



Calhoun: The NPS Institutional Archive
DSpace Repository

Theses and Dissertations

1. Thesis and Dissertation Collection, all items

2010-06

Turkey as an emerging energy hub

Tokus, Halil Ibrahim

Monterey, California. Naval Postgraduate School

<http://hdl.handle.net/10945/5337>

Downloaded from NPS Archive: Calhoun



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

TURKEY AS AN EMERGING ENERGY HUB

by

Halil İbrahim TOKUŞ

June 2010

Thesis Advisor:
Second Reader:

Robert Looney
Robert McNab

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE June 2010	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE Turkey as an Emerging Energy Hub			5. FUNDING NUMBERS	
6. AUTHOR(S) Halil İbrahim TOKUŞ				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number _____ N/A_____.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) There is an increasing dependence on Russian, Caspian and Middle Eastern oil and natural gas by Europe and the United States. Turkey is geographically in the middle of these consumer and producer countries and has an important place in its emerging role as an energy hub because of pipelines that exist, are planned, or are already under construction. Turkey has agreements with Russia, Iran, Iraq, Qatar, Syria, and Europe in regards to energy. Due to these agreements; Turkey is building a web of energy to diversify its energy supply. Some observers think that Turkey is establishing its own dependence, and some think that Turkey's attempts at an energy web are about interdependence rather than dependence in advantage of its energy security. The objective of this thesis is to analyze how Turkey's energy policy with the aim of becoming an energy hub affects its own and the region's dependence or interdependence in regards to energy security.				
14. SUBJECT TERMS Turkey, Energy, Energy Hub, Energy Policy			15. NUMBER OF PAGES 127	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

TURKEY AS AN EMERGING ENERGY HUB

Halil İbrahim TOKUŞ
1st Lieutenant, Turkish Air Force
B.S., Turkish Air Force Academy, 2004

Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(MIDDLE EAST, SOUTH ASIA, SUB-SAHARAN AFRICA)**

from the

**NAVAL POSTGRADUATE SCHOOL
June 2010**

Author: Halil İbrahim TOKUŞ

Approved by: Robert Looney
Thesis Advisor

Robert McNab
Second Reader

Harold A. Trinkunas, PhD
Chairman, Department of National Security Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

Europe and the United States are displaying an increasing dependence on Russian, Caspian and Middle Eastern oil and natural gas. Turkey is geographically in the middle of these consumer and producer countries and has an important place in its emerging role as an energy hub because of current and future. Turkey has agreements with Russia, Iran, Iraq, Qatar, Syria, and Europe in regards to energy. Due to these agreements, Turkey is building a web of energy to diversify its energy supply. Some observers think that Turkey is establishing its own dependence, and some think that Turkey's attempts at an energy web are about interdependence rather than dependence, in advantage of its energy security. The objective of this thesis is to analyze how Turkey's energy policy—with the aim of becoming an energy hub—affects its own and the region's dependence or interdependence in regards to energy security.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	MAJOR RESEARCH QUESTION.....	1
B.	IMPORTANCE.....	1
C.	PROBLEMS AND HYPOTHESES	3
D.	LITERATURE REVIEW	5
E.	METHODS AND SOURCES.....	11
1.	Thesis Synopsis.....	11
F.	THESIS OVERVIEW	12
II.	ENERGY PROBLEMS OF TURKEY	13
A.	TURKEY’S ENERGY OUTLOOK	13
B.	COLD-WAR ERA	20
C.	COLD-PIPELINE WAR ERA	24
1.	Turkey’s Changing Dynamics	25
a.	<i>New Neighborhood</i>	<i>25</i>
b.	<i>Turkey’s Energy Security and Energy Dependency.....</i>	<i>26</i>
2.	Convergences and Divergences of Regional Powers’ Policies.....	27
a.	<i>Pipelines</i>	<i>28</i>
b.	<i>East-West Corridor Strategy.....</i>	<i>30</i>
c.	<i>East-West Corridor With the Middle East</i>	<i>37</i>
d.	<i>North-South Corridor</i>	<i>39</i>
D.	CONCLUSION	42
III.	WHY TURKEY?	43
A.	NATURAL BRIDGE	44
1.	Location	44
2.	Seas and Straits	45
B.	ENERGY SECURITY OF TURKEY AND EUROPE.....	46
C.	INTERNATIONAL PIPELINES BETWEEN TURKEY AND ITS NEIGHBORS	51
1.	Turkey-Russia	52
a.	<i>The Trans-Balkan Natural Gas Pipeline</i>	<i>52</i>
b.	<i>The Blue Stream I and II Natural Gas Pipelines</i>	<i>53</i>
c.	<i>South Stream Natural Gas Pipeline</i>	<i>54</i>
d.	<i>Samsun-Ceyhan Bypass Oil Pipeline</i>	<i>55</i>
2.	Turkey-Eurasia	57
a.	<i>Baku-Tblisi-Ceyhan (BTC) Oil Pipeline.....</i>	<i>57</i>
b.	<i>South Caucasus (SCP) or Baku-Tblisi-Erzurum (BTE) Natural Gas Pipeline.....</i>	<i>59</i>
c.	<i>Trans-Caspian (Turkmenistan-Turkey-Europe) Natural Gas Pipeline Project.....</i>	<i>61</i>
3.	Turkey-Iran Natural Gas Pipeline	62
4.	Turkey-Middle East.....	63

a.	<i>Iraq-Turkey Crude Oil Pipeline</i>	63
b.	<i>Iraq-Turkey Natural Gas Pipeline</i>	65
c.	<i>Arab-Natural Gas Pipeline</i>	65
d.	<i>Turkey-Israel Pipeline</i>	66
5.	Turkey-Europe	67
a.	<i>Nabucco Natural Gas Pipeline</i>	67
b.	<i>Turkey-Greece Interconnector</i>	69
D.	RELIABILITY	70
E.	ENERGY INFRASTRUCTURE OF TURKEY	71
1.	Refineries	71
2.	Underground Storage	72
3.	Ceyhan Oil Terminal	73
F.	A GROWING ENERGY MARKET	74
IV.	WHY NOT TURKEY?	77
A.	EXTERNAL CHALLENGES	78
1.	Instability in Middle East	78
a.	<i>Iraq</i>	79
b.	<i>Iran-U.S. Relations</i>	81
2.	Instability in the Caspian Sea Basin Area	83
a.	<i>Nagornho-Karabakh Issue</i>	84
b.	<i>Georgia-Abkhazian-South Ossetia</i>	86
c.	<i>Kazakhstan</i>	87
d.	<i>Legal Status of Caspian Sea Basin</i>	88
3.	Russia's Foreign Policy	90
B.	INTERNAL CHALLENGES	93
1.	PKK Sabotage on Pipelines	93
V.	CONCLUSION	95
	LIST OF REFERENCES	101
	INITIAL DISTRIBUTION LIST	111

LIST OF FIGURES

Figure 1.	Total Turkish Energy Consumption.....	14
Figure 2.	Crude Oil Production between 1999 and 2008 (million tonnes)	15
Figure 3.	Natural Gas Production between 1999 and 2008 (million cubic meters)	17
Figure 4.	Primary Energy Consumption.....	19
Figure 5.	Primary Energy Production.....	19
Figure 6.	Number of Tankers Navigating Through the Bosphorus Strait	46
Figure 7.	Major Oil and Natural Gas Pipelines in Turkey	52

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

BCM	Billion Cubic Meters
BTC	Baku-Tblisi-Ceyhan Oil Pipeline
BTE	Baku-Tblisi-Erzurum Natural Gas Pipeline
CER	Centre for European Reform
EU	European Union
ISA	Iran Sanctions Act
ILSA	Iran-Libya Sanctions Act
INOGATE	Interstate Oil and Gas Transport to Europe
IOC	Indian Oil Company
LNG	Liquefied Natural Gas
MTOE	Million Tonnes of Equivalent
NATO	North Atlantic Treaty Organization
OECD	Organization for Economic Co-Operation and Development
OSCE	The Minsk Group of the Organization for Security and Cooperation in Europe
PKK	Kurdistan Workers' Party
TEP	Tonnes of Equivalent Petroleum
TOE	Tonnes of Equivalent
TPAO	Turkish Petroleum Corporation
TRACECA	The Transport Corridor Europe Caucasus Asia
UNCLOS	United Nations Conventions on the Law of the Sea
U.S.	United States

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGEMENTS

I express my sincere appreciation to my thesis advisor Professor Robert Looney and my second reader Professor Robert McNab for their patience and guidance in constructing my thesis. I learned a lot from your broad academic knowledge, experience and in class discussions. I benefited from you a great deal. I couldn't have written this thesis without your priceless contributions. You will always be remembered and appreciated. Thank you very much again.

I am grateful to the Turkish Air Force for providing me the opportunity to study at the Naval Postgraduate School. I am also grateful to all my friends at NPS and the Turkish community in Monterey because of their friendship, encouragement and support. Thank you for everything.

Bütün bunların ötesinde, sevgili anneme, babama, kız kardeşime ve erkek kardeşime ne kadar teşekkür etsem azdır. Her türlü sıkıntılı zamanımda bana her zaman destek oldunuz. Sizin bana vermiş olduğunuz destek paha biçilemez. Bu tezim biraz olsun sizin için gurur kaynağı olduysa ne mutlu bana.

This thesis is dedicated to my family. Thank you very much for all your support and encouragement.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

A. MAJOR RESEARCH QUESTION

There is an increasing dependence on Russian, Caspian and Middle Eastern oil and natural gas by Europe and the United States.¹ Turkey is geographically in the middle of these consumer and producer countries and has an important place in its emerging role as an energy hub because of pipelines that exist, are planned, or are already under construction.

Turkey has agreements with Russia, Iran, Iraq, Qatar, Syria, and Europe in regards to energy.² Due to these agreements, Turkey is building a web of energy to diversify its energy supply. Some observers think that Turkey is establishing its own dependence, and some think that Turkey's attempts at an energy web are about interdependence rather than dependence in advantage of its energy security.³ The objective of this thesis is to analyze how Turkey's energy policy with the aim of becoming an energy hub affects its own and the region's dependence or interdependence in regards to energy security.

B. IMPORTANCE

Turkey's domestic energy consumption increases at an annual rate of 4.3% on the average.⁴ To meet this increasing demand and to diversify against a dependence on a single source of energy, Turkey has sought energy from a variety of sources and suppliers.

¹ Tuncay Babali, "Turkey At the Energy Crossroads, Turkey Past and Present," *Middle East Quarterly*, Spring 2009, <http://www.meforum.org/2108/turkey-at-the-energy-crossroads>.

² Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

³ Mahir Zeylanov, "Turkey Becomes World's Largest Energy Hub Through Recent Deals," *Sunday's Zaman*, August 23, 2009, <http://www.sundayszaman.com/sunday/detaylar.do?load=detay&link=184792>.

⁴ Energy, Republic of Turkey, Ministry of Energy and Natural Resources, Republic of Turkey Ministry of Energy and Natural Resources, *Energy*, http://www.enerji.gov.tr/index.php?dil=en&sf=webpages&b=enerji_EN&bn=215&hn=&nm=40717&id=40717.

Russia, The Caspian Sea Basin and the Gulf have 71.8% of the world's proven natural gas and 72.7% of its oil reserves.⁵ Turkey is a neighbor of both these energy producing countries and energy consuming Europe. Thus, Turkey is trying to define itself as a key country in its position of a natural energy bridge between the source countries and consumer markets in ensuring energy security through diversification of supply sources and routes, by taking advantage of its proximity to energy giants of Middle East, Russia, and Caspian Basin and giant energy consumer Europe.⁶

More importantly, Turkey's energy policy of becoming an energy hub through pipelines has acquired increasing importance in the western world, especially because of Russia's energy policy and its Ukrainian and Georgian crises.⁷ Russia's energy policy is not the only concern for western energy security; it includes instability in Iraq, Iran-U.S. relations and the Israeli-Palestinian dispute.⁸ Because Turkey is in this region, Turkey needs not only diversification of its energy resources, but also good relations with all its neighbors to provide its security.⁹ Turkey's policy of "peace at home, peace abroad,"¹⁰ contributes positively to this situation and allows Turkey to be a reliable element for energy security.

Turkey's geographical location positions it to act as a transshipment country with the benefit of diversifying its own energy sources. Turkey's position appears as the best option for Europe that needs "a reliable alternative supply route"¹¹ and suppliers that

⁵ Mehmet Ogutcu and Danilla Bochkarev, "Rivals Become Partners," *European Voice*, September 21, 2009, <http://www.europeanvoice.com/article/2009/09/rivals-become-partners-/65924.aspx>.

⁶ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

⁷ Alex Petersen, "Russia's War for Oil Supplies," *Young Professionals in Foreign Policy*, August 18, 2008, <http://www.yfpf.org/content/russias-war-oil-supplies>.

⁸ International Energy Agency, *Oil Supply Security*, www.iea.org/Textbase/about/copyright.asp.

⁹ Tuncay Babali, "Turkey At the Energy Crossroads, Turkey Past and Present," *Middle East Quarterly*, Spring 2009, <http://www.meforum.org/2108/turkey-at-the-energy-crossroads>.

¹⁰ Republic of Turkey Ministry of Foreign Affairs, *Synopsis of The Turkish Foreign Policy*, <http://www.mfa.gov.tr/synopsis-of-the-turkish-foreign-policy.en.mfa>.

¹¹ Katinka Barysch, "Turkey's Role in European Energy Security," *Centre for European Reform Essays*, December 2007, http://www.cer.org.uk/pdf/essay_turkey_energy_12dec07.pdf.

need a reliable route providing access to world markets. Turkey's pipelines through Iran (despite U.S. opposition), Russia, the Middle East, and Europe create these reliable interdependent links.

This thesis argues that the Turkish energy policy to become an energy hub among suppliers and consumers not only contributes to its energy security but also to the region's energy security by creating an interdependence in terms of pipelines from east to west and north to south. Even though Turkey's energy policy towards Iran and Russia does not meet U.S. approval due to the ISA (Iran Sanction Act), it contributes to peace in the region and satisfies Turkey with pipeline fees and the flow of oil and gas through Turkish soil.

C. PROBLEMS AND HYPOTHESES

The major problem regarding the energy security of Turkey is U.S. foreign policy to isolate Iran from international affairs by the Iran Sanction Act (ISA) due to Iran's ambitions to obtain nuclear arms. There are, however, positive reasons for adding Iran to energy agreements. Due to Iran's geostrategic location among the Caucasus, the Caspian Sea, Central Asia, the Persian Gulf, the Gulf of Oman, Turkey, Iraq, Afghanistan, and Pakistan, Iran could extract oil and gas from the Caspian Basin less expensively and more efficiently than is currently done. However, the U.S. does not support this because of its isolation policy on Iran.¹²

Another problem is Iraq and its stability. Turkey supports a secure and united Iraq that is not a haven for terrorists.¹³ However, the Kurdistan Workers' Party (PKK), a terrorist organization positioned in northern Iraq,¹⁴ suspicions about the Kurdish Regional Government's intent to gain greater autonomy and become independent from

¹² Shah Alam, "Pipeline Politics in the Caspian Sea Basin," *Strategic Analysis: A Monthly Journal of the IDSA* XXVI, no. 1 (January–March 2002).

¹³ Brian Katulis, "The U.S. Needs Turkey for Its Middle East Agenda," *Atlantic-Community*, November 23, 2009, http://atlanticcommunity.org/index/articles/view/The_U.S._Needs_Turkey_for_its_Middle_East_Agen da.

¹⁴ Serpil Acikalın, "Turkey-Iraqi Relations in Light of Davutoglu's Visit to Iraq," *International Strategic Research Organization (Uluslararası Stratejik Arastirmalar Kurumu-USAK)*, August 21, 2009, <http://www.usak.org.tr/EN/makale.asp?id=1029>.

Iraq,¹⁵ conflicts between religious and ethnic groups, and the intensity of attacks on Iraqi oil pipelines, oil installations and oil personnel¹⁶ (469 attacks, which is relatively high, from 2003 to 2008¹⁷ in Iraq) are the main problems in respect to Iraq's stability that could affect oil and gas flow through the Kirkuk-Yumurtalik pipeline. Hence, Turkey is trying to further increase the amount of trade with Iraq to establish more mutual dependence. Besides, Turkey is the main trade partner of Iraq, and Turkey provides the only way to carry its oil and natural gas to the European market.¹⁸

Another important problem for energy security is the Israeli-Palestinian dispute. In the Middle East, there are increasing tensions between Israel and Middle Eastern Muslim countries concerning Palestinians. Turkey is the only country that is known as Muslim yet recognizes the independence of Israel. Israel wants to obtain natural gas and water through a pipeline from Turkey's port of Ceyhan.¹⁹ Also, Israel has been designated as a transit country for Russian and Caspian energy.²⁰ For this purpose, an expanded pipeline is planned to bring oil from the Russia and the Caspian region through Ceyhan to Ashkelon and from there to be pumped to Eilat and re-loaded onto tankers to be shipped to Asia at more competitive prices and with more capacity than through the Suez Canal.²¹ However, the dispute concerning Palestinians has strained the relations between Israel and Turkey and may negatively influence the energy security of Turkey.

