). Moreover, it is expected that the share of energy imports in total consumption will increase to 70% in the next twenty to thirty years (Green Paper, 2006).²

The fossil fuels dominate the energy mix. According to 2005 statistics, oil constituted 37% of total consumption, natural gas 24%, solid fuels 18%, nuclear 15% and renewables 6% (Annex to the Green Paper, as quoted in Bahgat, 2006: 963). The domination of fossil resources is not expected to change in the medium term. By 2030 oil is projected to constitute 33.8% of total consumption, natural gas 27%, solids 15%, renewables 12% and nuclear 11% (Annex to the Green Paper, as quoted in Bahgat, 2006: 967).³

In 2002, the EU-15 imported its oil mainly from the Middle East⁴, Norway, Russia and Africa⁵. (EU Commission Services, as quoted in Kalyuzhnova, 2005: 61). After enlargement, approximately 35% of oil imports to EU-25 came from the former USSR. As for gas, in 2005, EU imported 41% of its gas from Russian Federation, 25% from Norway and 15% from Algeria (BP, 2006). If the present

² 94% of oil, 84% of natural gas, 60% of solids expected to be imported in 2030.

³ The expectation of the share of the gas might differ in other projections. For instance the IEA predicts that by 2030 natural gas will establish 32% of the Union's total consumption.

⁴ Saudi Arabia, Iran and Syria are establishing the biggest share in EU oil imports.

⁵ Libya and Nigeria are the primary oil suppliers in Africa.

trends continue by 2030, 60% of EU gas imports are expected to come from Russia (Euractive, 2007).

When the future projections of import dependency are analyzed, it will be seen that the dependency on natural gas rises to a great extent. It will increase to 81% by 2030, from 49% of 2000. Import dependency on solids is also expected to increase widely; from 30% of 2000 to 65% by 2030. As oil consumption is expected to decrease, import dependency on oil will increase but not as much as gas or solids. It is expected that oil import dependency will rise to 90% by 2030, from 75% of 2000 (EU Directorate-General for Energy and Transport, 2006).

3.2 Internal Energy Policy of the EU

3.2.1 The Green Paper of 2000 on “Towards a European Strategy for the Security of Energy Supply”

The 2000 Green Paper on “Towards a European Strategy for the Security of Energy Supply” put forward a new European energy strategy. The Paper presents the weaknesses, future challenges and appropriate policies.

The weaknesses of EU in energy stem from its highly unequal consumption and production levels, which result in external dependence. As stated above, the EU is the second largest energy consumer after the USA, and the largest energy importer in the world. As the Paper puts forward, in the biggest energy consumer

sectors, such as households, services and transport, the EU is dependent on oil and gas⁶ (The Green Paper, 2000: 14-15). Yet, the Community's reserves are very limited in oil and gas. Moreover, because of the low quality of solid fuels and the high costs of their production, in absolute terms EU does not produce the desirable amounts of solids. Thus, as a result, in 1998, only half of the energy consumption is compensated by the EU production, and the rest is imported. The Green Paper alerts that the picture will become more worrying considering the fact that EU's physical energy stocks are bound to decrease (The Green Paper, 2000: 21). Therefore, external dependence will increase if the present trends continue. The Green Paper foresees 90% dependence for oil, 70% for gas and 100% dependence for coal in the next 20-30 years (The Green Paper, 2000: 21). Moreover, the dependence is not only limited to supply but also to the transit. Russian gas, which composes 40% of gas imports of the EU, for instance, needs to be transported by third parties, Ukraine being the main one.⁷ What is more, if Caspian gas is to be imported, the EU will also become dependent on Turkey and South East European states for transport.

Another weakness of the EU is its inability to be influential over international prices. According to the Green Paper, developing countries' energy choices will affect the international energy markets the most (The Green Paper, 2000: 27). Furthermore, the EU is not capable of changing geopolitical events such as the Middle East peace process and Organization of the Petroleum Exporting Countries' (OPEC) decisions. For the Green Paper, the basic reason of the EU's inability of influencing the international market is the lack of Common European

⁶ 63% of household needs are supplied by oil and gas and 98% of transport consumption is established by oil.

⁷ 80% of Russian gas to the EU is transferred by Ukraine.

Energy Policy, which reduces the EU's bargaining power (The Green Paper, 2000: 28).

Having mentioned the problems of the EU on energy, the Green Paper evaluates the positive and negative sides of each energy resource for EU consumption. The Paper defines nuclear energy and coal as “undesirables” because of the negative European perceptions about these resources (The Green Paper, 2000: 30). As for nuclear, although it has a strong potential to reduce carbon emissions, the Member states do not desire to invest on it for several reasons. Firstly, “the potential health and environment hazards from nuclear fission mean that public opinion is to some degree opposed to it” (The Green Paper, 2000: 32). Moreover, the Paper asserts that:

The arrival of pressure groups and ecological parties onto the political stage of the Member states and Chernobyl accident marked a turning point in the development of nuclear industry ...five out of eight member states with nuclear power have now adopted or announced a moratorium ...Italy renounced nuclear energy following a referendum in 1987, Germany has announced its decision to shut down its last reactors in 2021, and Belgium will do the same in 2025 (The Green Paper, 2000: 32).

Second, the storage of nuclear waste is posited as another problem in the Green Paper. Nuclear energy, according to the Paper, can be developed when “the waste issue finds a satisfactory solution with maximum transparency” (The Green Paper, 2000: 33).

Other factors that can affect the future of nuclear energy are “the economic viability of the new generation of power stations, the safety of reactors in Eastern Europe and the fight against nuclear proliferation in the CIS” (The Green Paper, 2000: 32).

Coal, once the dominant resource in the Union also has several problems in its production and consumption phases. First of all, the cost of imported coal is cheaper than domestic coal, which resulted in the decline of production in the Community. Second, “coal generates pollution at every stage of production and utilization cycle” (The Green Paper, 2000: 34). This is an important problem for EU since it has commitments to reduce pollution.

However, coal also has important advantages. Firstly, “being sold on a competitive international market, the price of coal shows unequal stability compared with other energy products” (The Green Paper, 2000: 34). Second, “the flexibility of coal contracts and the development of a spot market have allowed the price of coal to adjust constantly to the market situation” (The Green Paper, 2000: 34). Based on those facts, the Green paper links coal’s future “to the development of techniques which make it easier to use and lessening the environmental impact in terms of pollutant emissions through clean combustion technologies and CO₂ sequestration” (The Green Paper, 2000: 36).

The picture in oil, on the other hand, is different than nuclear energy and coal, because of its ease of use and the established practices. The Green Paper foresees that with the ongoing trends, oil dependence will reach 90% by 2020, 50% of which will be imported from the OPEC. To prevent the risks attached to oil dependence, the Green paper puts forward the diversification of resource types. This is where natural gas and renewables become important.

Natural gas and renewable energy resources are presented as “seductive alternatives”. Natural gas has gained a considerable place in the energy consumption of the EU lately due to its ease of use in different sectors such as power, heating and transport; and due to its low carbon emission levels. However, natural gas also has some disadvantages. Accordingly:

...the combination of price indexing, supplies under long-term take or pay contracts and imports into Europe primarily through gas pipelines makes the gas market into a regional market, characterized by reduced competition between exporters...with regard to Russia, a certain increase in dependence on that country seems inevitable (The Green Paper, 2000: 40).

Thus, the Green Paper resumes the gas dependence as follows:

In the long run, the supply of gas in Europe risks creating a new situation of dependence, all the more so given the less intensive consumption of carbon. Greater consumption of gas could be followed by an upward trend in prices and undermine the European Union’s security of supply (The Green Paper, 2000: 41).

To overcome this problem, the Green Paper proposes geographical diversification of the gas supplies, which can be realized by pipeline transfer from the Caspian and the Middle East region and by liquefied natural gas (LNG) from overseas.

Renewable energy resources are labeled “political priorities” because of their potential to increase the security of supply by diversification, by contributing to indigenous production, and by their zero or low carbon emission levels. The types of renewables that can be used efficiently in the EU are hydroelectricity,

biomass, wind energy, solar power, and geothermal. The Green Paper also focuses on bio-fuels for their potential to substitute oil in transportation. The bio-fuels have advantages in two senses: first, they emit between 40-80% less greenhouse gases than other fuels (The Green Paper, 2000: 43). Second, they reduce dependency on oil thus increasing energy security. Although the share of bio-fuels is really small - 0.15% of the total consumption of mineral oils in 1998 (The Green Paper, 2000: 42)- they are seen as an important alternative to oil in transportation by the Green Paper.

However, the Green Paper also mentions the obstacles to the development of renewables. First of all, the economic and social system is based on centralized development around conventional sources of energy, such as coal, oil and natural gas. Second, renewables require significant investment. Finally, “subsidiary, national, regional and local regulations need to be adopted for land planning and use to give clear priority to the installation of generation plants for electricity from renewable energy sources” (The Green Paper, 2000: 44). Unless these obstacles are overcome, the target set up by the Commission in 1998, such as to double the production level from renewables by 2010, cannot be met.

In short, the weakness of EU energy situation stems from low level of production capacity, high levels of consumption and external dependence. Based on current trends, mentioned above, the EU is expected to increase its dependence on oil and gas. The development of indigenous production in coal and nuclear does not seem probable because of environmental commitments of the EU and public opposition against nuclear. Renewables, on the other hand, seems to have lots of obstacles to develop in the near future. All of these factors establish the weaknesses of EU energy situation.

The second part of the Green Paper presents the challenges that the EU should overcome due to its energy supply. The first one is the climate change and the second is the integrated European energy market.

For the Green Paper, climate change is a global security problem, which can affect economic activities and land use of mankind deeply (The Green Paper, 2000: 48). The reason for climate change is attributed to the energy sector in the Green Paper because fossil resources are producing CO₂, which is responsible for the greenhouse effect (The Green Paper, 2000: 47). For example, in the EU, oil accounts for 50% of CO₂ emission, coal for 28% and natural gas for 22% (The Green Paper, 2000: 47).

Being a member of the Kyoto Protocol, the EU has strong commitments in dealing with the issue. EU commitment is to reduce its greenhouse gas emission by 8% in 2012, compared to the 1990 level (The Green Paper, 2000: 47). Yet, this target seems ambitious, considering the fact that, “total emissions of greenhouse gases by the Union of 15 Member States are expected to increase at least 5,2% between 1990-2010, if no action is taken” (The Green Paper, 2000: 48). Thus, there is a need for new policies, the most important of which are reducing the consumption and increasing the share of less carbon-intensive energy products, particularly in road transport and buildings (The Green Paper, 2000: 49). Reducing consumption can be achieved by a more efficient taxation system. By more efficient, the Paper means a “harmonization of tax rates between Member States” whereby it will be possible to restructure national taxation systems and achieve reduction objectives in environment and transport (The Green Paper, 2000: 55). Increasing the share of less carbon intensive technologies by state aids is also considered an effective policy measure to reduce the consumption and CO₂ levels.

For the Green Paper, some energy sectors like oil, gas and nuclear power should not benefit from state subsidies, while renewables should. An effective demand management, at the same time, is considered as an influential policy to tackle climate change problem. Decrease in energy demand by informing individuals and by using more energy efficient products will not only decrease dependence on fossil fuels, but will also decrease the CO₂ level that is produced by these fossil resources.