All the problems above are external issues about relations between Turkey and its neighbors. However, Turkey also has internal problems with respect to energy security.

¹⁵ Lionel Beehner, "The Challenge in Iraq's Other Cities: Kirkuk," *Council On Foreign Relations*, June 30, 2006, <http://www.cfr.org/publication/11036/>.

¹⁶ Gal Luft, "Fencing in Looters and Saboteurs in Iraq, Energy Security," *Institute for the Analysis of Global Security*, September 29, 2003, <http://www.iags.org/n0929032.htm>.

¹⁷ Iraqi Pipeline Watch, *Attacks on Iraqi Pipelines, Oil Installations, and Oil Personnel, Energy Security*, March 27, 2008, <http://www.iags.org/iraqipelinewatch.htm>.

¹⁸ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, (Burlington: Ashgate Publishing Limited, 2007), 147.

¹⁹ Gal Luft, "Energy Security Challenges for Israel Following the Gaza War," *International Analyst Network*, February 25, 2009, http://www.analystnetwork.com/article.php?art_id=2799.

²⁰ Ibid.

²¹ Ibid.

Most important is the probability of sabotage on pipelines by the terrorist PKK. Their sabotage against the Baku-Tbilisi-Ceyhan pipeline raised a question about security in Turkey with respect to its own and the region's energy security in August 2008.²² The BTC Pipeline is an ideal target for militants wishing to destabilize Turkey. The 669-mile-long BTC pipeline is difficult to defend against such militant attacks.²³ The continued probability of these kinds of attacks on pipelines continues as a security concern for Turkey.

The main opposite hypothesis for the Turkish energy policy is that Turkey is increasing its dependence on foreign countries²⁴ with its energy projects between Russia, Qatar, Azerbaijan, Syria, and Iran. According to this hypothesis, Turkey's energy agreements have made it too dependent on suppliers, especially Russia. However, Turkey needs to meet its domestic requirements. Thus, Turkey needs to diversify its energy supplies. To achieve this, it needs to access energy from these other countries. Besides, Turkey is the best option for the landlocked Caspian Basin that is heavily influenced by Russian foreign policy, isolated Iran, and the Middle East to reach out to western markets for reliable transshipment of oil and natural gas to world markets.²⁵ This situation creates common interests between Turkey, as both an energy consumer and transit country, and the energy producer regions. Consequently, these common interests create interdependency.

D. LITERATURE REVIEW

Energy security is considered the provision of affordable (ability to buy supply at relatively stable and reasonable prices), reliable (predictable supplies that are less and less vulnerable to disruptions), and ample supplies of oil and gas (ensuring that a large

²² Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

²³ Stratfor Global Intelligence, *Turkey: Implications of a Blast on the BTC Pipeline*, http://www.stratfor.com/analysis/turkey_implications_blast_btc_pipeline.

²⁴ Mahir Zeylanov, "Turkey Becomes World's Largest Energy Hub Through Recent Deals," *Sunday's Zaman*, August 23, 2009, <http://www.sundayszaman.com/sunday/detaylar.do?load=detay&link=184792>.

²⁵ Chen Ming, "Turkey Emerges as World Energy Hub After Big Deals," *Turkish Weekly*, August 26, 2009, <http://www.turkishweekly.net/news/87662/turkeyemerges-as-world-energy-hub-after-big-deals.html>.

number of nations with hydrocarbon reserves produce them for global markets).²⁶ According to the International Energy Agency, energy security is “the uninterrupted physical availability at a price which is affordable, while respecting environment concerns.”²⁷ It has two dimensions; one of them is the view of the importing country, the other the view of the exporting country. For an importing country (consumer), energy security refers primarily to access to the sources and security of supplies,²⁸ for an exporting (producer) country, energy security needs to have access to markets and security of demand.²⁹

Turkey is a natural energy corridor between consumers and producers. According to Katinka Barysch of the Centre for European Reform (CER), “Turkey’s natural position of being an energy hub contributes to European energy security positively by its proximity to resource rich regions in its neighborhood.”³⁰

Turkey is an energy-transit nation that links Caspian and central Asian suppliers with European consumers.³¹ Turkey's energy issues are not limited to pipeline politics. Poor domestic energy supplies, electricity costs, and an overdependence on Russian gas raise questions about Turkey's own energy security and Turkey’s position as an energy bridge for energy.³²

Ahmet Davutoglu, the chief foreign policy advisor to Turkey's prime minister, says Turkey's security interests lie in successfully balancing its role as an energy transit country between producers and consumers. According to him,

²⁶ Jan H. Kalicki and David L. Goldwyn, "Introduction: The Need to Integrate Energy and Foreign Policy," in *Energy Security Toward a New Foreign Policy Strategy*, ed. Jan H., and David L. Goldwyn Kalicki (Washington DC: Woodrow Wilson Center Press, 2005), 9–10.

²⁷ International Energy Agency, *Energy Security*, http://www.iea.org/subjectqueries/keyresult.asp?KEYWORD_ID=4103.

²⁸ Mason Willrich, *Energy and World Politics* (New York: Free Press, 1975), 66.

²⁹ *Ibid.*, 94.

³⁰ Katinka Barysch, "Turkey’s Role in European Energy Security," *Centre for European Reform Essays*, December 2007, http://www.cer.org.uk/pdf/essay_turkey_energy_12dec07.pdf.

³¹ Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

³² *Ibid.*

Turkey's national strategy requires establishing the transit of energy across its territory due to its geographical position. Turkey shares common interests with Russia, Iran, and the United States for the successful operation of natural gas and oil pipelines that run in various directions through the Turkish territory. Hence, Turkish analysts try to combine all these interests in one single picture. This is a rational calculation, not an ideological account. Turkey's relations with Iran will continue, and efforts will be made to preserve its understanding with Russia, based on mutual interest. As far as cooperation with the United States in the field of energy concerns, the joint projects on the Trans-Caspian as well as strategic approach for energy security in global economy will be maintained in the most effective way.³³

In this respect, Turkey's energy policy contributes to mutual interdependence of consumer and producer countries rather than dependence on them. The main concern of Turkey's foreign policy is energy. In the energy issue, the main concern is natural gas. Turkey made its first natural gas treaty with Russia in 1984 and Russian natural gas is carried by a pipeline, via Bulgaria, constructed in 1987.³⁴ Natural gas is a most critical commodity, since it is relatively inexpensive and serves as a pollution-free fuel for heating and power generation. Using this pipeline, Turkey's consumption of natural gas rose from 1.2 billion cubic meters in 1988, to 50 billion cubic meters in 2010.³⁵ In 1999, the only pipeline for natural gas was the one inaugurated in 1987³⁶. Turkey needed more pipelines to meet the requirements of its own economy and diversify its energy supplies. The most obvious alternative suppliers were Iran, Turkmenistan, Iraq, Egypt, and the Caspian Basin.³⁷

Due to energy traffic via straits of Turkey, Turkey has been considered as an important key player in the north-south oil route. Also, the Baku-Tblisi-Ceyhan (BTC) oil route and the Baku-Tblisi-Erzurum (BTE) natural gas pipeline promote Turkey's role as an east-west energy corridor. However, while Turkey's role as an important energy

³³ Ahmet Davutoglu, "Turkey's Foreign Policy Vision: An Assessment of 2007," *Insight Turkey* 10, no. 1 (2008), 91–92.

³⁴ William Hale, *Turkish Foreign Policy 1774-2000* (London: MPG Books Ltd, 2002), 167.

³⁵ *Ibid.*, 212.

³⁶ *Ibid.*

³⁷ *Ibid.*

player increases, pressure on Turkey increases at the same rate. Turkey needs to balance the hegemonic and regional powers. Otherwise, hegemonic and regional powers like the U.S. and Russia can have differences with Turkey due to the contrasts between Turkey's energy policies and their interests. For instance, Turkey's stance in the Russian-Georgian War in 2008 upset Russia, and Turkey's energy agreements with Iran upset the United States.³⁸

The emergence of the Caspian Basin as a significant source of energy has changed Eurasia and given Turkish policy toward Central Asia and the Caucasus an important new dimension. Although initial estimates of Caspian oil reserves have been highly exaggerated, these reserves are still important.³⁹ Caspian resources are landlocked and to get the energy to international markets, new pipelines need to be built.⁴⁰ Turkey provides almost the only opportunity for Central Asian and Caucasus countries to reach the international markets, if they want to escape the influence of Russia. Turkey has basically three goals in the Caspian Basin: economic benefits deriving from the transit fee income; the reduction of Turkey's dependence on Russian gas and Middle Eastern oil; and, employment opportunities that pipeline constructions would create in less developed eastern Turkey.⁴¹ Even though Turkey considers economic goals in the Caspian, Russia, the EU and the U.S. mainly consider Turkey's role in the Caspian as political. Turkey and the Caspian Basin play a crucial role in U.S. strategies to enhance western influence and to match Russian influence in Central Asia, as well as to maintain the U.S. containment policy against Iran.⁴² The U.S. wants an uninterrupted flow of oil and gas from the region

³⁸ Tuncay Babali, "Turkey At the Energy Crossroads, Turkey Past and Present," *Middle East Quarterly*, Spring 2009, <http://www.meforum.org/2108/turkey-at-the-energy-crossroads>.

³⁹ F. Stephen Larrabee and Ian O. Lesser, *Turkish Foreign Policy in an Age of Uncertainty* (Santa Monica, California: RAND National Security Research Division, 2003), 107.

⁴⁰ *Ibid.*, 108.

⁴¹ Dietrich Jung and Wolfango Piccoli, *Turkey at the Crossroads Ottoman Legacies and A Greater Middle East* (New York: Zed Books, 2001), 186.

⁴² Dietrich Jung and Wolfango Piccoli, *Turkey at the Crossroads Ottoman Legacies and A Greater Middle East* (New York: Zed Books, 2001), 186.

and would like to ensure pipeline security by restricting Iranian and Russian influence on oil and gas exploration, development, and pipeline routes.⁴³

Despite frequent Iranian declarations of contracts and partnerships, since 2001, Turkey has been the only significant importer of Iranian gas. Turkey signed the Iran contract in 1996, during the tenure of the Refah Party, whose leader Necmettin Erbakan's Islamist leanings later led to public pressure for his resignation.⁴⁴ The U.S. was clearly unhappy with this project due to the ILSA (Iran-Libya Sanction Act), but Turkey was anxious about its demand for natural gas, so Turkey continued to establish strong ties with Iran and Russia in regard to natural gas pipelines. Energy has been a driver behind the warming of Iranian-Turkish relations. Iran is the second-largest supplier of natural gas to Turkey (after Russia). In July 1996, shortly after taking office, Turkish Prime Minister Necmettin Erbakan concluded a \$23 billion agreement for the delivery of natural gas from Iran over 25 years. In February 2007, under Prime Minister Erdogan, Turkey and Iran agreed to seal two new energy contracts: one allowing the Turkish Petroleum Corporation (known as TPAO) to explore oil and natural gas in Iran and another for the transfer of gas from Turkmenistan to Turkey (and on to Europe) through a pipeline in Iran.⁴⁵

Arrangements with European Union member states on the Nabucco natural-gas pipeline, with Russia on the competing South Stream project, with Qatar on liquefied natural gas and a possible pipeline, with Azerbaijan on gas supplies for its isolated Nakhchivan autonomous region, and with Syria on gas-imports are the indicators of

⁴³ Shah Alam, "Pipeline Politics in the Caspian Sea Basin," *Strategic Analysis: A Monthly Journal of the IDSA XXVI*, no. 1 (January–March 2002).

⁴⁴ Tuncay Babali, "Turkey At the Energy Crossroads, Turkey Past and Present," *Middle East Quarterly*, Spring 2009, <http://www.meforum.org/2108/turkey-at-the-energy-crossroads>.

⁴⁵ F. Stephen Larrabee, "Turkey Rediscovered The Middle East," *Foreign Affairs* 86, no. 4 (July/August 2007): 103–114.

Turkey's energy aspirations.⁴⁶ For that reason, Mahir Zeynalov from *Zaman*, an influential newspaper in Turkey, emphasized Turkey as the “World’s Largest Energy Hub.”⁴⁷

Turkey is really becoming the world’s largest energy hub that establishes a bridge between east-west and north-south by its pipelines: -east-west pipelines of the Baku-Tbilisi-Ceyhan Project (BTC), the Kirkuk-Ceyhan Oil Pipeline, the South Caucasus Pipeline (under construction), the Turkey-Greece-Italy Gas Pipeline (under construction), the Nabucco Gas Pipeline (projected), the Trans-Caspian Pipeline (projected), the Kazakh-oil expansion to BTC (projected), the Iraqi Gas (projected) and North-South of Blue Stream Gas Pipeline, the Samsun-Ceyhan Bypass Oil Pipeline (projected), the Burgas-Alexandropulos Oil Pipeline-Bypass for straits (projected), the Samsun-Ceyhan Pipeline (projected), the Turkey-Israel Oil/Gas Pipeline (projected).⁴⁸

Turkey’s energy policy is driven mainly by its domestic needs.⁴⁹ Turkey’s energy production is insufficient for the country’s needs. Turkey is a developing country and needs energy to sustain its economic growth. To sustain that economic growth, it has to make enormous efforts to increase its energy imports as well as develop its own resources and improve energy efficiency, due to the lack of its known own oil and natural gas reserves.⁵⁰ Thus Turkey is attempting to improve its energy requirements by making agreements with energy giants Russia, Iran, Caspian Sea Basin countries and the Middle East. Sometimes it contrasts with U.S. and European countries. The United States and

⁴⁶ Alexandros Petersen, "Turkey's Multivector Energy Hub: Ignore At Your Own Peril," *Radio Free Report Radio Liberty*, August 31, 2009, http://www.rferl.org/content/Turkeys_Multivector_Energy_Hub_Ignore_At_Your_Peril/1811254.html.

⁴⁷ Mahir Zeylanov, "Turkey Becomes World's Largest Energy Hub Through Recent Deals," *Sunday's Zaman*, August 23, 2009, <http://www.sundayszaman.com/sunday/detaylar.do?load=detay&link=184792>.

⁴⁸ Mehmet Efe Biresselioglu, "Turkey: Europe's Emerging Energy Corridor for Central Eurasian," *Caucasian and Caspian Oil and Gas*, January 20, 2007, <http://www.balkananalysis.com/2007/01/20/turkey-europe's-emerging-energy-corridor-forcentral- Eurasian-caucasian-and-caspian-oil-and-gas/>.

⁴⁹ Katinka Barysch, "Turkey's Role in European Energy Security," *Centre for European Reform Essays*, December 2007, http://www.cer.org.uk/pdf/essay_turkey_energy_12dec07.pdf.

⁵⁰ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 13.

European countries have tensions with Russia and Iran on energy, but Turkey has to improve its energy needs to meet its domestic requirements.

In this thesis, the author argues that Turkey's attempt to improve its energy needs contributes to its energy security as well as the region's (EU, Russia, Iran, Middle East and Caspian Sea Basin) energy security by mutual interdependence. Its attempts to build more pipelines from east to west and north to south contribute to more energy security by mutual interdependence.

E. METHODS AND SOURCES

This thesis examines the Turkish energy security policy as well as the region's energy security. Initially, this thesis analyzes Turkey's energy structure and its attempts to meet its own needs. Subsequently, it examines the impacts of these attempts on the region. Finally, this thesis analyzes the challenges of being an energy hub or corridor.

1. Thesis Synopsis

The thesis consists of five chapters. The first chapter covers the background of energy security and Turkey's energy security issues. This chapter provides initial information and clarifies the research question of the thesis. It gives information and the background of the main research question.

The second chapter covers Turkey's energy policy and explains why Turkey chooses to be an energy hub or corridor for its energy security. It has two sections. First, it covers Turkey's energy outlook, and second, Turkey's energy policy before and after the Cold War.

The third chapter analyzes Turkish energy security and how Turkey's methods to maintain its energy security contribute to the region's energy security. For that reason, the thesis analyzes pipelines between energy consumers and suppliers.

The fourth chapter examines the challenges to Turkey's and the region's energy security. It examines Russian, U.S., EU and Iranian foreign policies, instabilities of the Middle East, and Turkey's problems with terrorism.

The last chapter provides a conclusion. It analyzes Turkey's attempts to establish interdependence among energy consumers and suppliers to take advantage of its energy security and meet its domestic energy needs.

F. THESIS OVERVIEW

Energy security is one of the main challenges of the post-Cold War era. Developed and developing countries are dependent on energy-producing countries. However, energy producers sometimes use their energy supplies as a strategic weapon to leverage their political aims. This creates an unsecure situation between consumers and producers. In this thesis, the author examines Turkey's natural energy corridor situation as a means of interdependence to mitigate the relations between consumers and producers in advantage of its energy security.

Thus, the thesis examines Turkey's energy relationships between energy consumers and producer countries. In this context, the author argues that Turkey's natural energy corridor or hub situation contributes to peace among consumers and producers by increasing interdependence. Because of Turkey's existing, planned and under-construction pipeline networks, and its location close to energy consumer markets and energy producers, Turkey has a unique position which provides the best option for peace and stability in regard to energy security.