In short, in regard to climate change, the Commission proposes two main policies: reducing the consumption by which fossil resources' usage will decrease and using less carbon-intensive resources such as renewables. The latter can be provided by efficient Community wide legislations as taxation and state aids.

The IEM is as another challenge that should be overcome in EU energy policy. The Community, though having no competence in this area, has succeeded to adopt some measures in the integration of an international market, such as achieving price transparency, the transit of electricity and gas through grids (The Green Paper, 2000: 58). Yet, there are still important obstacles to be overcome to achieve a fully working internal market. Low level of intra-Community trade in electricity and insufficient transmission systems are slowing down the integration of national markets (The Green Paper, 2000: 59). To tackle these problems, the Green Paper states that "a European mechanism for collaboration between internal parties with a view of defining a European plan for the major missing internal infrastructure could resolve these problems" (The Green Paper, 2000: 60).

More concretely, the Paper proposes two new components. First, "all the national regulations should sit on an advisory body to assist the Commission with the smooth operation of the internal market" (The Green Paper, 2000: 61), and

second is the creation of a new interconnection infrastructure (The Green Paper, 2000: 61).

The third chapter of the Green Paper is the main part where energy strategy is outlined. Before drawing the policies, the Paper presents the energy situation more concretely. Accordingly, oil and gas reliance is inescapable as well as the increasing import dependency (The Green Paper, 2000: 67). Moreover, with the ongoing trends, renewables will short of the desired targets which will result in the failure to decrease CO₂ emissions and to meet Kyoto objectives (The Green Paper, 2000: 67).

Having presented these problems, the Green Paper proposes controlling the growth of demand and managing supply dependence as the most appropriate policies in EU energy strategy.

Controlling of the growth of demand is crucial to reduce the massive dependence on foreign energy supplies and to realize the commitments of the Kyoto Protocol (The Green Paper, 2000: 69). The most effective instruments for controlling demand are taxation, legislation, energy saving schemes, and development of new technologies. While taxation and new legislations will control the demand, through the development of new technologies energy saving will be possible. Thus, controlling demand, and decreasing consumption will be possible. The Green Paper also proposes sectoral policies to control the demand. In transport, the imbalance between road transport and rail transport is addressed, and the problematic sides of road transport, such as being a large oil consumer and emitting high levels of CO₂, are mentioned. The concrete policies that the Green Paper proposes here are the revitalization of railways, development of short sea shipping and usage of inland waterways, reorganization of road transport sector, developing

a trans-European rail freight network, promoting urban transportation, using hydrogen fueled vehicles, and finally developing of ‘polluter pays’ system (The Green Paper, 2000: 70). In buildings too, the Green Paper proposes energy saving rules such as “the introduction of standard energy certificates that would make the energy variable factor on the property market and will create demand for energy-efficient buildings” (The Green Paper, 2000: 71), and encouraging the use of renewable energy resources in new buildings (The Green Paper, 2000: 72). Thus, the controlling of the growth of demand will serve two main objectives of EU energy policy: increase the energy security by reducing the dependence and realizing environmental commitments by reducing the consumption of fossil fuels.

Another policy to increase the energy security of the EU is the responsible policy for managing supply dependence. Since the development of less pollutant energy sources, as renewables and nuclear, are also increasing the indigenous production, reliance on these resources will decrease the supply dependence. Moreover consistent stock policy in oil and natural gas will also reduce the risks related on supply dependence.

As for ensuring external supplies, ongoing dialogues with producers are essential (The Green Paper, 2000: 73). Moreover, to have a supply network with security guarantees also increases security of supply. Here, the construction of new oil and gas pipelines, by which Caspian and Middle East resources will be transferred, is essential. Also, “for imports of electricity, there should be better interconnections between the networks of Member States of those of the Union with the applicant countries, and Russia.” (The Green Paper, 2000: 74) These policies of EU will be analyzed in more details later, under the External Policy of EU section.

3.2.2 The Green Paper of 2006 on “A European Strategy for Sustainable, Competitive and Secure Energy”

In 2006 the Commission published a new Green Paper under the name of ‘A European Strategy for Sustainable, Competitive and Secure Energy’. As mentioned in its introduction, this Green Paper puts forward suggestions and options that could form the basis for a new comprehensive European energy policy. (The Green Paper, 2006: 4) This energy policy should have three main objectives: Sustainability (sustainable development), competitiveness and security of supply. From that perspective, this Green Paper is similar to its precedent Green Paper of 2000, in the sense that both try to achieve security of supply by respecting environment and increasing competition by integrating energy markets. Yet, the Green Paper of 2006 proposes more concrete policies, especially in internal market, than the Green Paper of 2000. Also, the Green Paper of 2006 focuses more on the technical side of energy issue.

To achieve sustainability, competitiveness and security of supply, the Green Paper specifies six priority areas that include concrete policy proposals. The first priority is the completion of the internal electricity and gas markets. The Green Paper believes that the sustainability, competitiveness and secure energy cannot be achieved unless open and competitive market exists. “A truly competitive, single European electricity and gas market would bring down the prices, improve security of supply and boost competitiveness” (The Green Paper, 2006: 5). Although the Commission achieved some degree of success in opening of the market, as EU consumers’ right to purchase electricity and gas from any supplier in the EU, there is still a lot to do. As mentioned in the Green Paper, many markets in Europe are

still largely national and dominated by a few companies (The Green Paper, 2006: 5); and there are also many differences between member states approaches regarding the market opening (The Green Paper, 2006: 5). Besides these national differences, there are also structural problems in achieving a fully integrated market. Actions are needed in the development of a single European grid, improving interconnections, investing in generation capacity, creating more effective unbundling and boosting the competitiveness of European industry (The Green Paper, 2006: 6-7).

The second priority area is the establishment of the IEM that guarantees the security of supply and solidarity between member states. Enhancing security of supply in the internal market might be achieved by the European energy supply observatory which will monitor the demand and supply patterns and “which will identify the possible shortfalls in infrastructure and supply at an early stage” (The Green Paper, 2006: 8); improved network security, which will require the increased coordination and exchange of infrastructure between transmission systems; a mechanism that will prepare and ensure rapid solidarity, and common standards to protect infrastructure (The Green Paper, 2006: 8). A review of EU’s approach to oil and gas stocks is essential. “This would be helped by a new Commission legislative proposal ensuring the publication on a more regular and transparent basis the state of Community oil stocks” (The Green Paper, 2006: 8).

The third priority area is to diversify the energy mix by which sustainability will also be achieved. By Using clean coal technology and nuclear power (as long as the nuclear waste and safety problems are addressed), the EU will achieve sustainability. Indigenous production by coal and nuclear will also decrease EU dependence on foreign supplies.

The fourth priority is the necessity of an integrated approach to tackle climate change. Increasing energy efficiency and thus reducing the consumption of fossil fuels, using more renewable energy resources in electricity and in transport are the main policies to handle climate change problems (The Green Paper, 2006: 10-13). To achieve the former, that is, increasing energy efficiency, the Green Paper proposes long term targeted energy efficiency campaigns, increasing efficiency in buildings, improving efforts in energy efficiency in transport sector and improving urban public transport, and “harnessing financial instruments to stimulate investments in energy efficiency projects” (The Green Paper, 2006: 11). For the latter, the paper proposes a renewed effort to meet existing renewable targets (12% by 2010), consideration of new targets and objectives beyond 2010, “a new directive on heating and cooling” (The Green Paper, 2006: 12), a detailed plan to stabilize and reduce the EU’s dependence on imported oil, and initiatives to bring clean and renewable energy sources closer to markets (The Green Paper, 2006: 19).

The fifth priority area is the creation of a strategic European energy technology plan. The development of new technologies will help the EU achieve sustainability and security of supply more easily by contributing to energy efficiency and low carbon technologies. To succeed in doing this, the Green Paper offers a strategic energy technology plan, which “should accelerate the development of promising energy technology” (The Green Paper, 2006: 13), and “making best use of Europe’s resources” (The Green Paper, 2006: 19).

The sixth priority is the creation of common external energy policy. This is going to be analyzed in the next section in more details.

3.3. External Energy Policy of the EU

This section will analyze the external energy policy of the EU. Although the EU does not have a CEP yet, there are strong efforts and initiatives of EU institutions, mainly the Commission, to establish the Community wide external energy policy. For this reason, in various papers, the external challenges, risks, objectives and policies are presented. The aim of this section is to analyze this external policy of the Union. What are the external challenges to EU energy security, in which ways they can be tackled, what relations has the EU established with third parties, and for what reasons are the questions that will be answered. The first part of the section will put forward the challenges and objectives of EU external energy policy and will show how the EU designs its external energy policy. The second part will analyze EU relations with third parties in energy, particularly with producer regions. Overall, the analysis of the external energy policy of the EU will help to understand the energy security behavior of the Union.

3.3.1 The Objectives of EU External Energy Policy

EU external energy policy is designed to respond to the energy challenges and problems that arise from outside conditions. The main external challenge to EU's energy security stems from its over dependence on foreign supplies. As presented in the first chapter, EU energy security is defined as achieving reliable, affordable and sustainable flows of energy. To achieve all of these targets, the EU is dependent on foreign supplies. As the EU cannot produce the sufficient amount of

energy to meet its consumption, EU is dependent on external supplies and outside conditions such as increasing global energy demand and rising oil and gas prices- to be able to get reliable, affordable and sustainable input of resources. Moreover, climate change, one of the objectives of EU energy security, being a global problem, requires global action. Therefore, in this topic too, the EU is dependent on other actors' policies. In short, EU energy security is and can be affected greatly by outside conditions. This is why external energy policy is very important for EU energy security. This is also reflected in various papers of the EU. In the Green Paper of 2006, the reason for the creation of a common external policy is to react to "the challenges of high and volatile energy prices, increasing import dependency, strongly growing global energy demand and global warming"(The Green Paper, 2006: 19-20). Another Commission paper mentions, "the development of a coherent and focused external EU energy policy, drawing on the full range of EU internal and external policies, would enhance the collective external energy security of the Union" (An External Policy to Serve Europe's Interests: Paper From Commission /SG/HR for the European Council, 2006).

How should such strategically important policy be designed, and what should be its objectives are the next questions. The first step should be "to agree at Community level on the aims of an External Energy Policy and on the actions needed at both Community and national level to achieve it" (The Green Paper, 2006). A Community-wide policy would allow the EU to speak with one voice, which will result in the strengthening of leverages. In other words, a single European external policy rather than Member States' policies will increase the political and economic influence of the Community in external supply conditions. This External Energy Policy, in general sense, must be:

...coherent (backed up by all Union policies, the Member States and industry), strategic (fully recognizing the geo-political dimensions of energy-related security issues) and focused (geared towards initiatives where Union level action can have a clear impact in furthering its interests. It must also be consistent with the EU' broader foreign policy objectives such as conflict-prevention and resolution, non-proliferation and promoting human rights (An External Policy to Serve Europe's Interests: Paper From Commission /SG/HR for the European Council, 2006).