II. ENERGY PROBLEMS OF TURKEY

A. TURKEY'S ENERGY OUTLOOK

Turkey has a dynamic and growing economy, which is ranked 17th in the world in GDP, and a growing population, which is also ranked 17th in the world.⁵¹ According to the Turkish Statistical Institute's data, Turkey's population is around 71 million with a growth rate of 13 percent.⁵² Due to Turkey's rapidly growing industrialization and urbanization, Turkey's energy demand is increasing. It is expected to grow at the rate of 6–8 percent per year and the primary energy consumption is expected to double between in 2010 with 126 million tonnes of equivalent (toe) and in 2020 with 222 million equivalent million tonnes.⁵³ While Turkey meets 30 percent of its total energy demand, the rest of its energy demand is being met from imports.⁵⁴

Turkey's total primary energy demand is mostly being satisfied by hydrocarbon resources. Oil and natural gas consolidate the almost 65 percent of total energy consumption of Turkey (See Figure 1). However, Turkey has very low oil and natural gas reserves.⁵⁵ Turkey produces an insufficient amount of oil and natural gas, and low quality and highly polluted lignite coal.⁵⁶ Thus, Turkey's energy policy has been highly supply oriented.⁵⁷

⁵¹ The World Bank, *Data Statistics for Turkey*, <http://www.worldbank.org.tr/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/TURKEYEXTN/0,,menuPK:361738~pagePK:141132~piPK:141109~theSitePK:361712,00.html>.

⁵² Turkish Statistical Institute, *Statistical Indicators 1923–2008*, http://www.tuik.gov.tr/yillik/Ist_gostergeler.pdf, 9.

⁵³ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

⁵⁴ Ibid.

⁵⁵ Havva Caha, "Energy Security of Turkey," *International Conference on Human and Economic Resources*, 2006, <http://eco.ieu.edu.tr/wpcontent/proceedings/2006/0608.pdf>.

⁵⁶ Brenda Shaffer, "Turkey's Energy Policies in a Tight Global Energy Market," *Insight Turkey* 8, no. 2 (April/June 2006), 97.

⁵⁷ Ibid., 98.

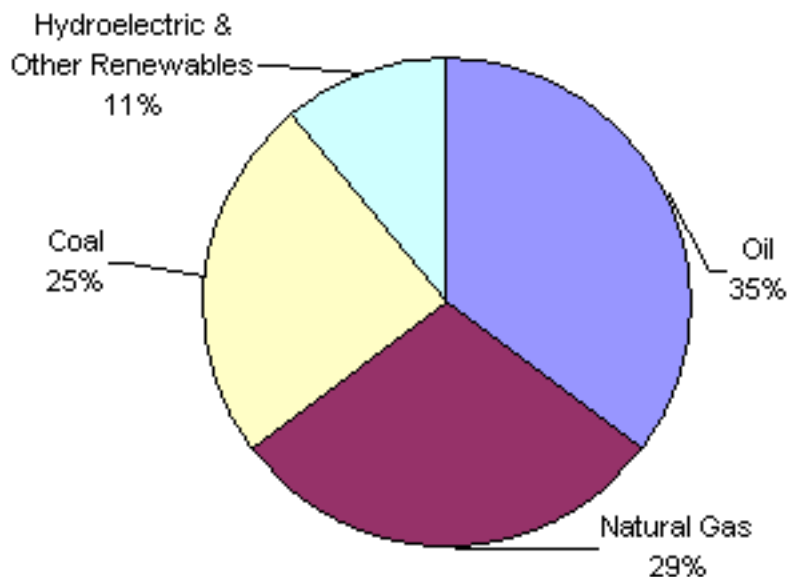


Figure 1. Total Turkish Energy Consumption⁵⁸

Oil contributes 35 percent of total energy consumption. According to the *Oil and Gas Journal*, Turkey's proven oil reserve is 284 million barrels⁵⁹ and oil production per year is around 46 thousand barrels.⁶⁰ However, Turkey's consumption is around 675 thousand barrels per year. Thus, there is a huge gap between oil production and consumption.

In Turkey, oil consumption has increased steadily, while oil production has decreased since 1990 when the oil production was at the peak level. Turkey's oil consumption increased from 7958 thousands tonnes of equivalent petroleum (TEP) in 1970 to 32551 thousand TEP in 2006.⁶¹ However, Turkey's total oil export is only 6688

⁵⁸ U.S. Energy Information Administration, Independent Statistics and Analysis, *Turkey, Country Analysis Brief*, <http://www.eia.doe.gov/emeu/cabs/Turkey/Background.html>.

⁵⁹ General Directorate of Petroleum Affairs (Petrol Isleri Genel Mudurlugu), *Statistics (Istatistikler)*, <http://www.pigm.gov.tr/istatistikler.php>.

⁶⁰ U.S. Energy Information Administration, Independent Statistics and Analysis, *Turkey Energy Profile*, http://tonto.eia.doe.gov/country/country_energy_data.cfm?fips=TU.

⁶¹ Republic of Turkey Ministry of Energy and Natural Resources, *Istatistik, Birincil Enerji Kaynaklari Tuketimi (Primary Energy Consumption)*, http://www.enerji.gov.tr/EKLENTI_VIEW/index.php/raporlar/raporVeriGir/4314/2.

thousand TEP, while its total oil import was 36681 thousand TEP, in 2008.⁶² That means that Turkey imports five-sixths of its needed oil from abroad.

In 2008, 2.2 million tonnes of oil and, until today, a total of 1,307 million tonnes of oil were produced in Turkey. However, during the last decade, oil production decreased 24 percent. Also, the decrease in oil production is expected to continue in the future due to no discovery of new oil fields and aging oil fields (See Figure 2).⁶³

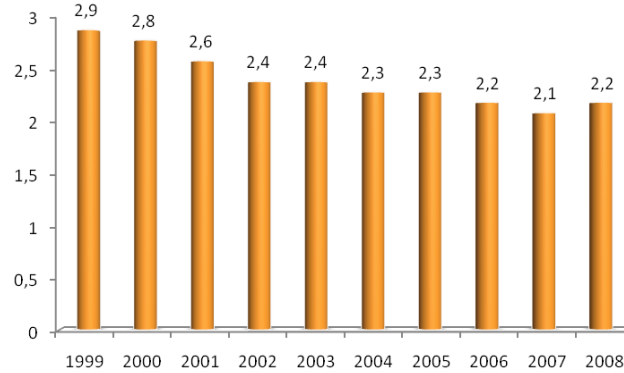


Figure 2. Crude Oil Production between 1999 and 2008 (million tonnes)⁶⁴

Unless new oil fields are discovered, Turkey's total oil reserves will be depleted in 19 years by the consumption level of today.⁶⁵ Thus, Turkey needs to find a way to meet its energy demand for oil. Crude oil suppliers of Turkey are Iran, Russia, Saudi Arabia, Iraq, Kazakhstan, Azerbaijan, Syria, Italy, England and Libya.⁶⁶

On the other hand, Turkey has chosen natural gas as another energy source, because of its growing energy needs, the discovery of giant gas fields in the Middle East,

⁶² Republic of Turkey Ministry of Energy and Natural Resources, *Istatistikler, 2008 yili Genel Energy Dengesi (General Energy Balance in 2008)*, http://www.enerji.gov.tr/EKLENTI_VIEW/index.php/raporlar/raporVeriGir/46124/2.

⁶³ Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *2008 Yili Petrol ve Dogalgaz Sektor Raporu (Oil and Natural Gas Sector Report of 2008)*, http://www.tpao.gov.tr/v1.4/condocs/petrol_sektor.pdf.

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ Energy Market Regulatory Authority, *Petrol Piyasasi Sektor Raporu 2008 (Oil Market Sector Report of 2008)*, http://www.epdk.gov.tr/yayin_rapor/petrol/2008sektorraporu/2008sektorraporu.pdf.

Russia and Central Asia, and diversifying its energy supplies.⁶⁷ Furthermore, natural gas is less polluting than coal and oil.⁶⁸ In the last two decades, Turkey substantially transformed its power generation from coal- and oil-fired plants into natural gas-fired plants.⁶⁹ Thus, Turkey's natural gas demand is also increasing steadily.

However, Turkey has very limited natural gas reserves—around 6.827 million cubic meters. Turkey produced 1.014 million cubic meters of natural gas in 2008 and, until today (See Figure 3), Turkey has produced 10.574 million cubic meters of natural gas. Even though Turkey's natural gas production has increased in the past ten years, it will eventually be depleted unless new gas fields are discovered.⁷⁰

Turkey started to produce natural gas in 1976 and since then Turkey's natural gas demand has continuously increased. In 1987, Turkey began to import natural gas from the Soviet Union, since Turkey could not meet its natural gas demand from its own gas resources.

Turkey imports gas mainly from Russia by blue stream, and to lesser degrees from Azerbaijan, Iran, Algeria and Nigeria. Turkey imports from Russia, Azerbaijan and Iran by pipelines, but from Algeria and Nigeria as LNG.⁷¹

⁶⁷ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 213.

⁶⁸ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 138.

⁶⁹ Brenda Shaffer, "Turkey's Energy Policies in a Tight Global Energy Market," *Insight Turkey* 8, no. 2 (April/June 2006), 97.

⁷⁰ Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *2008 Yili Petrol ve Dogalgaz Sektor Raporu (Oil and Natural Gas Sector Report of 2008)*, http://www.tpao.gov.tr/v1.4/condocs/petrol_sektor.pdf, 8–9.

⁷¹Ibid.

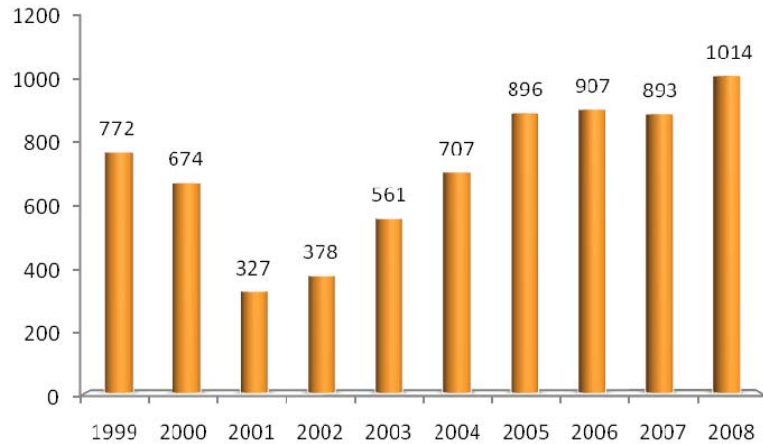


Figure 3. Natural Gas Production between 1999 and 2008 (million cubic meters)⁷²

The other energy source for Turkey is coal. Turkey's total coal reserves are about 4.614 million short tonnes. Unfortunately, only 7 percent of it is hard coal (anthracite and bituminous) and the rest of it is lignite.⁷³ So, most of Turkey's coal reserves produce poor quality and polluted coal.⁷⁴ Most of Turkey's lignite production is consumed in coal-fired power plants, but Turkey has been trying to replace the coal- and oil-fired power plants with natural gas power plants. Turkey mainly imports high quality coal from abroad.⁷⁵

Turkey also has a significant potential for renewable energy. Turkey produces a robust amount of hydroelectricity.⁷⁶ Hydropower energy and the seas surrounding Turkey are the main sources of probable renewable energy. Especially, Turkey's hydro- energy potential is huge. It is estimated that in 2020, Turkey can meet around 40 percent of its

⁷² Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *2008 Yili Petrol ve Dogalgaz Sektor Raporu (Oil and Natural Gas Sector Report of 2008)*, http://www.tpao.gov.tr/v1.4/condocs/petrol_sektor.pdf, 8–9.

⁷³ Langdon D. Clough, "Energy Profile of Turkey," *The Encyclopedia of Earth*, July 10, 2007, http://www.eoearth.org/article/Energy_profile_of_Turkey.

⁷⁴ Brenda Shaffer, "Turkey's Energy Policies in a Tight Global Energy Market," *Insight Turkey* 8, no. 2 (April/June 2006), 98.

⁷⁵ Omer Yuksek, Murat Kankal, Murat Ihsan Komurcu, Hizir Onsoy and Adem Akpınar, "The Importance of Hydropower Plants in Turkey's Energy Planning," *General Directorate of State Hydraulic Works*, http://www.dsi.gov.tr/english/congress2007/chapter_2/57.pdf.

⁷⁶ Brenda Shaffer, "Turkey's Energy Policies in a Tight Global Energy Market," *Insight Turkey* 8, no. 2 (April/June 2006), 98.

energy demand by hydropower.⁷⁷ The other renewable energy sources in Turkey are solar, thermal, wind, geothermal, photovoltaic energy and new programs such as hydrogen energy, and fuel cells.⁷⁸

Due to Turkey's lack of indigenous conventional energy resources, Turkey is a net energy importer. According to Turkey's Foreign Ministry, Turkey meets only 30 percent of its energy demand.⁷⁹ The rest of its energy comes from outside of Turkey. Especially after the 2001 economic crisis, Turkey's energy needs increased at the rate of 8 percent (See Figure 4).⁸⁰ Thus, the country needs new energy sources. In 2008, Turkey's primary energy demand was 106,338 million tonnes of equivalent petroleum and total primary energy production was 29,257 million tonnes of equivalent petroleum.⁸¹ According to estimates, Turkey's total energy demand will increase to 222 million tonnes of equivalent petroleum in 2020.⁸² It will be doubled compared to 2008.

⁷⁷ Omer Yuksek, Murat Kankal, Murat Ihsan Komurcu, Hizir Onsoy and Adem Akpınar, "The Importance of Hydropower Plants in Turkey's Energy Planning," *General Directorate of State Hydraulic Works*, http://www.dsi.gov.tr/english/congress2007/chapter_2/57.pdf.

⁷⁸ Omer Yuksek, Murat Kankal, Murat Ihsan Komurcu, Hizir Onsoy and Adem Akpınar, "The Importance of Hydropower Plants in Turkey's Energy Planning," *General Directorate of State Hydraulic Works*, http://www.dsi.gov.tr/english/congress2007/chapter_2/57.pdf.

⁷⁹ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

⁸⁰ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 138.

⁸¹ Republic of Turkey Ministry of Energy and Natural Resources, *Istatistikler, 2008 yili Genel Enerji Dengesi (General Energy Balance in 2008)*, http://www.enerji.gov.tr/EKLENTI_VIEW/index.php/raporlar/raporVeriGir/46124/2.

⁸² Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

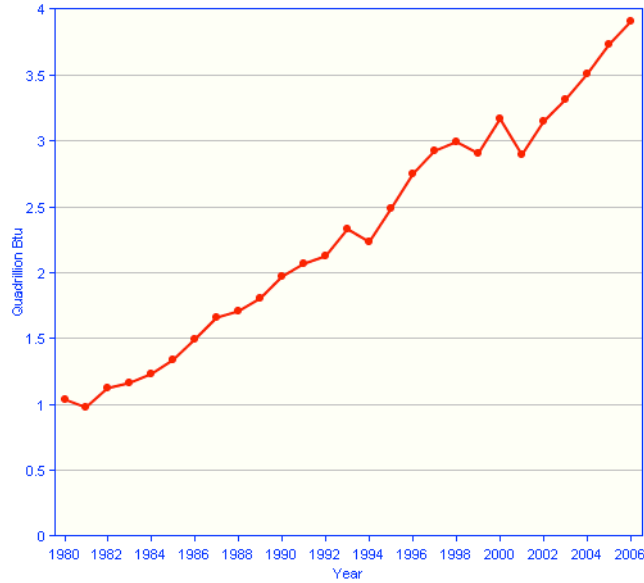


Figure 4. Primary Energy Consumption⁸³

Yet, Turkey's energy production will not increase as significantly as consumption (See Figure 5).

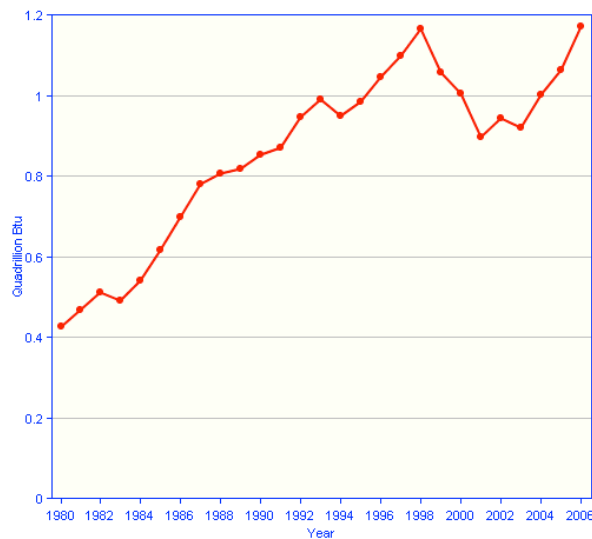


Figure 5. Primary Energy Production⁸⁴

⁸³ U.S. Energy Information Administration, Independent Statistics and Analysis, *Turkey, Primary Energy Consumption*, http://tonto.eia.doe.gov/country/img/charts/TU_prim_conc_large.png.

⁸⁴ U.S. Energy Information Administration, Independent Statistics and Analysis, *Turkey Primary Energy Production*, http://tonto.eia.doe.gov/country/img/charts/TU_prim_prod_large.png.

Turkey needs new energy resources if the country wants to keep its 6–8 percent of average annual growth.⁸⁵ It is a huge gap to meet. Therefore, Turkey’s primary focus in terms of energy is to meet its increasing energy demand by outside energy sources.

Turkey is and will remain for the foreseeable future an importer of oil and gas. In 1995, it imported 25.8 million tonnes of crude oil and will reach more than 40 million tonnes by the end of 2010, according to energy demand projections. The increase in its consumption of natural gas will be even more striking: from slightly less than 10 billion cubic meters in 1998 it is expected to use 54 billion cubic meters by 2020.⁸⁶ For that reason, the U.S. Department of Commerce has identified Turkey as a “Big Emerging Market,” and has actively encouraged new investment in and exports to Turkey.⁸⁷

B. COLD-WAR ERA

During the Cold War era, Turkey’s concerns were about security issues. Turkey had various relations with the West, the Soviet Union and the Arab Middle East.

During the Cold War, the Soviet Union’s aggressive acts defined Turkish foreign policy. The Soviet Union had claims on Turkey’s eastern provinces of Kars and Ardahan, and demands for a voice over the control of the Bosphorus. Thus, the Soviet Union had been at the center of Turkish foreign policy. Because of this, Turkey chose to be a member of NATO. After centuries of falling victim to European imperial desires, Turkey managed protection within the European system.⁸⁸

For the West, Turkey was important due to its location as a buffer between the Soviet Union and the Middle East, which ensured that Soviet influence in the region was

⁸⁵ Republic of Turkey Ministry of Foreign Affairs, *Turkey’s Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

⁸⁶ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 101.

⁸⁷ Ian O. Lesser, "Turkey and the United States: Anatomy of a Strategic Relationship," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 92.

⁸⁸ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 33.

limited and without territorial expansion.⁸⁹ Therefore, Turkey and the West had mutual interests centered on the Soviet Union. For Turkey and the West, the main question was how to ward off the Soviet Union's threat.⁹⁰

Until the 1970s, energy had never been an important issue for Turkish domestic and foreign policy. However, a threefold increase of consumption of energy between 1962 and 1977 caused the rise in Turkey's dependence on oil.⁹¹ Oil prices increased fivefold. Crude oil imports had been 60 percent of Turkey's total earnings in four years and exceeded Turkey's total export earnings by about 30 percent in 1980. This imbalance increased Turkey's dependence on oil while it raised the inflation rate in Turkey.⁹²

This energy crisis caused reduction in energy consumption in Turkey. Daily power cuts in major cities, interruptions in industrial production, lack of heating in houses, and huge lines of vehicles at the pumps for the supplies of petrol were seen. This situation demonstrated to Turkey's politicians the importance of energy in regard to political stability, economic growth, national security and domestic policy.⁹³ Therefore, the oil crisis of the 1970s built a direct link between energy and foreign policy for the first time in the Turkish Republic's history.⁹⁴ Starting in the 1970s, Turkey developed an economic component to its foreign policy.⁹⁵

Turkey, which maintained balanced relations with the Middle East countries and Israel until the 1970s, started to expand commercial relations with oil-rich Arab

⁸⁹ Amikam Nachmani, *Turkey, Facing a New Millennium: Coping with Intertwined Conflicts* (Manchester: Manchester University Press, 2003), 7.

⁹⁰ Alan Makovsky and Sabri Sayari, "Introduction," in *Turkey's New World*, ed. Alan Makovsky and Sabri Sayari (Washington DC: Washington Institute for Near East Policy, 2000), 1.

⁹¹ Sabri Sayari, "Turkey's Caspian Interests: Economic and Security Opportunities," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert, and Rajan Menon Ebel (New York: National Bureau of Asian Research, 2000), 227.

⁹² Amikam Nachmani, *Turkey, Facing a New Millennium: Coping with Intertwined Conflicts* (Manchester: Manchester University Press, 2003), 15.

⁹³ Sabri Sayari, "Turkey's Caspian Interests: Economic and Security Opportunities," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert, and Rajan Menon Ebel (New York: National Bureau of Asian Research, 2000), 228.

⁹⁴ Ibid.

⁹⁵ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 39.

countries.⁹⁶ As a result, Turkey shifted away from treating the Middle East as a hostile bloc; it began to build relationships based on mutual interests.⁹⁷

Before the oil crisis in 1973, Turkey's trade with the Arab countries was about 5 percent of its overall trade. From 1973 to the 1981, that increased to 34 percent, mostly Turkish imports of Arab oil, more specifically Saudi, Libyan and Iraqi oil.⁹⁸

In 1977, Turkey and Iraq agreed on building an oil pipeline from Iraq through Turkish soil to Turkey's Mediterranean coast that ultimately brought Turkey revenues of up to \$1.2 billion dollar a year. ⁹⁹

By the 1980s, Turkey was filling the gap in its balance of payments by increasing exports of foodstuffs and manufactured consumer goods to Middle Eastern oil-rich countries. This was increased by the 1979 Iranian Revolution, which caused a jump in oil prices.

The Iran-Iraq war opened other avenues for Turkey. Iran and Iraq, two major oil rich countries, heavily depended on Turkey as a transit route and a source of imports.¹⁰⁰ Turkey improved economic relations with Iran during the wartime. Booming relations between Turkey and Iran resulted in Turkey's neutrality to Iran and Iraq. Also, Turkey was the only outlet for Iran due to sanctions of the United States. At the end of the war, relations with Iran declined due to ideological and political differences, but economic contacts remained stable because of Turkish interest in energy deliveries from Iran.¹⁰¹

⁹⁶ Kemal Kirisci, "Turkey and the Muslim Middle East," in *Turkey's New World: Changing Dynamics in Turkish Foreign Policy*, ed. Alan, and Sabri Sayari Makovsky (Washington DC: Washington Institute for Near East Policy, 2000), 39–40.

⁹⁷ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 39.

⁹⁸ Amikam Nachmani, *Turkey, Facing a New Millennium: Coping with Intertwined Conflicts* (Manchester: Manchester University Press, 2003), 15.

⁹⁹ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 39.

¹⁰⁰ William Hale, "Economic Issues in Turkish Foreign Policy," in *Turkey's New World: Changing Dynamics in Turkish Foreign Policy*, ed. Alan Makovsky and Sabri Sayari (Washington DC: Washington Institute for Near East Policy, 2000), 23.

¹⁰¹ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 143.

Turkey's relations with Iraq were much better than those with Iran. When Turkey pursued the foreign policy of Kemalist neutrality, Turkey gained a significant economic benefit from its wartime trade with Iraq.¹⁰² Oil exports were about 96 percent of Iraq's total income.¹⁰³ Syria had blocked the flow of Iraqi oil to the Mediterranean through the Syrian pipeline because Syria supported Iran. Because of Iran, oil transport was risky through the Persian Gulf. Therefore, Turkey was the only way for Iraq to transport its oil to the Mediterranean port of Ceyhan.¹⁰⁴ During the Iran-Iraq war, the -kilometer- long pipeline to Turkey's Mediterranean port of Ceyhan carried almost 100 percent of Iraq's oil—80 million tonnes annually. For years, the Kirkuk-Yumurtalik (Ceyhan) route has been the only functioning way of export for Iraq's oil.¹⁰⁵

In this situation, Turkey was the main beneficiary. Before 1990, Iraq was the central oil supplier of Turkey and also played a major role in its international trade. Iraq was supplying 250,000 barrels per day to Turkish refineries and to Turkey's oil terminal port of Ceyhan.¹⁰⁶ Turkey gained energy resources and transit fees from flow of Iraqi oil through Turkish soil and also through cross-border truck trade.¹⁰⁷ Turkey's gain from transit fees from the oil pipeline was around \$250 million dollars. Turkey's exports increased from \$220 million in 1981 to \$2 billion in 1985, which was one-quarter of Turkey's overall exports.¹⁰⁸

After Iraq's invasion of Kuwait in 1990, the flow of oil from Iraq stopped. The United Nations exerted sanctions on Iraq. Therefore, Turkey and Iraq's relations

¹⁰² Lenore G. Martin, "Turkey's Middle East Foreign Policy," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 167.

¹⁰³ Amikam Nachmani, *Turkey, Facing a New Millennium: Coping with Intertwined Conflicts* (Manchester: Manchester University Press, 2003), 9.

¹⁰⁴ Lenore G. Martin, "Turkey's Middle East Foreign Policy," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 167.

¹⁰⁵ Amikam Nachmani, *Turkey, Facing a New Millennium: Coping with Intertwined Conflicts* (Manchester: Manchester University Press, 2003), 9.

¹⁰⁶ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 212.

¹⁰⁷ Lenore G. Martin, "Turkey's Middle East Foreign Policy," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 167.

¹⁰⁸ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 98.

ceased. This caused Turkey's loss of an estimated \$30-\$60 billion dollars in revenue from transit and storage fees and trade and business opportunities, over the following decade.¹⁰⁹

Turkey's energy relationships were about not only oil but also natural gas during the Cold War. In 1976, Turkey started to consume natural gas after the oil crisis of the 1970s. Natural gas was consumed mainly by gas-fired power plants to satisfy growing industrial and household consumption of electricity. However, Turkey's natural gas production was not enough. Turkey began to import natural gas from the Soviet Union in 1987. Since then the Soviet Union, and after the collapse of the Soviet Union, Russia has been the main supplier of natural gas for Turkey.¹¹⁰

Until the 1970s, Turkey had never had any energy policy. After the oil crisis of the 1970s, Turkey added energy to its foreign policy issues, but Turkey had never considered the exploitation of its geostrategic location in terms of an energy policy. Turkey's energy policy during the Cold War focused on meeting the increasing domestic demand. However, the demise of the Soviet Union and the foundation of Turkic speaking states in the Caspian provide Turkey new opportunities in terms of foreign policy and energy. The United States' east-west energy corridor strategy opened new avenues for Turkey to merge its energy policy with foreign policy to meet Turkey's increasing energy demands and enhance Turkey's national security.

C. COLD-PIPELINE WAR ERA

Since the end of the Cold War, energy has become the main issue for developing countries, because energy-rich but poor Eurasia has opened its doors to the world. Thus, a new cold war started, not between the two super powers but among several regional powers. Turkey emerged as a regional power after the collapse of the Soviet threat due to its historic, ethnic, and linguistic links with Eurasia.

¹⁰⁹ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 212.

¹¹⁰ Sabri Sayari, "Turkey's Caspian Interests: Economic and Security Opportunities," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert, and Rajan Menon Ebel (New York: National Bureau of Asian Research, 2000), 228.

Changing dynamics have shifted the regional powers' foreign policies in terms of energy security. Turkey also shifted its foreign policy from passive and neutral to a more active but still dependent on US policy objectives. There are mainly two factors that have shaped Turkey's energy policy: Turkey's new neighborhood and the huge gap between domestic energy consumption and the insufficient energy resources of Turkey.

Turkey exploits the regional powers' policies to meet its huge energy demands and adapt itself to its new neighborhood. Turkey's goal to achieve these two important objectives is to become an energy hub between the energy rich regions of Eurasia and the Middle East, and energy hungry Europe.

1. Turkey's Changing Dynamics

a. New Neighborhood

During the Cold War, Turkey was only a barricade against the expansion of the Soviet Union into Europe and the Middle East.¹¹¹ When the threat from the Soviet Union ended, Turkey, once surrounded by a far more powerful single state, is now surrounded by smaller and weaker states.¹¹²

As a consequence of the collapse of the Soviet Union, the strategic importance of Turkey's military role in the Western camp declined.¹¹³ However, in fact, Turkey is now in a much more critical condition for Western security by its place near the 13 regions of 16 potential unstable and risky regions. So, the new security conditions of the region have moved Turkey from the status of a flank country into a frontline country.¹¹⁴

¹¹¹ F. Stephen Larrabee and Ian O. Lesser, *Turkish Foreign Policy in an Age of Uncertainty* (Santa Monica, California: RAND National Security Research Division, 2003), ix.

¹¹² William Hale, *Turkish Foreign Policy 1774-2000* (London: MPG Books Ltd, 2002), 191.

¹¹³ Oktay F. Tanrisever, "Turkey and Russia in Eurasia," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 133.

¹¹⁴ Nursin Atesoglu Guney, "The New Security Environment and Turkey's ISAF Experience," in *Contentious Issues of Security and the Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 179.

Thus, the old, passive and neutral approach of Kemalist foreign policy slowly has given way to a more self-conscious and active foreign policy. In fact, Ankara has not severed its Kemalist neutral, pacifist foreign policy, but is redefining its foreign policy due to the emerging new security environment.¹¹⁵ As Turkey has become stronger and its neighbors weaker, Turkey has gained self-confidence to break out of its traditionally passive foreign policy into a more active and balanced foreign policy.¹¹⁶

b. Turkey's Energy Security and Energy Dependency

After the first oil crisis in 1973, energy had become the main issue in Turkish foreign policy. This has been solved mainly by increasing economic relations with the Middle East. Unfortunately, again, energy has become the main issue for Turkey due to two reasons, since the 1990s. First, Turkey's energy demands have increased to an unprecedented level due to the high rate of industrialization at and the end of the Cold War and the transformation of the economy from import-substituted into export-substituted. Turkey's energy demand is rising at a rate of 8 percent per year. It is a net oil and natural gas importer.¹¹⁷ In addition, its insufficient oil and natural gas reserves are expected to be depleted in 20 and 7 years, respectively.¹¹⁸ Therefore, Turkey, which imports 70 percent of its energy needs,¹¹⁹ faces an emergency energy problem.

Second, U.N. sanctions on Iraq after the Iraq war ceased the flow of oil through the Kirkuk-Yumurtalik pipeline. Turkey's loss had been high in terms of energy.

¹¹⁵ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 93.

¹¹⁶ Alan Makovsky and Sabri Sayari, "Introduction," in *Turkey's New World*, ed. Alan Makovsky and Sabri Sayari (Washington DC: Washington Institute for Near East Policy, 2000), 3.

¹¹⁷ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 138.

¹¹⁸ Energy Market Regulatory Authority, *Petrol Piyasasi Sektor Raporu 2008 (Oil Market Sector Report of 2008)*, http://www.epdk.gov.tr/yayin_rapor/petrol/2008sektorraporu/2008sektorraporu.pdf, 7.

¹¹⁹ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

Since the imposition of sanctions, Turkey has increased its oil purchases from Saudi Arabia and Iran,¹²⁰ influencing Turkish foreign policy.¹²¹

These two reasons pushed Turkey to find a way to meet its increasing energy demand. Turkey's geographic location has emerged as a natural bridge between the energy-rich Middle East and newly independent Eurasian states on the one hand, and the energy-consuming states of Europe.¹²² Thus, the demise of the Soviet threat and opening of all energy-rich Eurasian states, with which Turkey has linguistic, cultural, and ethnic connections, offered Turkey a new opportunity for the country's energy security.

Turkish leaders want to participate in the new emerging large oil and gas resource of Eurasia, mainly in Azerbaijan, Kazakhstan and Turkmenistan. Turkey sees Eurasia as a means to deal with Turkey's rising energy demands.¹²³

2. Convergences and Divergences of Regional Powers' Policies

Since the end of the Cold War, two goals of Turkey's energy policy have been to secure new energy supplies, and establish the country as the transit route for energy flows from Eurasian energy-rich countries to consumer markets of Europe.¹²⁴ The U.S. offered Turkey the opportunity to become an energy hub with the U.S.' East-West Energy Corridor Strategy providing two new opportunities for Turkey. First of all, the US offered to solve Turkey's energy problem by the construction of the East-West energy corridor. If oil and gas flow to Turkey, Turkey can meet its increasing energy demands. Second, Turkey has an opportunity of merging its energy policy with its security policy. If Turkey becomes an energy hub, it will secure its national boundaries from any attack and any

¹²⁰ Sabri Sayari, "Turkey's Caspian Interests: Economic and Security Opportunities," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert, and Rajan Menon Ebel (New York: National Bureau of Asian Research, 2000), 228.

¹²¹ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

¹²² Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 92.

¹²³ *Ibid.*, 152.

¹²⁴ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 211.

ethnic conflicts by providing interdependence among all transit, producer and consumer countries in its new although more risky environment.

However, Turkey wants to be an energy corridor not only between energy rich Eurasia and energy hungry Europe. Turkey wants to be an energy hub between all regional energy rich countries and energy hungry Europe. For that reason, Turkey's energy policy sometimes clashes with the U.S., Russia, Iran, and Europe. So Turkey wants to add Russia, Iran, Iraq and even Egypt to its energy hub strategy.