Based on this general definition, the EU proposes particular policies in external energy policy. For the Green Paper there should be several subtopics of this policy. First of all, a clear policy on security and diversifying energy supplies is necessary. Such policy would provide "clearly identified priorities for the upgrading and construction of new infrastructure necessary for the security of EU energy supplies, notably new gas and oil supplies and energy terminals as well as the application of transit and third party access to existing pipelines" (The Green Paper, 2006: 15). The Green Paper identifies the Caspian region, North Africa and the Middle East as alternative oil and gas suppliers. Second, energy partnership with producers, transit countries and other international actors is an important step for a coherent external policy. This is twofold: dialogue with major energy producers which would offer security for both the EU and producers, and developing a pan European energy community that would increase security of supply for EU and its neighbors by "developing common trade, transit and environmental rules, market harmonization and integration" (The Green Paper, 2006: 16). Third, reacting

effectively to external crisis situations can promote EU interests in its energy policy. Here the Green Paper offers a new Community mechanism to “enable rapid coordinated reaction to emergency external energy supply situations impacting EU supplies” (The Green Paper, 2006: 20). Fourth, the Paper proposes integrating energy into other policies with an external dimension. This means integrating energy policy into climate change and energy efficient renewable resources with other major energy consuming countries like US and Japan. The EU sees any cooperation in those fields as beneficial for Europe’s energy security. In short, diversification and energy partnerships/dialogues with other actors can be considered as the main proposed external energy policies in the 2006 Green Paper. The next part analyzes these policies in more details.

3.3.1.1 Diversification

Diversification of the resource base is crucial for energy security since it reduces the risks and the problems linked to the supply. As long as the suppliers are diversified, the risks that might arise from one exporter are minimized. This maximizes reliability, sustainability and affordability, which are the main factors of energy security.

It might be assumed that EU has not been successful in diversifying its energy base and the energy routes so far. At present, 80% of EU’s gas supply comes from three countries: Russia has the biggest share with 41% (BP, 2006). In oil, on

the other hand, the picture is slightly better with 35% import dependency on the Former Soviet Union (FSU) and slightly less on the Middle East.

EU decision makers once more realized the importance of diversification for the energy security and the problem of being over reliant on a few suppliers and on a few transit routes after the Russian-Ukrainian dispute over natural gas prices in January 2006.⁸ Since then, the alternative suppliers and diversification routes have started to be discussed in the EU more frequently and deeply. This section analyzes the initiatives of the EU in diversifying its energy routes. However, it should be mentioned that the focus here will be more on natural gas pipelines than oil pipelines because natural gas has more potential of creating dependence between the parties, since it cannot be transferred as easily as oil or coal. While oil and coal can cheaply be transferred by seaway and this makes diversification easier, there are only two ways of transporting gas: by pipeline or LNG. Because of the latter being expensive and generally preferred in long distance overseas, pipeline is the most common way to transfer gas. The restricted options in transferring gas generally and particularly in the EU's case because Russia's geographical proximity to Europe as well as its historical ties with the region's countries and the existing pipeline system with Europe are the factors that make the diversification of gas more difficult for the EU. For these reasons, future transfer of gas seems to be crucial for EU energy security and this is why the focus will be on alternative gas routes.

⁸ "Although there was no slow down in the stream of Russian exports to Europe, the dispute raised doubts about Russia's reliability as a source of energy to Europe" (Baghat, 2006, p.962).

3.3.1.1.1 Alternative Natural Gas Routes

Alternative natural gas routes are designed mainly to reduce the dependence on Russia in gas supplies and on Ukraine in gas transit. This is why Caspian Basin and the Middle East are seen as the most viable options for diversifying gas sources. The planned projects are as follows:

a. The Nabucco Project

The Nabucco Project aims to diversify both the supplier and the transit country in natural gas by exporting the Caspian and the Middle Eastern gas to Europe through Turkey, Bulgaria, Romania, Hungary and Austria. The pipeline will be 3300 km long and will have a capacity of 25-30bcm/y. The transit countries are expected to take 8-10bcm/y, making final delivery in Austria around 17-22bcm/y (Robert, 2004: 9).

In 2004, the Nabucco Gas Pipeline International GmbH is established with the objective of coordinating the project. The shareholders of the company are Botaş, Bulgargaz, Transgaz, Mol and OMV. Total, Gaz de France, E.On and RWE have also applied to join the project, which can help to resolve the financial problems because of the latter companies' high credit ratings.

The technical issues of the project are expected to be resolved by the end of 2007, and the construction is due to start in 2008, for completion by 2011 (Petroleum Economist, 2007).

b. The South Caucasus Pipeline (SCP)

The SCP is another pipeline, which will transfer Central Asia's gas to Europe via Turkey. The pipeline will transfer Azeri gas first to Tbilisi and then to Erzurum in Turkey. SCP will supply 8.6bcm/y in the first phase, but it is expected to export 20bcm/y capacity when BP, the technical operator of the pipeline, will develop Shah Deniz Caspian gas fields (Petroleum Economist, 2007).

The significance of the pipeline might increase in the future if two other projects are also realized. The first one is the Nabucco Project that is mentioned above. The SCP could feed Nabucco and thus enhance its capacity. The second is the Trans Caspian Pipeline (TCP), which aims to transfer Kazakh and Turkmen gas to Azerbaijan. Although the TCP is just an idea right now and there are many potential problems about its development, if it is realized it could be linked to SCP and then to Nabucco. The TCP-SCP-Nabucco would make each project very significant for EU energy security due to their ability to reduce EU dependence on Russia in gas supplies and on Ukraine in gas transit.

c. The North European Gas Pipeline (NEGP-Nord Stream)

The NEGP project aims to transport Russian gas from the "Russian coast north of St. Petersburg (Vyborg) under the Baltic Sea to Northern Germany and then onward via the Netherlands to the UK" (Communication from the Commission to the Council and the European Parliament on the development of energy policy for the enlarged EU, its neighbors and Partner Countries, 2003). Sweden, Denmark,

Belgium and France could also be potential users of this gas. This is a joint project of three major companies: Gazprom of Russia, Wintershall of Holland and E.ON Ruhrgas of Germany and the project is scheduled to begin operation in 2010. In the first phase, there will only be one pipeline with the transport capacity of 27,5bcm/y. In the second phase, a parallel pipeline, which is planned to be built in 2012, will come on stream and will double the capacity (www.nord-stream.com/eng/project, last accessed on 12 July 2007).

The construction of the pipeline would not help the EU's objective of diversifying suppliers. Yet, the pipeline will still enhance EU energy security by making it less dependent on Ukraine in gas transit because the pipeline will transfer Russian gas directly to Europe.

d. The Medgaz and Galsi Pipelines

Another strategy of the EU to decrease its dependence on Russia is to rely on its other exporter Algeria. For this reason, two other projects under consideration are: Medgaz and Galsi Pipelines.

1. Medgaz Pipeline

Medgaz Pipeline aims to transfer Algerian gas first to Spain and then to European markets. The pipeline will first transfer Algerian gas from Hassi R'mel gas field to Mediterranean coast of Beri Saf. From there, the gas will be transferred by offshore pipeline to the Spain coast of Almeria. The pipeline is expected to become operational in 2009 and when complete, the pipeline will transfer 8bcm/y (Communication from the Commission to the Council and the European Parliament on the development of energy policy for the enlarged EU, its neighbors and Partner Countries, 2003).

2. Galsi Pipeline

Another planned pipeline is Galsi, which aims to transfer Algerian gas, from Hassi R'mel field to first Sardinia and then to the west of Italy. The Galsi pipeline is expected to be operable at the end of 2009 and will transfer 8bcm/y like Medgaz. (Petroleum Economist, 2003)

These two pipelines- Medgaz and Galsi- could also establish the first phase of larger projects as transferring the gas of other states in Africa. Nigeria, for example, is one of the most important potential suppliers with its large gas resources. EU has already made efforts to transfer Nigerian gas to Europe by using existing and future pipeline infrastructure between Algeria and Spain. With the Nigal pipeline, also referred as Trans-African/Trans-Saharan, gas from Nigeria's

Warri region will be transferred to the Mediterranean coast of Algeria, and then from there, it will be supplied to Europe. The pipeline is expected to become operational in 2015 with the transfer capacity of 30 bcm of gas per year. (<http://www.answers.com/topic/nigal-pipeline>, last accessed on 14 July).

e. Turkey – Greece – Italy Interconnector

Interconnector means a two-way pipeline system. So, when this project is completed, it will be able to transfer gas from East to West and vice versa. Thus, the project will increase ‘the flexibility of the supply’ (Roberts, 2005: 10).

The first phase of the project is to build an interconnector between Turkey and Greece. Approximately 300 km long, the interconnector will work from Karacabey of Turkey to Komotimi of Greece. When completed, it is expected to transfer 3bcm/y to Greece.

The second phase of the interconnector will be between Greek terminal of Stavrilimenas and Italian part of Otranto (Roberts, 2005: 10). This second line is expected to be operational in 2011, with the capacity of transferring 8bcm/y.

This interconnector is designed to link to STC, whereby it will be able to transfer Caspian gas to Europe. As EU energy commissioner Andris Piebalgs puts forward in his speech “this infrastructure will contribute to the European efforts to diversify both the geographical origin of European energy and the supply routes” (http://www.neurope.eu/view_news.php?id=70054, last accessed on 14 July 2007).

3.3.1.2 Energy Dialogues and Partnerships

3.3.1.2.1 The EU-Russia Energy Dialogue

The creation of EU-Russia energy dialogue stems from one basic fact: mutual interdependence. As it was shown above, Russia is the main energy supplier of the EU; it is the largest gas and the largest oil exporter. It is also the largest uranium supplier to the EU and provides a considerable proportion of the uranium enrichment requirements (Communication from the Commission to the Council and the European Parliament on the development of energy policy for the enlarged EU, its neighbors and Partner Countries, 2003). This mutual interdependence creates the condition of EU willingness to secure adequate energy supplies and Russian willingness to secure foreign investments in energy production. The dialogue is thus based on the basic assumption that “interdependence between the two regions will grow – from the EU for reasons of security of supply; on the part of Russia, to secure foreign investments and facilitate its own access to EU and world markets” (Euractive, 2007). More simply, the reason of the dialogue can be described as “Europe’s investments in return for Russia’s oil and gas” (Bahgat, 2005: 23).

Under this mutual interdependence, both sides agreed at the October 2000 EU-Russia summit to institute an energy dialogue on a regular basis. The purpose of this dialogue is noted as:

...to raise all issues of common interest related to the energy sector,
including the introduction of cooperation on energy saving,
rationalization of production and transportation infrastructures,

European investment possibilities, and relations between produces and consumer countries (<http://ue.eu.int/newsroom>, last accessed on 19 July 2007).

In the Synthesis Report of 2001, the common concerns of the parties, the mutual interests and the common short and long term interests were identified. Accordingly, the parties “share the same concerns ensuring stable energy markets, reliable and growing imports and exports, modernized Russian energy sector, improve energy efficiency and reduce green-house gas emissions”(Synthesis Report, 2001). Based on these concerns, the Synthesis Report designs five major themes of mutual interest: ensuring the security of energy supplies, the development of the Russian economy and energy resources, the application of pan European market, the challenge of climate change, the conditions framing the use of nuclear energy (Synthesis Report, 2001). Based on these mutual interests and common concerns, the Synthesis Report proposes an agreed set of mutual commitments, which is expected to become legally binding for both parties. In that sense, issues leading to rapid results and longer-term initiatives are proposed. For the former one, the situation of long term take-or-pay contracts, new strategic transport infrastructure of common interest (new energy routes), improvement of the energy production and legal framework for the large-scale investments, security of the transport networks (creation of regional satellite monitoring system which will control the transport system) and energy efficiency are set as the short term targets. Long term initiatives, on the other hand, consist of the political investment support scheme, cooperation in the field of climate change, in which the ratification of the Kyoto Protocol by all parties has utmost importance, technology cooperation and

building a technology center, trading electricity, energy efficiency and the use of renewables. These short and long-term policies have established the base of EU – Russia Energy Dialogue and as the progress reports since 2001 have shown, the dialogue tries to achieve these objectives.

So far, the dialogue has achieved significant results in some areas. First of all, EU – Russia Energy Technology Center was built in 2002, with the objective of strengthening cooperation in energy technologies in the sectors of oil, gas, coal, electricity and renewables, attracting investments and to contribute energy efficiency (<http://www.technologycentre.org/content.php?topic=4>, last accessed on 19 July 2007). The Center's work program consists of information exchange, coordination of activities to facilitate contacts between EU and Russian energy sector actors, identifying and assisting the promotion of large scale technology cooperation projects, cooperation with other Russian, the EU and Member States' energy centers, and the creation of a common information space for the dissemination of energy technology (Piper, 2004: 19).

The center has so far organized considerable amounts of round tables, seminar workshops and congresses, all of which focused on energy efficiency, use of renewables, technology transfer, investment projects and clean coal technology. The Fifth Progress Report (2004) presents the achievements of the Centre as follows:

Among the numerous events the center has organized, specific mention should be made of the round tables held on modern technology for the exploitation of hard-to-recover oil reserves, implementing advanced coal preparation technology in Russia, the technology regulation of power plants to assure the stability of the grid, the EU experience of

promoting renewable energies and its relevance for Russia, and a round table energy efficiency and renewable energies in buildings.

With respect to investment promotion, the Center also organized a workshop with the European Bank for Reconstruction and Development on project financing (Fifth Progress Report, 2004). Furthermore, the round tables served to

the harmonization of technical norms and standards in electricity sector, on the legal framework for the refining industry and for the use of renewable energies, on advanced technology for the safety of underground coal mining and on the possible participation of EU business in the Russian domestic gas market” (Sixth Progress Report, 2005).

The second achievement of EU-Russia Energy Dialogue is the building of the pipeline system in Northern Europe. Starting from the First Synthesis Report, each progress report has focused on the establishment of new strategic transport infrastructure, which would be beneficial for both parties. North European Gas Pipeline project, which connects Russian gas directly to Europe, has been recognized as a priority project during the dialogue and its construction started in 2005 and is expected to end in 2010.

The third achievement is the signing and the ratification of the Kyoto Protocol by Russia in 2005. This will help cooperation more on energy efficiency, use of renewables, and clean coal technology.

Finally, EU-Russia Energy Dialogue contributed to Russia taking more measures in maritime safety. In 2003, Russia banned the transport of heavy oil in single hull tankers and strengthened its checks on tankers that discharge in its ports (Fifth Progress Report, 2004).

Yet, EU-Russia Energy Dialogue is not without problems. Although there have been some achievements, the progress has been slow. The most important reason for this is Russia's unwillingness to fully open its energy markets. By the monopolies of the state owned companies in energy, Russia can promote its strategic and economic interests in the Eurasian region and in the international arena. With the opening of its energy market, Russia will be unable to control energy policy in a way that will promote its strategic political and economic interests. This is why Russia is unwilling to open its market to foreign investments which slows down the progress of the dialogue. Moreover, the dialogue involves a host of participants as private and state controlled companies. These actors usually have their own agenda and this often conflicts with the decision of the Russian government and the EU, which is one of the factors that retard the progress (Grant and Barysch, 2003).

3.3.1.2.2 The Euro- Mediterranean Energy Partnership

The Euro-Mediterranean Partnership is a part of the Euro-Mediterranean Partnership, the starting point of which was the Barcelona Declaration of 1995 that pointed out the need to create an area of peace, stability, shared prosperity, an economic area of free trade and a development of economic and financial cooperation. To achieve these objectives, the partnership was developed around three axes: first is the politics/security, second is the economy/finance and the third is society/culture. The Euro-Mediterranean Partnership comprises 35 members, 25

EU Member States and 10 Mediterranean Partners, which are Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestinian Authority, Syria, Tunisia, and Turkey. Energy was central to economy and finance and to recall the importance of the energy dimension, the Euro-Mediterranean Partnership on energy was adapted in Trieste Conference in June 7-9 1996.

There are several reasons why such a partnership was established between the parties. For the EU, first of all, the region is important in the sense of its geographical proximity to Europe and thus its being a transit route for energy (Kagiannas et al., 2003: 2668). Second, the region possesses a considerable amount of oil and gas reserves, which is important for EU energy security and the EU objective of energy diversification. However, with the economic development in the region, energy consumption is expected to increase which means the potential energy resources will be used for domestic consumption rather than export. Being aware of this fact, EU, by the energy partnership, aims to provide financial assistance and technology transfer to the region, which will encourage energy efficiency and development of renewables. “This process will help rein in excessive growth, in domestic energy demand and increase the energy available for export to Europe” (Kagiannas et al., 2003: 2668). The EU assistance is also important for the Mediterranean Partners (MPs), because by energy efficiency, those countries will be able to save and thus export more resources to EU, whereby they will generate more revenues for their economies (Kagiannas et al., 2003: 2669). Therefore, there is a mutual interest between the parties to develop the partnership.

Based on this mutual interest, the fields of cooperation in the energy sector, as specified in the Trieste Conference, aims to create the appropriate conditions for investments in energy sector and combat climate change (Petroleum Economist,

2003). The fields of cooperation in the Trieste Conference are specified as energy policy, which will build a consistent approach between the parties; infrastructure and networks, which will develop energy networks; industrial cooperation and Research and Technological Development to promote technology and investments, and energy efficiency (Petroleum Economist, 2003).

In 1998, at the Brussels Ministerial Conference of energy ministers, the objective of the Euro-Mediterranean Energy Partnership are defined as:

- security of supply, through the development and diversification of energy resources and through closer international cooperation, taking account of the complementarity between producer, transit and consumer countries in the Mediterranean basin and their mutual benefits;
- competitiveness, in particular with a view to the free trade area which it is proposed to create by 2010 and through greater industry cooperation, taking account of the different economic and social conditions from one country to other;
- protection of the environment, while ensuring safe and clean production, transportation and use of energy and encouraging energy efficiency and renewable energy (Annex 2, Euro-Mediterranean Energy Forum priorities for 2003-2006).

In 2000, at the Grenada Forum, the priorities of the energy policy are agreed.

These are:

- reform of the legislative and regulatory energy sector frameworks of the Mediterranean partners (MP);
- restructuring of the energy industry of the Mediterranean partners;

- convergence of the energy policy of the EU and the Mediterranean partners;
- integration of the Mediterranean energy market and strengthening competition;
- development of interconnections, in particular South – South;
- the promotion of renewable energy sources in the framework of sustainable development (Annex 2, Euro-Mediterranean Energy Forum priorities for 2003-2006).

Although the objectives and the priorities of the Forum are clearly specified, in implementation, the Euro-Mediterranean Energy Partnership has been unsuccessful so far. There are multiple reasons: the reemerging of the Middle East problems in 1997 and 2002, thus the outbreak of the violence, the different perceptions of priorities between the EU and MPs, the perceptions of EU acts as interference to the internal affairs of the MPs, the different country profiles of the MPs and thus difficulty of adopting single policy (Kagiannas et al., 2003: 2682).

Since 2004, the Mediterranean Partners are also included in the European Neighborhood Policy (ENP), under which a new agenda of political and economic reforms for short and medium terms are established. The Action Plans between the EU and each partner set out the agenda to which energy is included. In that way, the design of policy in line with each country's internal situation might be possible. The Action Plans of each country is not going to be analyzed in details here. Yet, the common points of the energy agenda of Jordan, Lebanon, Morocco, Tunisia and

Egypt⁹ in the Action Plans will be underlined. First of all, the adoption of energy policy, which converges with EU energy policy objectives, is the main aim. This means that these states are expected to respect to security of supply, competitiveness and sustainability in their policies. Such a policy is also in line with the EU's aim of creating a pan-European market around itself. Second, the EU proposes convergence towards the principles of EU internal electricity and gas markets. This will require the implementation of organizational, institutional, regulatory and technical policies. Third, the EU tries to promote energy efficiency and the use of renewable energy sources. Designing of new Action Plans and institutions, and increasing the share of renewables by setting targets are the proposed policies. Finally, the Action Plans propose reinforcing and developing of energy networks and infrastructure. Reducing electricity network losses and improving their performance, safety and security; developing new networks, infrastructures and interconnections with neighboring countries and with the EU, and electrification of rural areas are the key policies to reinforce energy networks.

In conclusion, by the EU-Mediterranean Energy Partnership, the EU tries to impart its energy policy and its model to the Mediterranean region. Thus, it can be assumed that for the EU the implication of its energy policy model in the region- security of supply, competitiveness and sustainability- will enhance EU energy security. The EU-Mediterranean Energy Partnership tries to achieve this objective. The problems of the Euro-Mediterranean Partnership, which are mentioned above, can be overcome by the new ENP initiative. Due to its state-based approach, ENP and the Action Plans will probably improve the Euro-Mediterranean Energy

⁹ These countries are the only states which are the members of the EU-Mediterranean Partnership and which have Action Plans under the ENP at the same time.

Partnership, and will contribute to better apply the objectives decided in the Partnership.

3.3.1.2.3 INOGATE

“INOGATE stands for Interstate Oil and Gas Transfer to Europe” (<http://www.inogate.org/en/>, last accessed on 25 July 2007). Institutionalized in 1995, INOGATE is “a dynamic cooperation programme for enhancing security of energy supply in the EU and participating countries in Eastern Europe, the Caucasus and Central Asia” (<http://www.inogate.org/en/>, last accessed on 25 July 2007). The participating countries of the Programme are Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, Georgia, Greece, Kazakhstan, Krygyzstan, Latvia, Macedonia, Moldova, Romania, Serbia and Montenegro, Slovak Republic, Tajikistan, Turkey, Turkmenistan, Ukraine, and Uzbekistan. INOGATE aims at the creation of the integration of the pipeline systems within the region and with the EU. It also acts as an institution to attract private investors and international financial institutions. In that sense, INOGATE is similar to EU-Russia energy dialogue since both aims to attract European investment in the region, in return for the energy cooperation with the EU (Bahgat, 2005: 23).

Funded by EU’s Tacis Regional Cooperation Programme, INOGATE tries to enhance security of supply of both the EU and the participating countries. It succeeds this by focusing on physical security of supply and strategic and commercial aspects of security of supply. The former refers to the security of existing pipeline infrastructure, most of which is old and need investment to be

improved. INOGATE's financial aid to the participating countries has been beneficial to this last point (<http://www.inogate.org/inogate/en/about/context>, last accessed on 25 July 2007). INOGATE is also planning to improve a regional monitoring system to control the operation of gas transit pipelines and underground gas storage facilities.