Turkey's energy strategy has mainly four pillars: Pipelines, the U.S. East-West energy corridor policy, energy reserves of the Middle East and the North-South-South-North energy corridor policy.

a. Pipelines

Pipelines are the most efficient way of transporting large quantities of hydrocarbons across long distances.¹²⁵ Especially, they are the best medium for exporting natural gas from the Middle East and Eurasia, because piping natural gas directly from the producer is far more economical, even though natural gas can be transported in the form of liquefied natural gas by tanker as can oil.¹²⁶

Transportation of oil and natural gas is a high-reward business. Transit countries gain substantial income from transit fees. Also, pipeline construction and operation provide jobs and support infrastructure for local economies.¹²⁷ Large transit revenues improve the social welfare for all groups and strengthen the status of the ruling regime. So, it promotes national unity and decreases ethnic tensions.¹²⁸

¹²⁵ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 4–5.

¹²⁶ Bijan Khajehpour-Khouei, "Survey of Iran's Economic Interests in the Caspian," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 80.

¹²⁷ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 4.

¹²⁸ *Ibid.*, 137.

The pipelines cause geo-political dependency for producer countries.¹²⁹ A transit country's political stability and economic health is important in terms of energy security, because no big power wants any disruption in the flow of oil or natural gas. So a transit country guarantees its own political stability by its pipelines.¹³⁰

From the liberal point of view, pipelines provide interdependence and positive sum economics, because the flow of oil and natural gas is important for the producer country, transit country and consumer country. So, pipelines have become a motivation for positive sum interdependence.¹³¹

Energy-rich Eurasia is the main reason for pipeline wars. The main problem about Eurasian pipelines is the how and where to build pipelines, because each pipeline project has run into major obstacles—political, military, economic, or a combination—so, the “million dollar question” is how and where to build the pipelines.¹³²

The Caspian has been the battle area of the twenty-first century's “Great Game,” because countries that have strong interest in where pipelines run will get a great deal of political leverage. Thus, the U.S., Russia, and Turkey are trying to win this pipeline game.¹³³

¹²⁹ Bijan Khajehpour-Khouei, "Survey of Iran's Economic Interests in the Caspian," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 80.

¹³⁰ Robert Ebel and Rajan Menon, "Introduction: Energy, Conflict, and Development in the Caspian Sea Region," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 10–11.

¹³¹ David I. Hoffman, "Azerbaijan: The Politicization of Oil," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 71.

¹³² Jennifer DeLay, "The Caspian Oil Pipeline Tangle: A Steel Web of Confusion," in *Oil and Geopolitics in the Caspian Sea Region*, ed. Michael P. Croissant and Bulent Aras (Westport: Praeger, 1999), 46.

¹³³ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 2.

b. East-West Corridor Strategy

The Caspian Sea Basin possesses around 90 billion barrels of oil. This amount is slightly more than that of the North Sea and equal to reserves of Iran and Kuwait. The U.S. and EU import around 50 percent of their oil and Japan almost 100 percent. Oil is a vital interest for the world's developed countries.¹³⁴ As the Eurasian countries are landlocked, the shortest routes to the world's sea-lanes are by pipelines. The sea-lanes are in the Black Sea, Mediterranean Sea and Persian Gulf. The Persian Gulf is not an option due to U.S.' isolation policies against Iran.¹³⁵ Turkey is located between the Black Sea and the Mediterranean Sea and is, therefore, the vital player in this pipeline war.¹³⁶ For that reason, the U.S. formalized a "strategic energy alliance" to promote energy diversity and security, develop Caspian sources, transport oil and gas through Turkey to international markets.¹³⁷

Turkey is an important actor in Eurasia, although it is not a Eurasian state. The expansion of U.S. commercial interests in Eurasia and Russia's reduced influence has provided Turkey with the opportunity to project its influence in the region.¹³⁸

In 1993, when the construction of an oil pipeline from Baku to Ceyhan was first suggested, Turkey's potential role as a transit route between consumer and producer emerged.¹³⁹

The United States embraced the idea of an East-West energy corridor that transports energy from Eurasia to Europe while excluding Russia and Iran, also

¹³⁴ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 215.

¹³⁵ Kenneth Katzman, "The Iran Sanction Act (ISA)," *CRS Report for Congress*, October 12, 2007, <http://www.fas.org/sgp/crs/row/RS20871.pdf>.

¹³⁶ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 215.

¹³⁷ *Ibid.*, 218.

¹³⁸ Hooshang Amirahmadi, "Introduction: Challenges of the Caspian Region," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 23.

¹³⁹ William Hale, "Economic Issues in Turkish Foreign Policy," in *Turkey's New World: Changing Dynamics in Turkish Foreign Policy*, ed. Alan Makovsky and Sabri Sayari (Washington DC: Washington Institute for Near East Policy 2000), 27.

increasing the independence of Eurasia and linking those countries with the West.¹⁴⁰ The Clinton administration identified broad U.S. interests as rapid energy development and the construction of multiple pipelines in Eurasia.¹⁴¹ However, Russia has opposed the multiple pipeline strategy due to its strong desire to retain control over its “Near Abroad.”¹⁴² Among other regional powers, Turkey also embraced the idea of an East-West corridor and multiple pipelines due to its geopolitical advantage.¹⁴³

The Baku-Tbilisi-Ceyhan project is the main pillar of the U.S.- Turkish East-West corridor policy. It will not only benefit Ankara financially, but will also represent the symbolic aspiration of Turkey’s regional power.¹⁴⁴ With the opening of the BTC pipeline, Turkey already has become the key transit country for energy. The BTC brings 1 million bbl/d of crude oil from Azerbaijan and Kazakhstan to Turkey’s port of Ceyhan from which it can be shipped by tanker to Europe.¹⁴⁵

The Baku-Tbilisi-Erzurum (BTE or South Caucasus) natural gas pipeline is another leg of the East-West corridor strategy of the U.S. The BTE pipeline brings 8.8 billion cubic meters per year of Kazakhstan and Azerbaijan natural gas to Turkey.¹⁴⁶

(1) New Silk Road-Eurasia. Eurasia holds the world’s third largest hydrocarbon reserves after the Persian Gulf and Siberia.¹⁴⁷ Its oil reserves have 16 percent of the world’s proven oil reserves and 53 percent of the proven natural gas

¹⁴⁰ Alan Makovsky and Sabri Sayari, "Introduction," in *Turkey's New World*, ed. Alan Makovsky and Sabri Sayari (Washington DC: Washington Institute for Near East Policy, 2000), 4.

¹⁴¹ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 165.

¹⁴² *Ibid.*, 166.

¹⁴³ *Ibid.*, 166–167.

¹⁴⁴ *Ibid.*, 92.

¹⁴⁵ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 86.

¹⁴⁶ Jeffrey Mankoff, "Eurasian Energy Security," *Council on Foreign Relations*, February 2009, http://www.cfr.org/publication/18418/eurasian_energy_security.html, 19.

¹⁴⁷ Bijan Khajepour-Khouei, "Survey of Iran's Economic Interests in the Caspian," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 78.

reserves.¹⁴⁸ It is seen as the next Persian Gulf, an area of such enormous untapped energy sources that it may become an alternative to the Middle East. However, there is exaggeration. The energy deposits in the region will not “shake the world,” but are enough to diversify the energy sources of the world market.¹⁴⁹

However, most of the Eurasian states are landlocked and depend on other countries to transport oil and gas to world markets.¹⁵⁰ Russia and Georgia are the only Eurasian countries that have seaways to the sea.¹⁵¹ Other Eurasian energy-rich states do not have outlets to the open sea, meaning that their oil and gas cannot be loaded directly into tankers.¹⁵²

The future of Caspian energy-rich states relies on export pipelines, because pipelines are the only way for landlocked Caspian states to develop their economies by shipping energy to global markets. If they want to improve their economies and reduce their dependence on Russia, then pipelines are a *sine qua non*.¹⁵³

¹⁴⁸ Siamak Namazi, "The Caspian's Environmental Woes," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 124.

¹⁴⁹ Robert Ebel and Rajan Menon, "Introduction: Energy, Conflict, and Development in the Caspian Sea Region," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 26–29.

¹⁵⁰ Hooshang Amirahmadi, "Introduction: Challenges of the Caspian Region," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 2.

¹⁵¹ Martha Bill Ollcott, "Regional Cooperation in Central Asia and the South Caucasus," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 126.

¹⁵² Jennifer DeLay, "The Caspian Oil Pipeline Tangle: A Steel Web of Confusion," in *Oil and Geopolitics in the Caspian Sea Region*, ed. Michael P. Croissant and Bulent Aras (Westport: Praeger, 1999), 45.

¹⁵³ Robert Ebel and Rajan Menon, "Introduction: Energy, Conflict, and Development in the Caspian Sea Region," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 10.

However, these states cannot get their energy to market without crossing other territory.¹⁵⁴ So, regional cooperation is necessary for installation of pipelines in the region, too.¹⁵⁵

The so-called New Silk Road will be a pipeline corridor stretching from Central Asia to Turkey and to Western consumer markets.¹⁵⁶ The New Silk Road is important, because Eurasian governments consider oil and gas as crucial for economic recovery and future prosperity. Besides Eurasian countries, OECD countries also consider the sources important from an energy security perspective.¹⁵⁷

The reason for the growing Turkish focus on Caspian energy development in the post-Cold War environment concerns pipelines construction projects. The transport of Caspian energy to Western markets has been a major source of international political and economic maneuvering and diplomacy. Producing countries, neighboring countries, Western oil companies and the U.S. have actively sought to influence choices concerning the routing of new pipelines.¹⁵⁸

The efforts of the Eurasian states to circumvent Russia, when shipping oil and natural gas has resulted in the emergence of Turkey as a dominant player in the export of Caspian oil and natural gas.¹⁵⁹ The BTC pipeline confirmed Turkey's importance to Eurasia.

¹⁵⁴ Geoffrey Kemp, "U.S.-Iran Relations: Competition or Cooperation in the Caspian Sea Basin," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 147.

¹⁵⁵ Hooshang Amirahmadi, "Introduction: Challenges of the Caspian Region," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 9.

¹⁵⁶ *Ibid.*, 6.

¹⁵⁷ Ottar Skagen, "Survey of Caspian's Oil and Gas Resources," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 55–56.

¹⁵⁸ Sabri Sayari, "Turkey's Caspian Interests: Economic and Security Opportunities," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert, and Rajan Menon Ebel (New York: National Bureau of Asian Research, 2000), 229.

¹⁵⁹ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

Turkey also sees the oil and gas pipelines as a source of stability, cooperation and good relations, which can prevent ethnic and religious conflicts in Eurasia. For that reason, Suleyman Demirel, ex-Turkish President, said: "We see this rich region of oil and gas reserves not just as a source of energy, but as an element of stability; just as the founders of the European community saw coal as a source of peace and stability for Europe. So we see oil and gas in our region serving the same role." Turkey knows the importance of forging trade and investments in Eurasia.¹⁶⁰

(2) Cooperation with the U.S. U.S. Policymakers in the U.S. view Eurasia as a potential counterbalance to excessive dependence on the Middle East, especially Saudi Arabia. But even if oil and gas were not at stake, there are other key interests driving U.S. policy, especially the desire to break regional dependence on Russia, isolate Iran, and support Turkish ambitions in the region.¹⁶¹

The construction of pipelines from Eurasia is imperative for the U.S.' creation of an East-West transportation corridor. For that reason, the U.S. has supported multiple oil and gas pipelines, since the 1990s. This policy was underpinned by the Silk Road Strategy Act, which emphasizes the development of infrastructure along the east-west axis in order to build strong international relations and commerce between countries of Eurasia, as well as to support US business interests and investments in the region.¹⁶²

The European Union followed a similar strategy with the U.S. and manifested the Transport Corridor Europe Caucasus Asia (TRACECA) project to fund the development of a transportation corridor from the Black Sea to Central Asia. The

¹⁶⁰ Bulent Aras and George Foster, "Turkey: Looking for a Light at the End of the Caspian Pipeline," in *Oil and Geopolitics in the Caspian Sea Region*, ed. Michael P. Croissant and Bulent Aras (Westport: Praeger, 1999), 229–230.

¹⁶¹ Robert Ebel and Rajan Menon, "Introduction: Energy, Conflict, and Development in the Caspian Sea Region," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 32.

¹⁶² Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 219.

East-West corridor policy is viewed as a tool to reduce Russia's control over the Eurasian states and bolster Turkey's position as a bridge between Eurasia and Europe.¹⁶³

U.S. policy is interested in the construction of at least one major east-west energy export route that will be insulated from Russian interference and that will deny Iran the lucrative transportation tariffs associated with such a pipeline.¹⁶⁴

Turkey has the central location for these two similar policies. Turkey is the member of OECD (Organization for Economic Co-operation and Development), NATO (North Atlantic Treaty Organization) and the Customs Union with the European Union. It is also a leading country in the Muslim world. In addition, Turkey has linguistic, ethnic, cultural and historic ties with the Eurasian countries. Furthermore, its location is in the middle of Eurasia and Europe. All these factors place Turkey in a unique position as a potential transit state.¹⁶⁵

Development of Eurasian oil and gas pipelines and making Turkey an energy hub, the maintenance of de facto independence for Georgia, Armenia, Azerbaijan and Central Asian republics, are the convergence of U.S. and Turkey's foreign policy goals in terms of energy.¹⁶⁶

Turkey possesses, however, only very limited economic means of its own to bring about realization of its interests. The success of its Eurasian energy policy mainly depends on the U.S. government's policies.¹⁶⁷ Therefore, Turkey does not

¹⁶³ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 219–220.

¹⁶⁴ David I. Hoffman, "Azerbaijan: The Politicization of Oil," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 71.

¹⁶⁵ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 92.

¹⁶⁶ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 86.

¹⁶⁷ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 101.

want to antagonize the US in Eurasia. Both countries, the U.S. and Turkey, have been working for a Eurasian transit corridor to export oil and natural gas resources from the Caspian region to Europe.¹⁶⁸

(3) Competition with Russia. Russia and Turkey are natural rivals in Eurasia. Russia views Turkey as the main beneficiary of the Soviet collapse and pursues a Near Abroad policy, which assumed that former Soviet Republics belong to a Russian sphere of influence. According to Russia, Turkey is a Trojan horse of the U.S. and the West. Turkey is seen by Russia as the main challenger after the U.S. in the Eurasia region.¹⁶⁹

Turkey's Eurasian policy differs from Russia's. It mainly seeks to decrease the newly independent states' dependence on Russia, and become a major actor in the region to secure economic and security benefits.¹⁷⁰ Thus, Turkey and Russia have clashed on three different points in terms of their different visions: the BTC and Nabucco, Bosphorus and Dardanelle Straits, separatist Chechens and the terrorist PKK.

In line with this policy, Turkey has sought to transport Eurasian crude oil through the BTC by blocking Russia's Baku-Novorossiysk option. To support this argument, Turkey argued that straits are narrow and there are frequent collisions and accidents with oil tankers, which can cause an environmental disaster. So Turkey adopted new regulations concerning straits on July 1, 1994. Russia argued that Turkey violated the Montreux Convention that regulated the control of Turkish Straits.¹⁷¹

Russia also accused Turkey of supporting Chechens through clandestine activities in the 1990s. In addition, Turkey accused Russia of aiding and providing refuge for PKK members. Both countries used their weaknesses to weaken each other.¹⁷² However, Turkey succeeded first with construction of the BTC pipeline.

¹⁶⁸ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

¹⁶⁹ Oktay F. Tanrisever, "Turkey and Russia in Eurasia," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 135–136.

¹⁷⁰ *Ibid.*, 137.

¹⁷¹ *Ibid.*, 137–138.

¹⁷² *Ibid.*, 139–140.

Now, Russia and Turkey are again rivals on the Nabucco project, although they are approaching each other much more moderately than before.

c. East-West Corridor With the Middle East

Oil is an important energy source for Turkey, but oil slowly gives way to natural gas as the energy choice in Turkey, because it is less polluting, more readily available to Turkey, and cheaper than oil. In addition, Turkey's geopolitical location provides abundant natural gas import ways from Middle East, Eurasia and Russia. For that reason Turkey is trying to diversify its natural gas supplies by increasing geopolitical ties with the Middle East.¹⁷³

(1) Cooperation with Iran. Economic factors, especially those related to energy, increasingly tie the two countries together.¹⁷⁴

Turkey signed an agreement with Iran to meet its growing demand for natural gas in 1996. Turkey and Iraq agreed to a \$23 billion natural gas deal. It would deliver 4 billion cubic meters (bcm) of gas to Turkey annually. After completion of the pipeline, it would increase to 10 bcm annually.¹⁷⁵

Turkey and Iran have signed a memorandum for developing Iranian gas and oil for the Turkish market as well as for onward export via pipeline to Europe. Even though the U.S. disapproves of this agreement due to the Iran Sanctions Act of the United States, Ankara signed the agreement. This agreement has major implications for the geostrategic "pipeline war" among the U.S., Russia, Iran, and Turkey.¹⁷⁶ By creating this pipeline, Turkey hopes to tie Iran the East West corridor to

¹⁷³ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 85–86.