Yet, the more important role of the Programme is in developing new transit routes between the Caspian region and Europe. There are three important role that INOGATE tries to achieve in this issue. Firstly, "INOGATE helps to define and promote common interest projects between the EU and INOGATE Participating Countries" (<http://www.inogate.org/inogate/en/about/context>, last accessed on 25 July 2007). Secondly, about financing of the projects, "INOGATE helps participating countries in preparing the necessary dossiers for the financing of bankable projects" (<http://www.inogate.org/inogate/en/about/context>, last accessed on 25 July 2007). Third, the Programme improves the institutional and legal basis of the cooperation. This is done by the INOGATE Umbrella Agreement, which came into force in February 2001. "The agreement sets out an institutional and legal system designed to rationalize and facilitate the development of interstate oil and gas transportation and operation" (Bahgat, 2005: 23).

Although the Programme has not been so successful in developing alternative energy routes so far¹⁰, it has had important contributions in several areas. The construction and modernization of gas metering stations, upgrades of underground gas storage stations, supporting of know-how, completion of the INOGATE Investment Attraction Action are the most important projects that INOGATE has achieved.

¹⁰ For twelve years, the only pipeline Project that is realized from Caspian to West was the BTC.

Overall, the INOGATE Programme “has proved a useful vehicle for EU investment over the past decade by backing a number of projects in areas such as energy trade and modernization of gas transport routes” (Kalyuzhonava, 2005: 72). Finally, it should be noted that, unlike the EU-Russian Energy Dialogue, and the EU-Mediterranean Partnership, INOGATE does not focus on broader energy issues, such as environment or competitiveness. Rather, the focus of the Programme is more concentrated on the security of pipeline systems and the enhancing security of supply by establishing new pipelines.

3.4 Interpretations

To reach the energy security objectives of “reliable, sustainable, affordable energy supplies and to consider environmental concerns”, the EU considers three things in its energy policy: security of supply, competitiveness and sustainability. Security of supply includes the policies of diversification, and energy dialogues/partnerships with producers. In other words, security of supply considers mostly third party relationships. Competitiveness, in the first phase, refers to the establishment of a single European energy market. In the second phase, it also aims to open neighboring regions’ and countries’ energy markets, by which the creation of the pan-European energy market will be possible. Sustainability is mostly about climate change and using environmentally friendly energy resources, which will reduce greenhouse gas emissions. This chapter showed how the three aspects of EU energy security understanding are reflected in EU policies. As the aim of the thesis is to understand the central motivation behind EU energy security policies and to

interpret EU energy security behavior in the light of an IR theory (rationalist-neo-realist or constructivist), EU policies on which a theoretical interpretation can be adapted will be summarized in this part.

First of all, the EU avoids the consumption of nuclear and coal because of these resources' environmental problems. Coal generates pollution at every stage of production, which results in huge CO₂ emissions and thus contributes to global warming and climate change. As the EU has strong commitments in reducing greenhouse gases, and as coal produces this gas in a great extent, the coal consumption is decreasing in the Union, although this resource provides diversification and is cheap.

As for nuclear, although it does not change climate negatively, it has its own environmental problems, such as threatening human health and environment by nuclear wastes, and the possibility of nuclear plants' explosion. These are the reasons why many EU member states have decided to phase out the nuclear power plants. This means, nuclear's share in total consumption will decrease, despite the fact that nuclear does not produce CO₂ when burned, it contributes to indigenous production and makes the EU less dependent on foreign supplies.

Second, natural gas' share is increasing and will increase in the future. The most important reason of this is natural gas' low carbon emission levels that means it is an environmentally friendly resource. The opportunity to use it in the large sectors as power generation and heating also widens its consumption. Yet, natural gas creates dependence to exporters and it makes the Union more dependent on Russia, which, in turn undermines EU energy security. However, despite this fact, natural gas' consumption will increase in the future and will make it the primary energy resource, due to its low carbon emission levels.

Third, the EU is trying to enhance the use of renewables and makes strong efforts in this field. Even though the objective to double the use of renewables by 2012 will probably fall short of the target, EU efforts to promote investment, technology and to enlighten national and local rulers about renewables signify that in the mid to long term, the consumption of renewable energy resources will increase.

Fourth, the EU sets the objective of diversification of energy suppliers and transit routes to increase its energy security. As the import dependency in natural gas is the greatest, and the situation will be worse in the future, the diversification of natural gas routes is crucial. The most important potential suppliers of gas are in the Central Asia, the Middle East and the North Africa. By energy partnerships, the EU is planning to build new energy corridors in these regions, whereby increasing gas transfer will be possible. The EU also wants to export its own model of opening markets and respecting the environment to the countries of the region. This will make the gas transfer in the region easier and thus will increase EU energy security.

Fifth, the EU tries to impose environmental regulations to the regions' countries. In the EU-Russia Energy Dialogue, in the Euro-Mediterranean Energy Partnership and in the ENP, the reduction of CO₂ emissions is set as a common concern. For this reason, the EU pushes the regions' states to adopt regulations in the environment, such the Kyoto Protocol, to set renewable targets for the short term and to pay attention on energy efficiency. The signing and ratification of the Kyoto Protocol by Russia, for instance, was a result of EU initiatives. This was mostly the consequence of EU diplomacy and the successful use of the economic instruments available to the Union (Vogler, 2005: 849). In order to persuade Russia

to ratify the Protocol, “the EU promised that it would push for the inclusion of Russia in the WTO” (Scheipers, Sicurelli, 2007: 447).

CHAPTER 4

EU ENERGY SECURITY BEHAVIOR

The aim of this chapter is to answer the research question of this study: is EU energy policy primarily based on its norms or is it based on its material interests? This task will be accomplished by commenting on the energy security policies that are defined in Chapter 3. By answering the research question, this chapter will also make it clear that how EU energy security policy can be interpreted by rationalism-neo-realism and constructivism. Accordingly, while the policies, which are based on material interests, will be explained by rationalism-neo-realism in this study; the norm-based policies will be interpreted by constructivism. Here, it should be noted that rationalism and neo-realism are two different perspectives, although they have common premises in explaining the policies of the actors. Yet, as rationalism is a general perspective, and might include other theories like neo-liberalism, which also focuses on norms from a different perspective than constructivism, to not create inconsistencies in answering the normative side of the research question, only neo-realism will be analyzed along with rationalism while explaining the material interests in policies. On the other hand, norms can be studied under various theories in IR, from positivist theories of neo-liberalism as just indicated, to post-positivist theories of normative theory.

However, in this study, it will be studied under constructivism. The reason why constructivism is chosen to explain norms will be given below.

It should also be notified that, this study, like most of the literature works, sees environment, democracy and good governance, and human right policies as the norms of the EU (Smith, 2005; Vogler and Bretherton, 2006; Manners, 2002: 241, Manners, 2005: 11).

The chapter starts first with the analysis of rationalism and neo-realism, which is followed by an analysis of constructivism. Next, the policies of the Union that are explained in Chapter 3 will be analyzed to determine whether they are based on material-interests or norms. This will give the basic background for the concluding analysis, which will be about interpreting those policies to the IR theories of rationalism-neo-realism and constructivism.

4.1 Rationalist-Neo-Realist Perspective

The aim of this section is to find the most appropriate theory/methodology to explain the security behavior that is solely or dominantly based on material interest. This theory, which emphasizes the role of interests, should, at the same time undermine the role of ideas, identity, norms and culture to find a more clear-cut answer to the research question of this study.

The best theory that will explain the role of interests in foreign policy is rational-choice theory. In IR context, rationalism refers to the application of rational choice theory to IR questions (Fearon and Wendt, 2002: 54). The core rational

choice assumption is that “when faced with several courses of action, people usually do what they believe is likely to have the best overall outcome” (Elster, as quoted in Ward, 2006: 25). The rational choice theory assumes that individuals are self-interested and they have “all the rational capacity, time and emotional detachment necessary to choose the best course of action, no matter how complex the choice” (Fearon and Wendt, 2002: 68). From this perspective, it can be assumed that rational choice theory is basically about finding the reasons for individual’s actions.

As rational choice theory is basically about presenting the reasons of individuals’ decisions, rationalism in IR, also tries to put forward the reasons of the policies of the actors, mainly nation states. If rational-choice theory is applied to IR, then rationalism should be expected to claim that states (or actors) usually do what they believe is likely to have the best overall outcome. Here, “the best overall outcome” is the problematic side of studying rationalism in IR. The best overall outcome can be assumed as interests. Yet, what these interests are, and how they are interpreted is the problem of rationalism, since different schools define the content of interest differently.¹¹ However, during the development of IR, rationalism is usually associated with materialism and the best overall outcomes are defined based on material interests (Fearon and Wendt, 2002: 58).¹² For this rationalism, the policies of actors are based on material interests such as power and wealth (Checkel, 1998: 326). Although today there are different interpretations of rationalism, as it is not only about reaching the material interest, rather ideas and

¹¹ As for neo-realism, interests are about material capabilities, and they are given. For constructivism, interests are rather ideas and are constructed by agents and structures. More details will be given below.

¹² Materialism is the view that “material reality exists, regardless of perception or interpretation, and that we know is a faithful representation of reality out there” (Adler, 2000, 111).

norms may play important roles in choosing the best overall outcome (Fearon and Wendt, 2002; Wendt 1999: *passim*), in this study rationalism should be restricted. As the aim of this section is to find the most appropriate theory that will explain interest-based policies, rationalism here will be accepted as the methodology, which emphasizes the role of material interests in decision-making.

This material-rationalism¹³ has been associated with the IR theories of neo-realism and neo-liberalism, since these theories also emphasize the importance of material capabilities in policy-making procedure. Indeed, in neo-realism, the distribution of material capabilities refers to the structure of the system. Yet, in this study, neo-liberalism will not be taken as a theory to explain material-rationalist policies, since neo-liberalism also focuses on the role of norms in the international politics¹⁴. As this might create confusion in interpreting norm-based policies, in this study material-rationalism will be restricted to neo-realism, which undermines the role of norms in international politics.

Neo-realism is an IR theory, which tries to explain the international politics. The leading neo-realist thinker is Kenneth Waltz, and he “seeks to provide a scientific explanation of the international political system” (Jackson and Sorensen, 2000: 85). As Waltz is committed to explain international political system scientifically, neo-realism is ontologically objective and is epistemologically based on scientific explanations.

¹³ The concept belongs to the author. It is defined like this to show that in this study rationalism is about reaching material interests.

¹⁴ The author is aware of the fact that the norms in neo-liberalism and in constructivism have different interpretations. For neo-liberalism, “norms are intervening variables between assumed interests and behavioral outcomes” (Katzenstein, 1996: 25). In other words, they help actors to maximize interests (Checkel, 1998: 327). In constructivism, conversely, norms are studied in totally different perspective which will be shown below.

Waltz takes some elements of classical realism as starting point. These can be stated as the concept of international anarchy and its central feature of power politics (Jackson and Sorensen, 2000: 86). The main actors in the international system are states and the main concerns of the states are security and survival.