¹⁷⁴ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 111.

¹⁷⁵ Sabri Sayari, "Turkey's Caspian Interests: Economic and Security Opportunities," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert, and Rajan Menon Ebel (New York: National Bureau of Asian Research, 2000), 231.

¹⁷⁶ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 85–86.

Europe. In this way, Turkey is diversifying its natural gas resources and also stepping forward to become an energy hub in the region.

In addition to the bilateral agreement with Iran, Turkey also concluded an agreement with Turkmenistan for natural gas exports through Iran's soil for which Iran will receive transit fees.¹⁷⁷

This process deepened with the signing in mid-September 2007 of a memorandum of understanding between the Iran and Turkey for an extensive joint venture in this area. Turkey has now become a major hub for the consumption of Iranian gas and oil, as well as for this onward transport to the West. Despite strong opposition, the EU will welcome this Iranian alternative to exclusive reliance on Russian exports to Europe—also not favored by Washington.¹⁷⁸

With respect to their mutual economic interests, Turkey and Iran are also potential competitors for alternative oil and gas transit pipelines from the Caucasus and Central Asia.¹⁷⁹

(2) Iraq Option. The Kirkuk-Yumurtalik oil pipeline closed in 1991 and reopened in 2004 after the fall of Saddam Hussein. Before the first Gulf War, it was the most important oil source for Turkey. Now Turkey is expecting the Kirkuk-Yumurtalik oil pipeline to reach its old capacity even though there have been many incidents of sabotage by insurgents.¹⁸⁰ If the pipeline reaches its old capacity, it will be another important source of oil for Turkey.

Turkey has also expressed an interest in developing Iraq's natural gas fields. Iraq has the eleventh largest natural gas reserves in the world with 3.17 trillion

¹⁷⁷ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 234.

¹⁷⁸ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 112.

¹⁷⁹ Lenore G. Martin, "Turkey's Middle East Foreign Policy," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 172.

¹⁸⁰ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 85–86.

cubic meters.¹⁸¹ So, constructing a pipeline, parallel to the existing twin oil pipelines to Ceyhan, will be relatively low-cost and a short-time option.¹⁸² Within this framework, a memorandum of understanding was signed between Turkey and Iraq on August 7, 2007 in Ankara in order to supply Iraqi natural gas to Turkey and via Turkey to Europe.¹⁸³ In this way, Turkey expects to add Iraq to the East-West energy corridor.

d. North-South Corridor

(1) Cooperation with Russia. After a period of competition, Russia and Turkey recognized that their rivalry was unlikely to produce a victory in Eurasia, and that it undermined their national security and their relations with Western powers. Russia became aware that it was not a superpower anymore, but a regional power. Turkey accepted that its capacity to project power over Eurasia was very limited due to lack of economic and political resources. Thus, economic and political limitations pushed both countries to rapprochement.¹⁸⁴

In 1997, Turkey and Russia started to cooperate. Turkey signed a natural gas agreement with Russia called the Blue Stream pipeline, which was constructed under the Black Sea and delivered 16 bcm of natural gas by the year 2010.¹⁸⁵ So, Turkey is a partner in the delivery of Russian gas.

Russia and Turkey have mixed relations in terms of energy. On the one hand, rivalry and mistrust between Turkey and Russia on Eurasia constitute a potential source of instability. On the other hand, unprecedented growth of economic ties has created considerable Turkish-Russian interdependence, and the determination of both

¹⁸¹ CIA World Fact Book, *Iraq*, <https://www.cia.gov/library/publications/the-worldfactbook/geos/iz.html>.

¹⁸² Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 234.

¹⁸³ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

¹⁸⁴ Oktay F. Tanrisever, "Turkey and Russia in Eurasia," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 141.

¹⁸⁵ Sabri Sayari, "Turkey's Caspian Interests: Economic and Security Opportunities," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert, and Rajan Menon Ebel (New York: National Bureau of Asian Research, 2000), 231.

sides to expand those ties offers an enormous opportunity for achieving mutual trust. Turkish-Russian relations at the beginning of the twenty-first century thus should be defined as “virtual rapprochement”—neither adversity nor friendship, but a mixture of the two that both sides find challenging to manage.¹⁸⁶ Turkey and Russia are competitors with regard to the transportation of Eurasian oil and gas; but they are also partners concerning the natural gas of Russia.¹⁸⁷

Thus, the Turkish-Russian relationship now rests on quite new foundations; powerful ties are emerging, and most contentious issues of the past are fading. Some elements of rivalry will always exist for influence in the Muslim regions of the former Soviet Union, and over alternative courses of east-west energy pipelines to Europe (whether they should traverse Russia or Turkey), but these issues seem manageable, especially to the degree that Russia now views Turkey as an independent competitor to Moscow and no longer an instrument of U.S. policies. Russia is expected to consistently encourage this independence.¹⁸⁸

Both domestic sources of Turkish and Russian foreign policy behavior and the states’ changing positions in the international system influence their foreign policy actions in the Eurasian region. For this reason, relations between Russia and Turkey displayed different characteristics before and after 1997. In 1992-1997, relations were characterized by a geopolitical rivalry between the two regional powers; since 1997, both states have moved to normalize their relations as their positions toward the West also started to converge.¹⁸⁹

¹⁸⁶ Duygu Bazoglu Sezer, "Turkish-Turkey and the Muslim Middle East," in *Turkey's New World: Changing Dynamics in Turkish Foreign Policy*, ed. Alan Makovsky and Sabri Sayari (Washington DC: Washington Institute for Near East Policy, 2000), 39–40.

¹⁸⁷ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 185.

¹⁸⁸ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 133.

¹⁸⁹ Oktay F. Tanrisever, "Turkey and Russia in Eurasia," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 154.

(2) Russia-Israel-Turkey. Considerably, huge Turkish import of Russian natural gas – which comprises at least 65 percent of Turkish gas imports¹⁹⁰ – through the Blue Stream pipeline under the Black Sea builds massive interdependence between the two countries. Actually, Russia wants to expand the Blue Stream gas pipeline from Turkey to Israel. Furthermore, Russia and Turkey agree on a pipeline, which is called Samsun-Kirikkale-Ceyhan pipeline that would cost an estimated \$1 billion, to carry Russian oil south across Turkey to the Aegean. Another alternative is the trans-Thrace pipeline, in which Russian oil will go through Turkish soil from the Black Sea into the Mediterranean—instead of through the sensitive and already overcrowded Bosphorus.¹⁹¹

In 2007, Turkey and Israel agreed on constructing a pipeline system, which connects the Black Sea to the Red Sea. This pipeline would bypass Syria and Lebanon and bring both gas and oil from Russia and Azerbaijan through Turkey to Israel by going underwater. Israel is still interested in Turkey's capability to transport energy from the Caucasus and Central Asia to Israel. BTC oil pipeline from Azerbaijan to Turkey is the first step of this aim.¹⁹²

(3) Arab Natural Gas Project. Even though Egypt and Turkey have never had a cordial relationship, in 1996, Turkey opened negotiations with Egypt over the possible provision of Egyptian natural gas to Turkey. Full construction and operation of the Arab Natural Gas Pipeline to carry Egyptian gas to Turkey, via Jordan and Syria, was scheduled for 2009,¹⁹³ but the project has yet to materialize and its economic feasibility

¹⁹⁰ Jeffrey Mankoff, "Eurasian Energy Security," *Council on Foreign Relations*, February 2009, http://www.cfr.org/publication/18418/eurasian_energy_security.html, 13.

¹⁹¹ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 131.

¹⁹² *Ibid.*, 118–119.

¹⁹³ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

still remains a question.¹⁹⁴ Anyway, the Arab Natural Gas pipeline is seen as an important route in the future for the South-North energy corridor.¹⁹⁵

D. CONCLUSION

Turkey cannot realize its goals concerning the Caspian by relying on its own resources and capabilities. Ankara has to develop a long-term policy that is coordinated with the political interests of its American and, to a lesser extent, European allies. In following its oil and natural gas pipeline interests, Ankara has to take into consideration U.S. policy objectives. As a consequence, to reap the fruits of its pipeline plans, Turkey has to design a policy that will keep American support for the East-West energy corridor plans without overly antagonizing Russia and Iran. This asks for skillful energy diplomacy. In such a plan, Turkey can be an important catalyst, especially if it can secure the long-term support of its western allies.¹⁹⁶

Turkey is described as an “energy hub” or “energy corridor” in the East-West direction. However, Turkey’s policy is to become not only an East-West energy corridor, but also a North-South energy corridor.¹⁹⁷ For that strategy, Turkey has been exploiting the foreign policies of regional powers. Thus, Turkey’s foreign policy, in terms of energy, is a delicate balancing policy between regional rivals. In this way, Turkey is endeavoring to become an energy hub in the axis of East-West as well as North-South and South-North.

¹⁹⁴ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 123–124.

¹⁹⁵ Ahmet Davutoglu, "Turkey's Foreign Policy Vision: An Assessment of 2007," *Insight Turkey* 10, no. 1 (2008), 91.

¹⁹⁶ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 111–116.

¹⁹⁷ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 138.

III. WHY TURKEY?

Turkey's main aim is to realize becoming an energy hub between energy rich and energy poor regions. However, Turkey needs to prove itself as an energy hub to the energy rich and energy hungry countries. Turkey has several advantages. If Turkey exploits its advantages in proper ways, Turkey can persuade the energy related countries to choose Turkey as an energy hub.

The first of its advantages is Turkey's location. Turkey is in the middle of energy consumer Europe and energy rich Eurasia, Middle East and Russia. Furthermore, Turkey is surrounded by three seas, which are connected to each other by the straits. These seas are the main outlets of Russia, Eurasia and the Middle East in terms of energy. So, Turkey is in the middle of the passages from east to west.

Turkey's second important advantage is the overlapping energy strategies of the European Union and Turkey. These two are heavily dependent on Russia's natural gas and oil. Both of them, Turkey and Europe, are needed to diversify their energy suppliers. Turkey is between the Eurasia and the Middle East and Europe. So Turkey can diversify its energy suppliers with Eurasia and the Middle East as well as Europe by becoming a transit country to Europe from Eurasia and the Middle East.

The third advantage of Turkey is the international pipelines, which go through Turkey to Europe and the other regions. Turkey is already an energy transit country by its existing, planned and under construction pipelines. Turkey has pipelines from all of the energy rich countries and regions to energy consumer countries and regions. Thus, Turkey has already established itself as an energy hub.

Turkey's fourth advantage is reliability. Turkey is a member of several western institutions such as NATO, OECD and the Customs Union with the European Union. For that reason, Turkey has common interests with these countries and shares democracy with the western regimes.. In addition, Turkey's "zero problem with the neighbors" strategy promotes Turkey to other reliable countries in terms of energy security.

Last of the advantages is Turkey's infrastructure in its energy industry. Turkey has large capacity refineries, underground natural gas storage, an indigenous natural gas and oil pipeline network and the Ceyhan terminal as an international energy terminal. All these infrastructures contribute to Turkey's goals.

If Turkey exploits all of its advantages, it can sanctify itself as an energy hub for the energy-related countries. Therefore, Turkey can meet its own energy demands by constructing an energy network, of which Turkey will be at the center.

A. NATURAL BRIDGE

1. Location

In terms of energy security, transportation of hydrocarbon energy sources is one of the most important issues. There should be secure, reliable, fast and inexpensive transportation routes for hydrocarbon sources such as oil and natural gas. In this regard, Turkey's geographic location makes it a natural bridge. On the east side of Turkey, there are the energy rich Middle East, Caspian Basin; on the North side there is oil and natural gas rich Russia; and on the west side, there is energy consuming Europe.¹⁹⁸

The Caspian Basin, the Middle East and Russia have 70 percent of the world's total proven oil and gas resources, and Europe is the second largest energy consumer in the world. Turkey, therefore, is in the middle of the energy rich and energy hungry regions and countries.¹⁹⁹

Turkey's location has an important place in Turkey's energy policy. Turkey usually exploits its location when describing its energy strategy. Prime Minister Recep Tayyip Erdogan pointed out the importance of Turkey's location within the country's energy policy by these words: "One of the main factors of Turkey's energy strategy is making use of its geography and geostrategic location by creating a corridor between

¹⁹⁸ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 92.

¹⁹⁹ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

countries with energy resources and energy consuming countries.”²⁰⁰ Turkey sees itself as a natural energy hub between the east- west and recently north-south and south-north axis.²⁰¹

2. Seas and Straits

Turkey’s location is related not only to being in the middle of energy consumer and energy rich countries, but also having straits as passages of oil transportation as well as sitting on major international waterways.²⁰²

Turkey is surrounded by the Black Sea, the Aegean Sea and the Mediterranean Sea on three sides. The Bosphorus and the Dardanelle Straits are the connection between these three seas. Furthermore, these three seas are important for oil transportation. Turkey commands the straits, which are the only maritime connections between these seas, and are the main outlet for Russian, and Caspian Basin’s oil to Europe and the world. In this regard, Turkey looks like a gatekeeper while the Bosphorus and Dardanelle Straits appear as a gate to Europe in terms of energy transportation.

Across the 17-mile Bosphorus Straits, approximately 3 million barrels per day passes from the Black Sea to the Mediterranean Sea. From the Mediterranean Sea, oil usually goes west and south. The Straits are one of the busiest waterways in the world. In a year, 50,000 vessels, including 5,500 oil tankers, pass through the Straits.²⁰³ Even though, according to the 1936 Montreux Convention, all commercial vessels are guaranteed free passage through the Straits, Turkey issued some restrictive regulations on passage rules to prevent any accidents in this most difficult waterway. ²⁰⁴

²⁰⁰ Brenda Shaffer, "Turkey’s Energy Policies in a Tight Global Energy Market," *Insight Turkey* 8, no. 2 (April/June 2006), 97.

²⁰¹ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 137–138.

²⁰² Brenda Shaffer, "Turkey’s Energy Policies in a Tight Global Energy Market," *Insight Turkey* 8, no. 2 (April/June 2006), 97.

²⁰³ Gordon Fellers, "Where are the World’s Oil Transit Chokepoints?," *Pipeline & Gas Journal*, http://findarticles.com/p/articles/mi_m3251/is_6_231/ai_n25092295/?tag=content;coll.

²⁰⁴ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 216.

Since the Montreux Convention was signed in 1936, the traffic density has increased significantly in the straits. In 1936, the average number of vessels passing through the straits was about 4,500. Now this number is over 50,000. Moreover, the number of tankers has increased significantly (see Figure 6).²⁰⁵ In terms of transportation through the straits, Turkey's importance is huge.

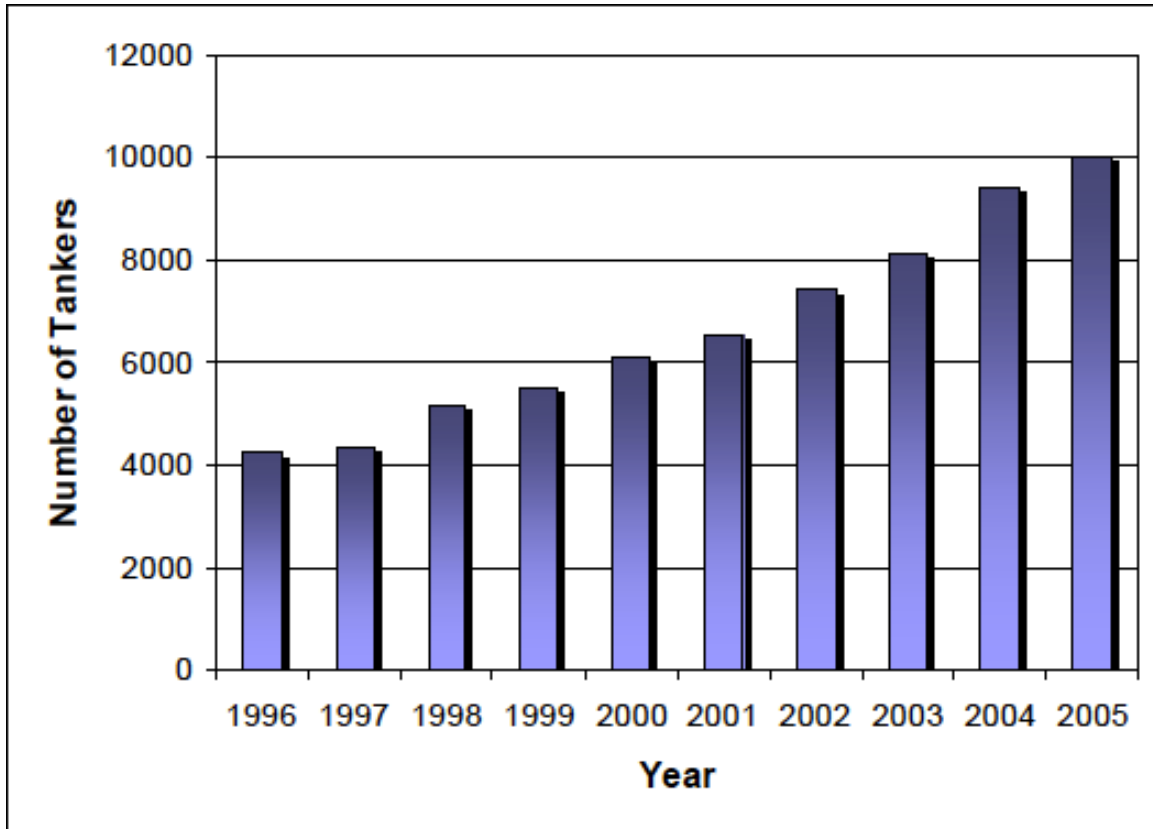


Figure 6. Number of Tankers Navigating Through the Bosphorus Strait²⁰⁶

B. ENERGY SECURITY OF TURKEY AND EUROPE

Europe is one of the most developed places in the world. It is big, has been quite dynamic, and unlike some other actual or potential markets, it is not ridden by payment

²⁰⁵ Mehmet E. Birpınar, Gonca F. Talu, Gonul Su and Mehmet Gulbey, "The Effect of Dense Maritime Traffic on the Bosphorus Strait and Marmara Sea Pollution," *The Regional Directorate of Istanbul, Ministry of Environment and Forestry*, http://www.balwois.com/balwois/administration/full_paper/ffp-746.pdf.