However, neo-realism also differs from classical realism in some senses. The main explanatory power of neo-realism, for Waltz, comes from its emphasis on structure (Waltz, 1991, *passim*). Since his work of *Man, the State and War* (1959), Waltz seems to have reliance on systemic factors in explaining state and international political behavior. In this work, Waltz presented the view that the origin of war can best be understood by understanding the nature of the international system (Waltz, 1959; 224-237). This approach is reinforced in his work of *Theory of International Politics* (1979). International structure, accordingly, is defined by the ordering principle of the system, which is anarchy and by the distribution of capabilities across units (Waltz, 1991: 29). He clarifies the last point as follows:

In an anarchic realm, structures are defined in terms of their major units.

International structures vary with significant changes in the number of great powers. Great powers are marked off from the others by the combined capabilities they command. When their number changes consequentially, the calculations and behaviors of states, and the outcomes of their interactions produce vary. (Waltz, 1991: 29-30)

For Waltz, this structural approach of neo-realism is its distinctive feature-at least from other realist theories, which concentrate on the actions and interactions of units, rather than structural effects (Waltz, 1991: 33).

One consequence of this structural approach is that in neo-realism states are alike units, because “states are made functionally similar by the constraints of the structure”(Waltz, 1991: 36). States “differ only in regard to their greatly varying capabilities” (Jackson and Sorensen, 2000: 85).

Structure also defines the outcomes of the states. “Structure mediates the outcomes that states produce” (Waltz, 1991: 36). Waltz believes that neo-realism is a theory, which can explain the effects of structure on the behavior and outcomes of states (Waltz, 1991: 37). If this is interpreted in another way, it can be said that, structure defines the interests and preferences of the agents. In other words, in Waltz’s neo-realism, interests are given.

This structural approach might be interpreted in several ways when the decision-making process of the actors is the subject. By focusing on structure and by restricting it to a material factor- power- Waltz implicitly assumes that ideas, culture and norms have no effect on interest formation and on behavior. As indicated above, in neo-realism interests are taken as given and the structure specifies the behavior. Assuming the structure as the distribution of material capabilities, Waltz implicitly claims that interests are material things. Moreover, as structure affects the outcomes and behaviors of the states, the inner conditions of the states are trivial in decision-making. Thus, for neo-realism, neither the international nor the domestic system has normative content (Katzenstein, 1996: 25). As structure conditions the behavior of state actors, in neo-realism states have largely unvarying, contextual identities and interests (Jepperson, Wendt and Katzenstein, 1996: 43). For neo-realism, therefore, culture and identity have no explanatory power in the decision-making process (Jepperson, Wendt and Katzenstein, 1996: 39, 43).

In sum, material interest decisions of actors can best be explained by rationalism and neo-realism. Rationalism explains how actors choose the best option that serves their material interests. However, as neo-liberalism is also under the materialist rationalism, and since it also focuses on the role of norms in the decision-making, the material rationalism is restricted to neo-realism in this study. Neo-realism excludes the role of ideas, norms, identities and culture in decision-making process. Rather, it focuses on the role of material capabilities in specifying the behavior and outcomes of the agents. Therefore, by focusing on rationalism and neo-realism, the study will be able to better understand the energy policies of the Union, which are reasoned strictly from material interests.

4.2. Constructivism

To explain the roles of the norms in the security decision-making process, this study relies on constructivism and the aim of this section is to show why this is so.

The fundamental proposition of constructivism is “human beings are social beings, and we would not be human but for our social relations” (Onuf, 1998: 58). This means, “social relations make or construct people” (Onuf, 1998: 59). On the other hand, the world is also constructed by the people “from the raw materials the nature provides, by doing what we do with each other and what we say to each other” (Onuf, 1998: 59). In sum, constructivism holds the view that “people make society, and society makes people” (Onuf, 1998: 59).

Based on these ideas, all constructivists share two understandings: “social construction of knowledge and the construction of social reality”(Guzzini, as quoted in Adler, 2002: 95). This means, “the objects of our knowledge are not independent of our interpretations and our language” (Adler, 2002: 95). Thus, unlike neo-realism, constructivism ontologically holds the view that there is not an objective world out there, but rather social world is inter-subjective. Moreover, as the world is made of social relations, nothing is given. Interests, in that sense, are constructed by social practices.

As in neo-realism, constructivists believe that structure exists. Yet, they believe that this structure is socially constructed and is not solely material. Material structure also exists in constructivism, as long as the agents construct it in that sense. Therefore, structure in constructivism is not the distribution of material capabilities, but it is the construction of social actors. Thus, fundamental to constructivism is that the structure is not independent of the agents, which construct it. In other words, in constructivism, there is a mutual constitution between agents and structures. “Constructivism locates actors in social structure that both constitutes those actors and is constituted by their interaction” (Farrell, 2002: 50). Thus, change in structure does not depend on change in material power, but rather, it depends on the “emergence of new constitutive rules, the evolution and transformation of new social structures” (Adler, 2002: 102).

As constructivism focuses on the social world, social practices as norms, identities and culture become crucial in decision-making process. This does not mean that constructivists ignore the importance of interests in politics. Rather, interests are effective; yet, they are also constructed by social practices. In other words, norms give interests their content and meaning (Adler, 2002, 103).

Moreover, norms also have independent explanatory power of decisions. In the constructivist literature, norm is defined as the “collective expectations about proper behavior for a given identity” (Katzenstein, 1996; Wendt, 1996; Checkel, 1998; Farrell, 2002). Katzenstein, Jepperson and Wendt separate norms into two: the constitutive norms “operate like rules defining an identity”, and the regulative norms “operate as standards proper enactment or a deployment of a defined identity”(Jepperson, Wendt and Katzenstein, 1996: 54). Thus, understanding norms of the actors becomes crucial in understanding the reasons for their actions, since norms establish actors’ interests and identities.

In sum, constructivism brings a different perspective to IR, by not taking the world as given, but by focusing on the inter-subjective world. In that sense it helps explain why people converge around norms and identities, how the structure change as the new constitutive rules are formed and how structures and agents are in interaction and constitute each other (Adler, 2000, 95-113).

4.3. The Analysis of EU Energy Security Policy

4.3.1. EU Energy Security Behavior: Exploring the Central Motivation

In Chapter3, EU energy security policy is analyzed. In the end of the Chapter, the most significant energy policies are underlined to be able to better

analyze them. This section will interpret these policies and will put forward which policies are based on norms of the EU and which ones are based on material interests. Combined with the theoretical discussion that has been made above, this task will help analyze how EU energy security policy can be interpreted by rationalist-neo-realist perspective or on constructivism.

The first policy that was mentioned at the end of the Chapter 3 was EU avoidance of the consumption of nuclear and coal energy, and thus the relative increase in the consumption of natural gas, for environmental reasons. This is certainly a normative act, because by not using nuclear and coal, the EU undermines one of its energy security goals of diversifying resource types. If the EU followed a material interest based policy, it would not mitigate using these resources, since the consumption of these resources would enhance the energy security of the Union by increasing indigenous production and by not making Europe more dependent on natural gas, which is mostly supplied by imports. Moreover, if the EU used more coal, it would pay less for the natural gas imports, since coal is cheaper than the natural gas. Furthermore, as mentioned in the Green Paper of 2000, coal has a relatively more stable and established international market. This means that in imports of coal there is a lower risk of supply disruption. Also, as coal is situated in many countries and as it can be transferred easily overseas, the risks associated to its trade is much lower than the natural gas. Despite the presence of these advantages of coal, the EU prefers to rely on natural gas for environmental reasons. In that sense, it would be wrong to assume that the EU chooses the best option that would serve its material interests. By relying more on natural gas, the EU pays more money, risks consistent supply, and is more

dependent on Russia. Thus, the only factor, which can explain the situation, is the presence and implication of norms in EU energy security policy.

The presence of norms can also be seen in the fact that nuclear energy's share is also expected to decrease, although nuclear does not harm the environment in the way fossil resources do. The only problem in decreasing nuclear's share in overall energy consumption seems to be the nuclear waste problem and the risk of nuclear reactor explosion. As both of these situations are also related to the environment and human health, the avoidance of nuclear energy is also a norm-based policy.

A rationalist may assume that protecting the environment is for the interest of the EU and, in the long-term, protecting the environment is a much more important interest than not using coal in the short term, because environmental problems might cause serious troubles both concerning economy and survival. It cannot be guaranteed that in a hundred years time most of the icebergs will not melt down and some parts of Europe will not stay under water. Or the climate will change in a way that European economy will collapse. These predictions cannot be falsified and it is true that protecting the environment is more important than the short-term interests. However, the efforts of the EU to protect the environment have little effects globally, and unless the other major consumers, such as the USA, China and India do follow the same environmental regulations that the EU does, EU policies will have small effects in worldwide. Despite being aware of this fact, the EU still avoids the consumption of coal and implements regulations to fight the climate change. This is why EU policy of not using coal and instead relying more on natural gas can be interpreted as a norm-based policy.

A policy that may be interpreted as being based more on interests is the EU's efforts of spreading and imposing environmental regulations to the neighbor countries. Certainly, as the environment is a EU norm and the EU has strong commitments in protecting the environment, spreading these regulations is norm diffusion and has normative content. Yet, as it is mentioned above, environmental regulations gain meaning if they are adopted globally. In that sense, by spreading it to the regions' countries- such as South East Europe, North Africa, Russia, Mediterranean countries- the EU may want to increase the number of countries, which respect the environment. Thus, the environment policy will gain more meaning in global context, and in the long term it would be to EU interest; since, as other countries, the EU will be affected less by the environmental problems, and therefore its interests would not be harmed. Thus, norm diffusion in the environment has both normative and interest based reasons.

Another policy, which has both normative and interest based reasons is the EU effort to increase the use of renewables. Renewables may have been defined as "priority" by EU in 2000 Green Paper for three reasons: first, they contribute to the environmental protection policies by not producing any harmful gas for atmosphere or harmful waste to the environment; second, by contributing to indigenous production, and thus by making it less dependent on the fossil resources' imports; third by providing diversification of resources. The first is again related to environmental protection and therefore is about norms. Yet, the second and the third considers the diversification of resources and increasing energy security by enhancing indigenous production, whereby EU will be less dependent on the imports from unstable regions, and the increase of renewable would mean more stable energy. This is a rational choice in terms of maximizing the material interests

as enhancing energy security, thus the power of the country and increasing the wealth by paying less on foreign energy resources.

The only policy that can be linked only to interest-based reasoning, is the EU's imports from the countries, which are considered as undemocratic and disrespectful to human rights. As it is indicated in the second chapter the main country supplying oil to the EU is currently Russia and the largest region is the Middle East. In gas, the EU is largely dependent on Russia, and Algeria is the third main gas supplier to Europe.

On the other side of the coin, democracy and good governance, and human rights protection are among the EU's main foreign policy objectives (Smith, 2005), and these are also the norms of the EU (Manners, 2005: 11). In most of its relations with third parties the EU gives importance to the application of these norms by third parties.¹⁵ In other words, the EU tries to diffuse its norms. Yet, this normative action is lacking when it comes to the EU's energy imports. Most of the countries from which the EU imports are neither democratic nor respect human rights, in the EU's definition.¹⁶ This can be better understood by looking at EU oil import data.

In 2005, the ten countries doing the most oil exports to Europe are in order Russia, Norway, Saudi Arabia, Libya, Iran, Kazakhstan, Algeria, Nigeria, Iraq and Mexico (http://ec.europa.eu/energy/oil/crude/index_en.htm, last accessed on 23

¹⁵ Examples can be multiplied. In Balkans, for example, the EU is trying to establish the democracy and good governments, human rights, by implying a 'carrots and sticks' policy to the region countries. It proposes a conditionality, which requires that, as long as the South East European states adopt necessary regulations in these topics they get awarded either financially or economically by the EU.

¹⁶ In 1998, the EU described the democratic principles as "the election of a country's leaders by free universal suffrage in a secret ballot, existence of clear cut rules apply to all citizens without discrimination, the promotion and protection of fundamental freedoms, institutional arrangements for participation in decision making and development of choices at national, regional, and local level, political and institutional pluralism, reflected by a free and open political system, transparency and integrity of institutions" (Smith, 2005, 132-133).

August 2007). Without attempting to discuss the internal democratization level of these countries, based on the EU definition, eight out of these ten countries (except Norway and Mexico) are not democratic. The conclusion is that roughly 80% of EU oil imports are from non-democratic countries.¹⁷ Moreover, when these eight countries' share is calculated, it will be seen that they established almost two-thirds of EU crude oil imports in 2005 (Europa, 2007).

A norm-based decision, on the other hand, should have restricted the imports from those countries or at least warned them to follow more democratic principles. However, this is lacking in EU energy policy. What is more, the EU is still trying to diversify supply sources coming from the countries which do not respect human rights or which are not democratic. Projected gas pipeline from Nigeria, Central Asian countries and Russia are the examples of this. Thus, it is clear that in diversifying the geographical origin of resources and in energy imports material interest of the EU is dominant and superior to its normative values of human rights and democracy.

However, this last point may be defended on the ground that the EU has no alternative option other than importing from these countries. Most of the world's gas reserves are situated in Russia and most of the oil is in the Middle East. Furthermore, the EU cannot meet its energy consumption by relying on other suppliers, since those countries' resources would not be sufficient to supply the total EU consumption. This is not wrong. However, if this is the case, then the EU's actions can more easily be interpreted on neo-realist grounds. If the structure is the distribution of material capability, energy structure will be the distribution of energy

¹⁷ It is approximate because, as exporters after the first ten are included to the list, the non-democratic countries' share will increase.

resources in the world. As energy resources are mostly in the hands of “non-democratic” countries, it is the structure, which causes the outcome of EU policy decision and EU behavior in energy policy. Structure does not let the EU import from other countries and thus the EU behaves in the non-normative basis and act as a rationalist (in the sense that when faced with many choices, the actors choose the best one which serves their interests) since there is no other viable alternative for the EU that structure proposes.

4.3.2. EU Energy Security Behavior: Theoretical Interpretations

In Chapter 2, it was shown that the EU has a broad energy security understanding. This statement was reached after analyzing EU energy security definition, which, differently than the literature, takes the environment as a referent-object of its energy security. In Chapter 3, it was shown that in its internal policies the EU respects environmental regulations. One will see this by analyzing EU energy situation, in which the share of high pollutant coal is expected to decrease and the oil's increase will be relatively low compared to cleaner natural gas. Moreover, the EU is committed to the Kyoto Protocol, which foresees the reduction of CO₂ emissions. Last, but not least, the EU is also trying to enforce the environmental regulations on other countries, as it is evident in Russia's ratifying the Kyoto Protocol.

The broadened security understanding and EU policies on the environment might have different motivations. Yet, in this chapter it was shown that EU policies

on the environment have generally normative content. Moreover, these norm-based actions are not reasoned from interest-maximization logic, as neo-liberals would assume, because they are sometimes taken at the expense of interests. Thus, in this study, environmental norms in EU energy policy are interpreted from a constructivist perspective. As it has been signified above, in constructivist literature norms are “collective expectations about proper behavior for a given identity”(Katzenstein, 1996). Identity, on the other hand, can simply be described as “we-feeling” (Adler, 2000: 104). Therefore, the environmental regulations in Europe are adapted because it is the proper behavior for European identity.

However, this norm-based understanding cannot be applied in the supply security policies of the EU. As the energy policy with third countries is a part of foreign policy, in the energy relationship with suppliers, a normative actor should be expected to follow foreign policy norms. For the EU, democracy and good governance, human rights are some of these foreign policy norms (Manners, 2005: 11), and the EU frequently emphasizes these norms with its relations toward other countries. For instance, these norms are pre-conditions for accession countries to be a member or to make pre-accession states ready to move up to be accession states. However, in energy trade and in energy imports these norms are not considered by the EU. The non-compliance with these foreign policy norms of the EU is not a preventive factor for the EU in importing energy. The EU largely imports its energy from “non-democratic” countries, which also disrespect human rights in EU terms.¹⁸ This shows that, in energy trade the EU thinks its material-interests before its norms. Indeed, norms have no explanatory power in energy trade. Thus the EU act, in this case, can be explained by rationalism and neo-realism since it chooses

¹⁸ In this case, the EU can be compared with the USA. As in the case of Iran, the US might give up importing energy from countries, which do not comply with the US’ or international norms.

the option, which will serve best to its material interests. Moreover, the lack of norms in energy trade also shows that this rationalistic model excludes neo-liberalism and is based on neo-realism, which downplays the explanatory role of the norms in decision-making process. Also, as indicated above, energy structure leads the EU to not behave normatively, since the EU has no option other than importing from these “non-democratic” states. Thus, a rationalist-neo-realist approach is the best perspective, which will explain EU supply security behavior.

In sum, different motives of EU energy security behavior can be interpreted differently by constructivism and rationalist-neo-realism. Whereas in environmental policy the EU takes action based on its norms because it is seen as proper behavior for European identity, in the policies concerning energy imports, the EU gives superiority to its material-interests rather than its norms. This means that, where constructivism can better explain the environmental side of EU energy security behavior, rationalism and neo-realism can better explain its supply security part.

CHAPTER 5

CONCLUSION

This thesis aimed to explore the central motivation behind EU energy security policy. More specifically, it targeted the question of whether EU energy security policy is based on its norms or its interests. Theoretically normative policies are interpreted by constructivism and interest-based policies are interpreted by rationalism and neo-realism. In light of the analysis of EU energy security definition, its internal and external energy security policies, this thesis reached to three main conclusions.

First, the EU has a broadened energy security understanding, which is reached by the comparison of the literature's definition of energy security and the EU's definition of energy security. Accordingly, in the literature, energy security basically refers to supply security that emphasizes the conditions by which supply security will be achieved easily and affordably. Therefore, energy security definition of the literature is "adequate, affordable and reliable supplies" (IEA, 2003). In EU context, on the other hand, there is an additional emphasize on the environment and sometimes on individuals. Green Paper of 2000 (Green Paper, 2000) defines energy security as follows:

... to ensure, for the well-being of its citizens and for the proper functioning of the economy, the uninterrupted physical availability of

energy products on the market at a affordable price for all consumers, whilst respecting environmental concerns and looking towards sustainable development.

Taking the environment to the energy security definition, the EU makes the environment a referent-object of its energy security. What follows from this, is the fact that the EU has a broadened energy security understanding in the sense that not only the security of traditional referent objects such as states is important but also the security of the environment and implicitly the security of individuals are also important for EU energy security.

Second, the environmental policies of the EU can be interpreted by constructivism, since the central motivation behind environmental regulations are norms and the norms are not applied only to maximize material interests as neo-liberals argue. Rather norms are implemented because they are found appropriate, and they establish the proper behavior for European identity. This is not to say that all of the policies related to environment are only the result of the norms. To the contrary, some environmental policies also reflect the interests of the EU, such as using more renewables by which indigenous production will increase, and EU supply security will be enhanced. However, all of these environmental policies have normative background. In the renewables, for instance, the consumption of renewables will make the use of fossil resources decrease, which will mean less pollution. Thus, in the environment, norms are dominant to interests in energy security decision-making process.

Finally, in security of supply, EU actions can best be explained by rationalist-neo-realist perspective. Rationalism in this thesis referred to situations in which actors pick the decision that best serves to their material interests, when

confronted with various options. Neo-realism, at the same time, referred to policies where there is no role of norms in decision-making process and where structure dictates the behavior of the actors. The EU's energy imports from countries, which do not respect EU foreign policy norms of democracy and human rights led to the conclusion that material interests - in this case secure energy supplies- are superior to policy norms. One might ask what could be the alternative for the EU when most of the reserves are situated in "non-democratic" countries. In this case, it can be assumed that structure specifies EU behavior in energy imports and thus neo-realism is the best explaining factor of EU security of supply policy. However, it should not be forgotten that the USA could stop its energy trade with Iran, since the latter does not comply with international norms. Thus, the EU could also take some normative action regarding the supply security if it privileges norms in its supply security.

In conclusion, in environmental policies the EU is strongly committed to its norms. In this topic, the EU thinks its norms before its material interests and even takes actions which conflict with its material interests. This norm-based behavior is interpreted by constructivism in this thesis, since the reason of this normative action is not to maximize interests by relying on norms as neo-liberals argue, but is the acceptance of the environment as a norm by agents and structures in the EU. In other words, the environment is constructed as a norm in the EU. However, it would be wrong to assume that EU energy security behavior is normative only looking at the environment. Although the EU is the most committed actor to the environment in the world, a fully normative approach is still lacking in EU energy security behavior. Especially, in supply security policies, the EU thinks its material interests before its norms. This is evident in EU energy trade, which is mostly with the

countries, which are considered as “non-democratic” and disrespectful to human rights. Thus, to be a normative actor in energy, the EU should take more normative actions in the supply security policies as energy embargoes or official warnings against the highly undemocratic exporter countries.

BIBLIOGRAPHY

- Anonymous. 2003. "Algeria/Italy", *Petroleum Economist*. May 2003: 1-2.
- Anonymous. 2006. "EU Eyes Caspian for Security," *Petroleum Economist*. May 2006: 10-12.
- Anonymous. 2007. "Gazprom Holds the Card," *Petroleum Economist*. January 2007: 4-6.
- Adler, Emanuel. 2002. "Constructivism and International Relations." In Walter Carlsnaes, Thomas-Risse and Beth A. Simmons, eds., *Handbook of International Relations*. London: Sage Publications, 52-73.
- Bahgat, Gawdat. 2005. "EU Seeks Energy Security in Stronger Supplier Ties," *Oil and Gas Journal* 103(38): 22-27.
- . 2006. "Europe's Energy Security: Challenges and Opportunities," *International Affairs* 82(5): 961-975
- Baylis, John. 2005. "International and Global Security in the Post-Cold War Era." In John Baylis and Steve Smith, eds., *The Globalization of World Politics*. New York: Oxford University Press, 254-273.
- Bilgin, Pinar. 2005. *Regional Security in the Middle East: A Critical Perspective*. London: Routledge.
- Booth, Ken. 1991. "Security and Emancipation," *Review of International Studies* 17: 313-326.
- Bretherton, Charlotte and John Vogler. 2006. *The European Union as a Global Actor* (2nd Edition). Oxon: Routledge.
- Buzan, Barry. 1991. *People, States and Fear* (2nd edition). New York: Harvester Wheatsheaf.