²⁰⁶ Ibid.

and currency instability problems.²⁰⁷ There are many welfare states within Europe. Therefore, its industry provides one of the most modern and reliable markets in the world. However, Europe needs energy to maintain its development at the same ratio. Oil and natural gas have the biggest share in Europe's energy portion. Unfortunately, Europe does not have enough oil and natural gas resources indigenously. Thus, it needs to import oil and natural gas from outside. However, while Europe imports natural gas and oil, energy security appears as a big problem.

As time passes, Europe's oil and natural gas reserves are decreasing.²⁰⁸ Almost half of Europe's requirement is met by Europe's indigenous reserves, currently. However, the remainder, half of Europe's requirement, is imported. Oil provides most of this imported energy. Europe's required oil is met by Russia with 30 percent, by the Middle East with 20 percent, by North Africa with 12 percent, and by others with 23 percent. Norway, which is the biggest oil exporter to Europe, supplies 16 percent, while the United Kingdom and Denmark supply only 25 percent of Europe's requirement.²⁰⁹

Other than oil, natural gas is the second imported commodity of energy in Europe. As time has passed, consumption of natural gas has increased in Europe and the world. Europe meets one third of its requirement from the North Sea.; 45 percent of the remainder comes from Russia; 24 percent from Norway; 21 percent from Algeria; and 11 percent from other countries.²¹⁰

According to estimates, by 2030, Europe's oil import requirements will be increased by 20 percent and reach 730 million tonnes of equivalent (Mtoe) compared to 608 Mtoe in 2006. And, natural gas requirements will reach 625 bcm or 65 percent of EU demand. Russia will continue to be the main supplier of oil and natural gas through 2030.

²⁰⁷ Ottar Skagen, "Survey of Caspian's Oil and Gas Resources," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 68.

²⁰⁸ Arianna Checchi, Arno Behrens and Egenhofer Christian, "Long-Term Energy Security Risks for Europe: A Sector-Specific Approach," *Center for European Policy Studies, CEPS Working Document, No. 309*, January 2009, <http://www.ceps.eu/node/1608>.

²⁰⁹ Ibid.

²¹⁰ Ibid.

Other producers need to increase their exports to Europe.²¹¹ Already, the EU imports 50 percent of its energy and that is expected to reach 70 percent in 2020.²¹² So, Europe will have to import almost 90 percent of its energy needs in 2030.²¹³

A picture of Europe's energy problem shows that within several years Europe will face an important energy problem. For that reason, Europe has taken some steps. One is to design an energy policy. Europe has based its energy policy on three main pillars: sustainability, competitiveness (open energy market), and security of supply.²¹⁴ To face the problem of lack of energy supplies, Europe is seeking to diversify the sources and routes of energy to prevent any disruption.²¹⁵ In this situation, Europe is attempting to maintain sustainability of the flow of oil and natural gas rather than its rate of dependence on oil and natural gas imports. In parallel, Europe's main concern is the use of the flow of oil and natural gas as a political weapon by the energy supplier countries. Most energy supplier countries are subject to terrorism, civil strife, ethnic tensions and controlling the energy industry by governments, which can use energy for the countries' national goals.²¹⁶ From this perspective, Russia, especially, appears as a main concern as the most important oil and gas supplier for Europe.²¹⁷

The Russia-Ukraine natural gas crisis in 2006, the Russia-Belarus natural gas crisis in 2007, and the last Russia-Ukraine crisis in 2009 have demonstrated the

²¹¹ Arianna Checchi, Arno Behrens and Egenhofer Christian, "Long-Term Energy Security Risks for Europe: A Sector-Specific Approach," *Center for European Policy Studies, CEPS Working Document, No. 309*, January 2009, <http://www.ceps.eu/node/1608>.

²¹² European Commission, *White Paper, Energy for the Future: Renewable Sources of Energy*, November 26, 1997, http://europa.eu/documents/comm/white_papers/pdf/com97_599_en.pdf, 5.

²¹³ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

²¹⁴ Commission of the European Communities, *Green Paper, A European Strategy for Sustainable, Competitive, and Secure Energy*, March 08, 2006, http://europa.eu/documents/comm/green_papers/pdf/com2006_105_en.pdf, 17–18.

²¹⁵ *Ibid.*, 18.

²¹⁶ Arianna Checchi, Arno Behrens and Egenhofer Christian, "Long-Term Energy Security Risks for Europe: A Sector-Specific Approach," *Center for European Policy Studies, CEPS Working Document, No. 309*, January 2009, <http://www.ceps.eu/node/1608>.

²¹⁷ *Ibid.*

importance of energy security for Europe.²¹⁸ Europe is seeking an alternative for Russia as its main energy supplier.²¹⁹ For that reason, Europe's energy policy has two main goals: first circumventing Russia and also reducing the EU's already high dependence on Russia.²²⁰

Turkey's situation is similar to that of Europe. Turkey is dependent on the outside for oil and natural gas resources. Turkey does not have significant oil and natural gas reserves. Almost 90 percent of its oil comes from the outside of Turkey. Natural gas is becoming a more preferred energy source due to its less polluting nature and also to Turkey's proximity to the huge gas reserves of the Caspian and Middle East.²²¹ Also, natural gas is important for electricity production (about 65 percent), industry (19 percent) and the residential sector (14 percent). Another important reason is that in approximately twenty years, Turkey's natural gas and oil reserves will be completely depleted, according to estimates of the Turkish Petroleum Corporation.²²² Thus, Turkey is attempting to build many pipelines to meet its huge and increasing energy demand.²²³

In this context, Turkey's energy security policy overlaps with the European Union's. Turkey and Europe have common interests on energy security.²²⁴ In 2010, Turkey will import almost 60 percent of its natural gas from Russia, and Russia will

²¹⁸ Elena, and Michael Emerson Gnedina, "The Case for a Gas Transit Consortium in Ukraine: A Cost-Benefit Analysis," *Center for European Policy Studies, CEPS Policy Brief, No.180*, January 2009, <http://aei.pitt.edu/10766/01/1782.pdf>.

²¹⁹ Katinka Barysch, "Turkey's Role in European Energy Security," *Centre for European Reform Essays*, December 2007, http://www.cer.org.uk/pdf/essay_turkey_energy_12dec07.pdf.

²²⁰ William Courtney and Kenneth Yallowitz, "Russia's Bid to Control Caspian Energy," *The Boston Globe*, October 04, 2008, http://www.boston.com/bostonglobe/editorial_opinion/oped/articles/2008/10/04/russias_bid_to_control_caspian_energy/.

²²¹ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 138–139.

²²² Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *2008 Yili Petrol ve Dogalgaz Sektor Raporu (Oil and Natural Gas Sector Report of 2008)*, http://www.tpao.gov.tr/v1.4/condocs/petrol_sektor.pdf, 8.

²²³ Brent Sasley, "Turkey's Energy Politics in the Post-Cold War Era," *Middle East Review of International Affairs Journal* 2, no. 4 (November 1998).

²²⁴ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

continue as the second biggest supplier of its oil. The Ukraine crises also affected Turkey. Turkey has no other opportunity for oil and gas, in case a political problem occurs between Turkey and Russia. Because of this, Turkey is also seeking to diversify its resources and has signed natural gas and oil agreements with other energy rich countries.²²⁵ Turkey imports almost 60 percent of its natural gas from Russia, 20 percent from Iran, 13 percent from Azerbaijan and the remainder from Algeria and Nigeria as a liquefied natural gas form.²²⁶ Besides, Turkey has negotiated with Qatar to build a natural gas pipeline to Turkey.²²⁷

In this manner, the European Union has a key position for Turkey's energy policy, because Turkey has established its policy as the transit route to Europe.²²⁸ Thus, Turkey will be able to secure its energy security and satisfy its energy needs. Turkey also has a key position for the European Union's energy security, because Europe sees Eurasia, Russia and the Mediterranean countries as its main energy suppliers. Turkey is considered by Europe as a strategic partner in this manner.²²⁹ The European Union stated this in its Green Paper in 2000.²³⁰

In this respect, Turkey is in the middle of the Europe's energy game. Europe wants to build energy pipelines, which bring non-Russian oil and natural gas through Turkey. Furthermore, Eurasian newly independent states as energy producer countries are looking for new and reliable energy markets without "upsetting" Russia. If Turkey and

²²⁵ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 140.

²²⁶ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 85.

²²⁷ Tamsin Carlisle and Chris Stanton, "Turkey Touts Proposed Gas Pipeline From Qatar," *The National*, January 18, 2010, <http://www.thenational.ae/apps/pbcs.dll/article?AID=/20100118/BUSINESS/701189852/1005>.

²²⁸ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

²²⁹ Commission of the European Communities, *Green Paper, A European Strategy for Sustainable, Competitive, and Secure Energy*, March 08, 2006, http://europa.eu/documents/comm/green_papers/pdf/com2006_105_en.pdf, 16.

²³⁰ Eur-Lex, *Green Paper, Towards a European Strategy for the Security of Energy Supply*, 2000, <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52000DC0769:EN:HTML>.

the EU cooperate in this respect, the EU will get a reliable alternative supply route, and Turkey will gain transit fees, meet its energy demands and secure its energy security.²³¹

Europe's diversifying efforts provide Turkey with many opportunities to shape its own energy policies. Especially, energy crises between Russia and Ukraine have changed Europe's view of Turkey, on a large scale, in terms of energy security.²³² However, Turkey should import much more oil and natural gas from non-Russian countries, which Russia does not control politically and economically, if Turkey wants to guarantee its key position for the European Union's energy security. For that reason, Turkey is assessing all opportunities other than Russia, such as Iraq, Egypt, Iran and Qatar.²³³

C. INTERNATIONAL PIPELINES BETWEEN TURKEY AND ITS NEIGHBORS

Turkey could serve as distribution hub with regard to future pipeline projects,²³⁴ because Turkey is consolidating the future network of pipelines by its agreements of today. Turkey has entered into oil and natural gas agreements with Russia, Israel, Egypt, Iraq, Qatar, Iran, Turkmenistan, Azerbaijan, and Kazakhstan. Even though Turkey has only the BTC, BTE, TGI, Turkey-Iran and Blue Stream today as pipelines, agreements that Turkey has concluded depict that Turkey is forming the pipeline network of the future. Out of the five pipelines that Turkey has today, Turkey has concluded more agreements for pipelines with different energy rich countries. Perhaps this situation can be defined as Turkey already being an energy hub in its region (See Figure 7). Turkey has planned, has under construction and has in existence natural and oil pipelines in cooperation with Russia, Eurasia, Iran, Iraq, Israel, and Europe.

²³¹ Katinka Barysch, "Turkey's Role in European Energy Security," *Centre for European Reform Essays*, December 2007, http://www.cer.org.uk/pdf/essay_turkey_energy_12dec07.pdf.

²³² Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 147.

²³³ Brenda Shaffer, "Turkey's Energy Policies in a Tight Global Energy Market," *Insight Turkey* 8, no. 2 (April/June 2006), 100.

²³⁴ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

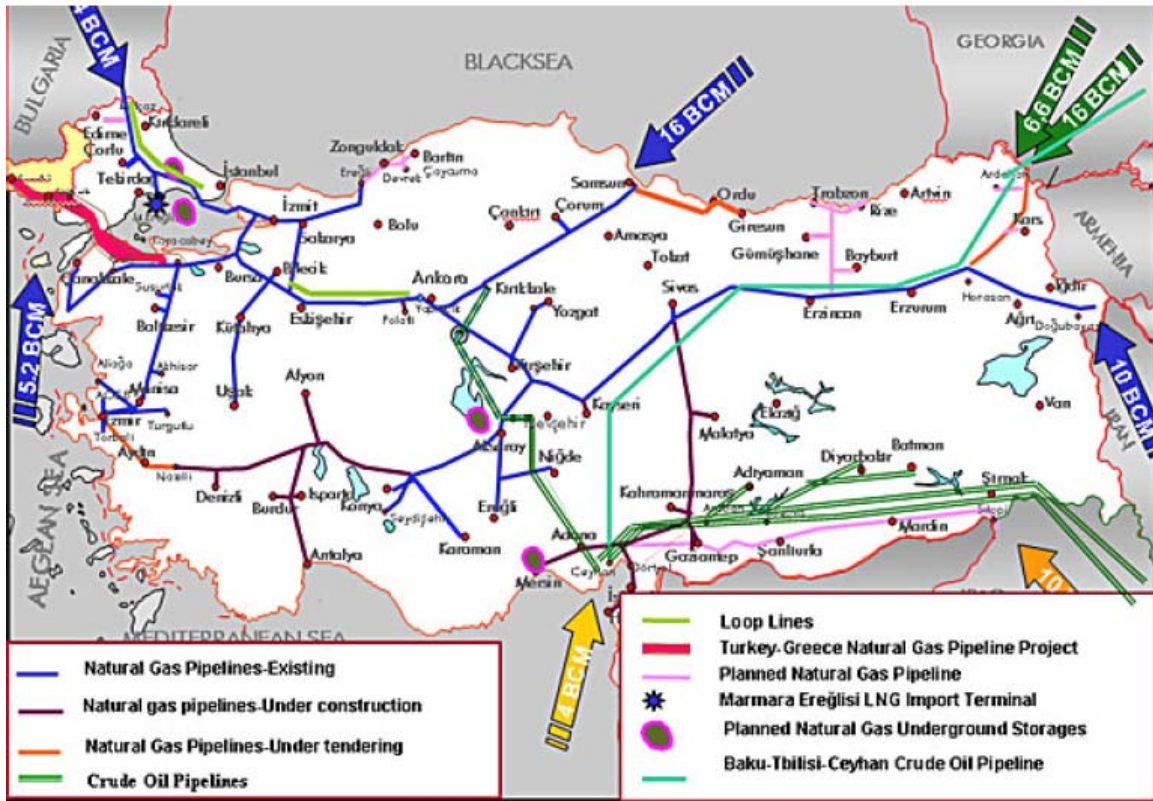


Figure 7. Major Oil and Natural Gas Pipelines in Turkey²³⁵

1. Turkey-Russia

a. *The Trans-Balkan Natural Gas Pipeline*

Russia is Turkey's main natural gas supplier and holds almost 60 percent of Turkey's total natural gas imports. Russia supplies Turkey by two separate natural gas pipelines. One of them is known as the Trans-Balkan Pipeline, which traverses Moldova, Ukraine, Romania and Bulgaria.²³⁶ The Trans-Balkan Pipeline agreement was signed

²³⁵ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

²³⁶ Langdon D. Clough, "Energy Profile of Turkey," *The Encyclopedia of Earth*, July 10, 2007, http://www.eoearth.org/article/Energy_profile_of_Turkey.

with the Soviet Union in September 1984 and started first deliveries in 1987 to reduce the Turkish energy dependence on the Middle East.²³⁷ It delivers 27 percent of Turkey's total natural gas requirements.²³⁸

b. The Blue Stream I and II Natural Gas Pipelines

The Blue Stream is the second natural gas pipeline, which supplies Turkey with Russian natural gas. It is the result of a 25-year agreement by the Russian and Turkish sides.²³⁹ Its cost was around \$3.2 billion and supplies 31 percent of Turkey's total natural gas requirement. The construction was completed in 2002 and oil started to flow in 2003.²⁴⁰ It is a twin pipeline coming from Dzhugba in Russia to the Turkish city of Samsun and lies under the Black Sea.²⁴¹

Blue Stream, the world's deepest underwater pipeline, is important for Turkey and Russia for several reasons. First, it is a direct link to Russia from Turkey. So Turkey has prevented disruptions such as those, which occurred in Romania, Moldova, Ukraine and Bulgaria where those countries host the Trans-Balkan natural gas pipeline.²⁴²

Second, Blue Stream creates a long-term interdependence between Russia and Turkey and it is the most important leg of the north-south energy corridor from Russia to Israel.²⁴³ Turkey and Russia have ambitions to extend the flow of Russian

²³⁷ Philip Robbins, *Suits and Uniforms: Turkish Foreign Policy Since the Cold War* (Seattle: University of Washington Press, 2003), 222.