- Buzan, Barry, Ole Waever and Jaap de Wilde. 1998. *Security: A new Framework for Analysis*. London: Lynne Rienner.
- Checkel, Jeffrey T. 1998. "The Constructivist Turn in International Relations Theory," *World Politics* 50(2): 324-348.
- Choudhuri, Jay. 2006. "Medgaz IM Approach Predicts Cost Savings," *Oil and Gas Journal* 104(31): 57-60.
- _____. 2005. "Medgaz Pipeline Promises Energy Security for Iberian Peninsula," *Oil and Gas Journal* 103(20): 59-62.
- Commission of the European Communities. Commission Staff Working Paper. Progress Report on the Response to the Green Paper. "*Towards a European Strategy for the Security of Energy Supply*." 3 December 2001
- Commission of the European Communities. Communication from the Commission. "*European Neighborhood Policy: Strategy Paper*." 12 May 2004
- Commission of the European Communities. Communication from the Commission to the Council and European Parliament. "*On the Development of Energy Policy for the Enlarged EU, its Neighbors and Partner Countries*." 26 May 2003.
- Commission of the European Communities. Communication from the Commission. "*Action Plan for Energy Efficiency: Realizing the Potential*." 19 October 2006.
- Commission of the European Communities. Green Paper. "*A European Strategy for Sustainable, Competitive and Secure Energy*," 8 March 2006.
- Commission of the European Communities. Green Paper. "*On Energy Efficiency or Doing More with Less*." 22 June 2005.
- Commission of the European Communities. Green Paper. "*Towards a European Strategy for the Security of Energy Supply*." 29 November 2000.
- Constantini, Valeria et al. 2007. "Security of Energy Supply: Comparing Scenarios from a European Perspective," *Energy Policy* 35: 210-226.
- Correlje, Aad and Coby Van Der Linde. 2006. "Energy Supply Security and Geopolitics: A European Perspective," *Energy Policy* 34: 532-543.
- Council of the European Union. Council Secretariat. "*Council Conclusions: A New Energy Policy for Europe*." 2 March 2006.
- Degermenci, Orhan. 2001. "EU Study of Caspian Area Oil, Gas Pipelines Compares Routes, Costs." *Oil and Gas Journal* 103(26): 55-58.

- Desch, Michael C. 1998. "Culture Clash: Assessing the Importance of Ideas in Security Studies," *International Security* 23(1): 141-170.
- Dyer, Hugh C. 1997. *Moral Order/World Order*. London: Macmillan Press.
- Farrell, Theo. 2002. "Constructivist Security Studies: Portrait of a Research Program," *International Studies Review* 4(1): 49-72.
- Fearon, James and Alexander Wendt. 2002. "Rationalism vs. Constructivism: A Skeptical View." In Walter Carlsnaes, Thomas-Risse and Beth A. Simmons, eds., *Handbook of International Relations*. London: Sage Publications, 52-73.
- Goldstein, Joshua S. 1999. *International Relations* (Third Edition). New York: Longman.
- Goldstein, Judith and Robert O. Keohane (eds.). 1993. *Ideas And Foreign Policy: Beliefs, Institutions and Policy Change*. Ithaca and London: Cornell University Press.
- Grant, Charles and Barysch Katinka. 2004. "The EU-Russia Energy Dialogue," Centre for European Reform, http://www.cer.org.uk/pdf/briefing_eu_russia.pdf
- Guzzini, Stefano. 1998. *Realism in International Relations and International Political Economy: the Continuing Story of a Death Foretold*. London: Routledge.
- Haftendorn, Helga. 1991. "The Security Puzzle: Theory-Building and Discipline-Building in International Security", *International Studies Quarterly* 35: 3-17.
- Jackson, Robert and Georg Sorensen. 1999. *Introduction to International Relations*. Oxford: Oxford University Press.
- James, Gavin. 2003. "Gearing up for Co-Operation", *Petroleum Economist*, July 2003: 30-32.
- Kagiannas, Argyris et al. 2003. "Energy Policy Assessment of the Euro-Mediterranean Cooperation," *Energy Conversion and Management* 44: 2665-2686.
- Kalicki, Jan H. and David L. Goldwyn. 2005. *Energy and Security: Toward a New Foreign Policy Strategy*. Washington D.C: Woodrow Wilson Center Press.
- Kalyuzhnova, Yelena. 2005. "The EU and the Caspian Sea Region: An Energy Partnership?" *Economic Systems* 29: 59-76.

- Katzenstein, Peter (ed.). 1996. *The Culture of National Security: Norms and Identity in World Politics*. New York: Columbia University Press.
- Kubalkova, Vendulka, and Nicholas Onuf (eds.). 1998. *International Relations in a Constructed World*. New York: M.E Sharpe.
- Lebland, Doris. 2004. "EU Plans Expansion of Natural Gas Import Network," *Oil and Gas Journal* 102(42): 61-63.
- Matlary, Janne Haaland. 1997. *Energy Policy in the European Union*. London: Palgrave Macmillan.
- Manners, Ian. 2002. "Normative Power Europe: A Contradiction in Terms," *Journal of Common Market Studies* 40: 235-258.
- Manners, Ian. 2005. "The European Union as a Normative Power in the Global Polity." Paper presented at Political Studies Association Conference, 2005. <http://www.psa.ac.uk/journal/pdf/5/2005/manners.pdf>, last accessed on 17 June 2007
- Mavrakis, Dimitrios, Fotias Thomoidis and Ioannis Ntroukas. 2006. "An Assessment of the Natural Gas Supply Potential of the South Energy Corridor from the Caspian Region to the EU," *Foreign Policy* 34: 1671-1680.
- Onuf, Nicholas. 1998. "Constructivism: A User's Manual." In Vendulka Kubalkova and Nicholas Onuf, eds., *International Relations in a Constructed World*. New York: Columbia University Press, 58-79.
- Roberts, John. 2004. "The Turkish Gate: Energy Transit and Security Issues," CEPS EU-Turkey Working Papers, No.11: 1-23
- Scheipers, Sibylle and Daniella Sicurelli. 2007. "Normative Power Europe: A Credible Utopia," *Journal of Common Market Studies* 45(2): 435-457.
- Smith, Karen E. 2003. *European Union Foreign Policy in a Changing World*. Cambridge: Blackwell Publishing.
- Smith, Steve. 2000. "International Theory and European Integration." In Marten Kalstrup and Michael C. Williams eds., New York: Routledge, 33-57.
- Soria, Ernesto and John Gray. 2005. "Economic Study Examines Middle East Gas Line to Europe," *Oil and Gas Journal* 103(26): 55-58.
- Spanjer, Aldo. 2007. "Russian Gas Price Reform and The EU-Russia Gas Relationship: Incentives, Consequences and European Security of Supply," *Energy Policy* 35: 2889-2898.

- Vogler, John. 2005. "The European Contribution to Global Environmental Governance," *International Affairs* 81(4): 835-850.
- Walt, Stephen. 1991. "The Renaissance of Security Studies," *International Studies Quarterly* 35(2): 211-239.
- Waltz, Kenneth N. 1959. *Man, the State and War*. New York: Columbia University Press.
- _____. 1979. *Theory of International Politics*. New York: Random House.
- _____. 1991. "Realist Thought and Neo-Realist Theory." In Robert L. Rothstein ed., *The Evolution of Theory in International Relations*. South Carolina: University of South Carolina Press, 21-39.
- Ward, Hugh C. 2002. "Rational Choice." In David Marsch and Gerry Stoker, eds., *Theory and Methods in Political Science*. New York: Palgrave Macmillan, 65-90.
- Weisser, Helmuth. 2007. "The Security of Gas Supply: A Critical Issue For Europe," *Energy Policy* 35: 1-5.
- Wendt, Alexander. 1995. "Constructing International Politics," *International Security* 20(1), 71-81.
- Yergin, Daniel. 2006. "Old Questions, New Answers," *Foreign Affairs* 85(2): 69-79.

Internet Sources

- BP, <http://www.bp.com>, last accessed on 17 May 2007.
- Energy Information Administration, <http://www.eia.org>, last accessed on 15 May 2007.
- EurActive Webpage, <http://www.euractive.com/en/energy/geopolitics-eu-energy-supply/article-142665>, last accessed on 23 August 2007.
- _____, <http://www.euractive.com/en/energy/eu-russia-energy-dialogue/article-150061>, last accessed on 23 August 2007.

_____, <http://www.euractive.com/en/energy/energy-outlook/article-117476>, last accessed on 23 August 2007.

_____, <http://www.euractive.com/en/energy/eu-renewable-energy-policy/article-117536>, last accessed on 23 August 2007.

_____, <http://www.euractive.com/en/energy/energy-efficiency-eu-action-plan/article-143199>, last accessed on 23 August 2007.

_____, <http://www.euractive.com/en/energy/coal-clean-energy-source-future/article-156397>, last accessed on 23 August 2007.

Europa Website,

http://www.europa.eu/press_rom/presspacks/energy/index_en.htm, last accessed on 17 July 2007.

European Commission, http://ec.europa.eu/energy/index_en.html, last accessed on 23 August 2007.

_____, http://ec.europa.eu/energy/oil/crude/index_en.html, last accessed on 23 August 2007.

_____, http://ec.europa.eu/external_relations/euromed, last accessed on 19 July 2007

_____, http://ec.europa.eu/energy/russia/joint_progress/doc/progress1_en.pdf, last accessed on 6 July 2007.

_____, http://ec.europa.eu/energy/russia/joint_progress/doc/progress2_en.pdf, last accessed on 6 July 2007.

_____, http://ec.europa.eu/energy/russia/joint_progress/doc/progress3_en.pdf, last accessed on 6 July 2007.

_____, http://ec.europa.eu/energy/russia/joint_progress/doc/progress4_en.pdf, last accessed on 6 July 2007.

_____, http://ec.europa.eu/energy/russia/joint_progress/doc/progress5_en.pdf, last accessed on 6 July 2007.

_____, http://ec.europa.eu/energy/russia/joint_progress/doc/progress6_en.pdf, last accessed on 6 July 2007.

_____, http://ec.europa.eu/energy/russia/joint_progress/doc/progress7_en.pdf, last accessed on 6 July 2007.

European Neighbourhood Policy Website.

http://ec.europa.eu/world/enp/index_en.htm, last accessed on 17 July 2007.

———, http://ec.europa.eu/world/enp/pdf/action_plans/egypt_enp_ap_final_en.pdf, last accessed on 6 July 2007.

———, http://ec.europa.eu/world/enp/pdf/action_plans/jordan_enp_ap_final_en.pdf, last accessed on 6 July 2007.

———, http://ec.europa.eu/world/enp/pdf/action_plans/lebanon_enp_ap_final_en.pdf, last accessed on 6 July 2007.

———, http://ec.europa.eu/world/enp/pdf/action_plans/morocco_enp_ap_final_en.pdf, last accessed on 6 July 2007 .

INOGATE Programme Website, <http://www.inogate.org/en>, last accessed on 25 July 2007.

International Energy Agency Website, <http://www.iea.org>, last accessed on 23 August 2007.

Nord Stream Gas Pipeline Project Website, <http://www.nord-stream.com>, last accessed on 12 July 2007.