²³⁸ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 139.

²³⁹ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 223.

²⁴⁰ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 139.

²⁴¹ Ibid.

²⁴² Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 223.

²⁴³ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 131.

natural gas through Turkey to Israel. It is an important sign for these two countries, after competition on the Caspian in the east-west energy corridor, to cooperation on the north-south energy corridor in the post-Cold War period.²⁴⁴

Third, and the last is a criticism, Turkey's dependence on Russia has increased by the Blue Stream pipeline since Turkey is trying to diversify its energy sources. The use of this pipeline looks like a contrast in Turkey's energy policy. Now, Turkey imports almost 60 percent of its natural gas from Russia. Hence, Turkish analysts criticize the Blue Stream due to increasing the dependence rather than diversification.²⁴⁵ It is criticized, not only by Turkish analysts, but also by the United States due to also potentially making Europe more dependent on Russia for energy.²⁴⁶

Russia and Turkey have also started to meet on the proposed Blue Stream 2 natural gas pipeline as an extension of the north-south energy corridor. The project's aim is to carry Russian natural gas through the Black Sea and Turkey for distribution to Syria, Lebanon, Israel and Cyprus.²⁴⁷ In short, Blue Stream pipelines are the sign of the strong relationship between Turkey and Russia in terms of energy.

c. South Stream Natural Gas Pipeline

The South Stream Pipeline is not mainly between Turkey and Russia. The South Stream goes from Russia to Italy via Bulgaria under the Black Sea. Although it does not use Turkish territory, it traverses the Turkish Exclusive Economic Zone (EEZ),

²⁴⁴ Oktay F. Tanrisever, "Turkey and Russia in Eurasia," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 145.

²⁴⁵ Langdon D. Clough, "Energy Profile of Turkey," *The Encyclopedia of Earth*, July 10, 2007, http://www.eoearth.org/article/Energy_profile_of_Turkey.

²⁴⁶ Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

²⁴⁷ Jessica Sims, "Balancing Pipeline Politics," *Wise Men Center for Strategic Studies*, April 09, 2010, http://www.bilgesam.org/en/index.php?option=com_content&view=article&id=266:bala-ncing-pipeline-politics&catid=128:energy&Itemid=143.

which is territorial water of Turkey in the Black Sea. It is designed to bypass Ukraine²⁴⁸ and carry Russian gas to the Southern Europe.²⁴⁹

The importance of the South Stream is mainly geostrategic. It is a direct rival for Europe's Nabucco project.²⁵⁰ Nabucco is designed to circumvent Russia and is backed by the United States and Turkey. However, Turkey also signed the agreement for the South Stream. By this agreement, Turkey is exploiting its geostrategic position. Whichever pipeline is constructed, Turkey will be lucky. It will gain not only transit fees and energy related business but Turkey will also be guaranteed its major energy hub role.²⁵¹

Even though the South Stream has detrimental effects on the European energy diversification project, it also plays a role in that diversification project. Russia has the capacity of providing enough natural gas for Europe. If it can construct the South Stream and if the Europe can construct the Nabucco pipeline, both of them together will provide a diversification role for Europe. Consequently, Europe will gain natural gas from both South Stream and Nabucco.

d. Samsun-Ceyhan Bypass Oil Pipeline

The proposed Samsun-Ceyhan Bypass oil pipeline is very important for both Russia and Turkey because of the Turkish Straits. The Turkish Straits are very important oil passages as well as important choke points in terms of increased oil

²⁴⁸ Woodrow Wilson International Center for Scholars, *Turkey's Energy Politics: Neither East or West, Southeast Europe Project, Event Summary*, September 01, 2009, http://wilsoncenter.org/index.cfm?topic_id=109941&fuseaction=topics.event_summary&event_id=546092.

²⁴⁹ Jessica Sims, "Balancing Pipeline Politics," *Wise Men Center for Strategic Studies*, April 09, 2010, http://www.bilgesam.org/en/index.php?option=com_content&view=article&id=266:balancing-pipeline-politics&catid=128:energy&Itemid=143.

²⁵⁰ Nabucco natural gas pipeline is designed to diversify EU's energy supplies by circumventing Russia. It traverses Turkish soil.

See "Sebnem Arsu, "Turkey and Russia Conclude Energy Deals," *The New York Times*, August 06, 2009, http://www.nytimes.com/2009/08/07/world/europe/07turkey.html?_r=2."

²⁵¹ Woodrow Wilson International Center for Scholars, *Turkey's Energy Politics: Neither East or West, Southeast Europe Project, Event Summary*, September 01, 2009, http://wilsoncenter.org/index.cfm?topic_id=109941&fuseaction=topics.event_summary&event_id=546092.

transportation. Almost 3.7 percent of the world's daily oil consumption is shipped through the Turkish Straits most of which belongs to Russia. According to Turkish officials, the amount of oil and oil product shipments increased from 60 million tonnes in 1996 to 150 million tonnes in 2007 and is anticipated to reach at least to 190 million tonnes in the near future.²⁵²

However, the Turkish Straits are almost 17 miles (30 kilometers) in length and 3 miles (4.7 kilometers) wide (maximum width). The narrowest width is only 698 meters not even a half-mile.²⁵³ Thus, Turkey is looking for alternative options for the Turkish Straits due to the Straits' role as a choke point as well as its role as an important passage in terms of energy transportation.²⁵⁴

The Samsun-Ceyhan Bypass oil pipeline is an important alternative project proposed to carry oil while bypassing the sensitive and already overcrowded Straits.²⁵⁵ Initial approval was given in 2006 by Turkey's Council of Ministers in 2006 and was launched in 2007, due to be completed in 2011.²⁵⁶ This oil pipeline is planned to be 350-miles and cost 1 billion dollars.²⁵⁷ Its main supplier will be the Kashagan oil field in Kazakhstan's portion of the Caspian Sea.²⁵⁸ Furthermore, Turkey persuaded Russia to

²⁵² Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

²⁵³ Mehmet E. Birpınar, Gonca F. Talu, Gonul Su and Mehmet Gulbey, "The Effect of Dense Maritime Traffic on the Bosphorus Strait and Marmara Sea Pollution," *The Regional Directorate of Istanbul, Ministry of Environment and Forestry*, http://www.balwois.com/balwois/administration/full_paper/ffp-746.pdf.

²⁵⁴ Soner Cagatay and Nazli Gencsoy, "Improving Turkish-Russian Relations: Turkey's New Foreign Policy and Its Implications for the United States," *The Washington Institute for Near-East Policy*, January 12, 2005, http://www.ciaonet.org/pbei/winep/policy_2005/2005_942/.

²⁵⁵ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 131.

²⁵⁶ Rianovosti, *Turkey to Approve Construction of South Stream Pipeline*, August 05, 2009, <http://en.rian.ru/russia/20090805/155735283.html>.

²⁵⁷ Langdon D. Clough, "Energy Profile of Turkey," *The Encyclopedia of Earth*, July 10, 2007, http://www.eoearth.org/article/Energy_profile_of_Turkey.

²⁵⁸ Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

supply the Samsun-Ceyhan oil pipeline with its oil supplies.²⁵⁹ Even though the overcrowded Bosphorus will remain a major passage and chokepoint in terms of energy transportation, the Samsun-Ceyhan pipeline will ease the burden on the Bosphorus Straits²⁶⁰ and protect Istanbul from potentially destructive oil spills that could be disastrous for Istanbul's environment and population.²⁶¹

2. Turkey-Eurasia

a. *Baku-Tblisi-Ceyhan (BTC) Oil Pipeline*

The Baku-Tblisi-Ceyhan oil pipeline is the world's second longest pipeline, 1768 kilometers, with the capacity of 50 million tonnes of oil per year.²⁶² It was officially completed in 2006 and traverses Baku in Azerbaijan, Tblisi in Georgia and Ceyhan in Turkey. Its capacity has increased from 1 million barrels per day to 1.2 million barrels per day.²⁶³ It meets almost 1.5 percent of the world's oil supply.²⁶⁴

Baku-Tblisi-Ceyhan oil pipeline is the most important leg of the United States and Turkey's East-West energy corridor policy,²⁶⁵ because it carries Caspian crude

²⁵⁹ Viladimir Socor, "Samsun-Ceyhan Pipeline Project Designed to Divert Kazakhstani Oil," *The Jamestown Foundation*, October 23, 2009, http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Bsword%5D=8fd5893941d69d0be3f378576261ae3e&tx_ttnews%5Bany_of_the_words%5D=samsun&tx_ttnews%5Btt_news%5D=35645&tx_ttnews%5BbackPid%5D=7&cHash=6a00af2e93.

²⁶⁰ U.S. Energy Information Administration, Independent Statistics and Analysis, *Turkey Country Analysis Briefs, Oil*, <http://www.eia.doe.gov/emeu/cabs/Turkey/Oil.html>.

²⁶¹ Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

²⁶² Türkiye Petrolleri Anonim Ortaklığı (Turkish Petroleum Corporation), *TPAO 08 Annual Report*, http://www.tpao.gov.tr/v1.4/condocs/yillik_rapor_2008en.pdf, 34.

²⁶³ BP Global, *BP in Azerbaijan, BTC*, <http://www.bp.com/sectiongenericarticle.do?categoryId=9015374&contentId=7028018>.

²⁶⁴ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

²⁶⁵ Ibid.

oil by bypassing two major regional powers, Russia and Iran.²⁶⁶ It is the very first direct pipeline to deliver crude oil from Eurasia to the Mediterranean bypassing Russia.²⁶⁷

From the perspective of the West, it is the central part of the East-West corridor linking the Caucasus and Central Asia to Europe for integration to the West.²⁶⁸ The Baku-Tblisi-Ceyhan pipeline is also seen as an important element to ensure the independence and economic viability of the former Soviet states of Eurasia, which are highly dependent on Russia. The United States and Europe aim to ease the Russian influence on the Caspian States by the Baku-Tblisi-Ceyhan pipeline, because it bypasses Russia and Iran, which are the main competitors against the United States and Europe in Eurasia.²⁶⁹

This pipeline is not only seen as a source of independence of Eurasian States from Russia, but also as an important element to ease Europe's dependence on Russia and the Middle East in terms of oil as an energy source.²⁷⁰

From the perspective of Russia, it is the main obstacle for Russia's monopolist energy policy.²⁷¹ Moscow sees the Baku-Tblisi-Ceyhan pipeline as an instrument used by the West to erode Russian influence on its near abroad. Furthermore, the high cost of the Baku-Tblisi-Ceyhan pipeline compared to other projects planned to carry Eurasian oil to the West has convinced Russia that the West is following an anti

²⁶⁶ Mehmet Ogutcu and Danilla Bochkarev, "Rivals Become Partners," *European Voice*, September 21, 2009, <http://www.europeanvoice.com/article/2009/09/rivals-become-partners-/65924.aspx>.

²⁶⁷ Langdon D. Clough, "Energy Profile of Turkey," *The Encyclopedia of Earth*, July 10, 2007, http://www.eoearth.org/article/Energy_profile_of_Turkey.

²⁶⁸ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

²⁶⁹ Soner Cagatay and Nazli Gencsoy, "Improving Turkish-Russian Relations: Turkey's New Foreign Policy and Its Implications for the United States," *The Washington Institute for Near-East Policy*, January 12, 2005, http://www.ciaonet.org/pbei/winep/policy_2005/2005_942/.

²⁷⁰ Gokhan Bacik, "Turkey and Pipeline Politics," *Turkish Studies* 7, no. 2 (June 2006), 301.

²⁷¹ Jeffrey Mankoff, "Eurasian Energy Security," *Council on Foreign Relations*, February 2009, http://www.cfr.org/publication/18418/eurasian_energy_security.html, 19.

Russian policy in Eurasia in terms of energy. Thus, Russia appears angry about the Baku-Tblisi-Ceyhan pipeline since it reduces Russian influence on the Caspian.²⁷²

From Turkey's perspective, the Baku-Tblisi-Ceyhan pipeline is an important source of benefits. Turkey earns between \$140 and \$200 million per year in transit fees²⁷³ and it is an important source of oil for Turkey's energy hungry industry. Strategically, the Baku-Tblisi-Ceyhan pipeline is the most important leg for Turkey's policy of becoming an energy hub between the West and East.²⁷⁴ It binds Turkey, Azerbaijan, and Georgia and allows Turkey to reach Central Asia.²⁷⁵ Furthermore, Turkey sees the BTC as an essential part of easing the burden on and bypassing the Straits.²⁷⁶

So, Turkey will emerge as an energy hub while decreasing risk in the Straits and will strengthen links between the East and West through Turkey. This will provide Turkey huge leverage in Europe and Eurasia, and also increase the influence of Turkey on Eurasian Turkic energy rich countries.

b. South Caucasus (SCP) or Baku-Tblisi-Erzurum (BTE) Natural Gas Pipeline

Turkey and Azerbaijan signed a natural gas agreement for bringing Azerbaijan's natural gas to Turkey by a pipeline following the same route as the BTC on

²⁷² Robert Ebel and Rajan Menon, "Introduction: Energy, Conflict, and Development in the Caspian Sea Region," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 9.

²⁷³ Langdon D. Clough, "Energy Profile of Turkey," *The Encyclopedia of Earth*, July 10, 2007, http://www.eoearth.org/article/Energy_profile_of_Turkey.

²⁷⁴ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

²⁷⁵ Ahmet Davutoglu, "Turkey's Foreign Policy Vision: An Assessment of 2007," *Insight Turkey* 10, no. 1 (2008), 91.

²⁷⁶ Soner Cagatay and Nazli Gencsoy, "Improving Turkish-Russian Relations: Turkey's New Foreign Policy and Its Implications for the United States," *The Washington Institute for Near-East Policy*, January 12, 2005, http://www.ciaonet.org/pbei/winep/policy_2005/2005_942/.

March 12, 2001.²⁷⁷ The construction started in 2004. The pipeline officially is called the South Caucasus Pipeline (SCP), but is also known as the Baku-Tblisi-Erzurum Natural Gas Pipeline.²⁷⁸

Its cost is about 1.4 billion dollars. It is about 690 kilometers in length and has a capacity of 8.1 billion cubic meters in a year.²⁷⁹ It became operational in July 2007, and brings natural gas to Turkey through Georgia from Azerbaijan.²⁸⁰ Even though it was expected to bring about 6.6 billion cubic meters of natural gas to Turkey, in 2008 it carried 7.2 billion cubic meters of natural gas to Turkey. Moreover, it has the potential to expand its capacity from 8.1 billion cubic meters up to 22 billion cubic meters per year by adding compressor stations.²⁸¹

It is the second most important leg of the East-West energy corridor policy of the United States and Turkey. It is seen as the leg of natural gas for the East-West energy corridor policy.²⁸² The major goal of this pipeline is to ship Caspian gas to Europe via Turkey.²⁸³ For Turkey, it connects the energy routes of Azerbaijan, Georgia and Turkey to Europe, so it provides Turkey with a new East-West belt. With this project, the Nabucco natural gas pipeline and the Turkey-Greece Interconnector pipelines, Turkey's energy corridor will stretch from East to West, and Turkey will become an

²⁷⁷ Gokhan Bacik, "Turkey and Pipeline Politics," *Turkish Studies* 7, no. 2 (June 2006), 301.

²⁷⁸ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 140.

²⁷⁹ Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *TPAO 08 Annual Report*, http://www.tpao.gov.tr/v1.4/condocs/yillik_rapor_2008en.pdf, 34.

²⁸⁰ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

²⁸¹ Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *TPAO 08 Annual Report*, http://www.tpao.gov.tr/v1.4/condocs/yillik_rapor_2008en.pdf, 34.

²⁸² Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

²⁸³ Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *TPAO 08 Annual Report*, http://www.tpao.gov.tr/v1.4/condocs/yillik_rapor_2008en.pdf, 34.

energy hub.²⁸⁴ It is also worth noting that the BTE is considered as the first leg of the Trans-Caspian Natural Gas pipeline project, which would carry Turkmenistan's natural gas to Europe underneath the Caspian Sea and via Turkey.²⁸⁵

c. *Trans-Caspian (Turkmenistan-Turkey-Europe) Natural Gas Pipeline Project*

Turkey and Turkmenistan signed an agreement for carrying Turkmenistan's natural gas to Europe via Turkey. It is projected to circumvent Russia and Iran by building a pipeline carrying Turkmen gas under the Caspian Sea through Azerbaijan and Georgia to Turkey.²⁸⁶

According to the agreement, Turkmenistan would supply Turkey with 30 billion cubic meters of natural gas of which Turkey would use 16 billion cubic meters and transship the remainder to Europe.²⁸⁷

However, the Trans-Caspian pipeline project has been cancelled for three reasons. First of all, building the Trans-Caspian under the Caspian Sea Basin would be extremely expensive, around \$5-\$8 billion.. Second, the legal status of the Caspian is uncertain. The last reason is ex-Turkmen President Saparmurat Niyazov's character and unreliable personality.²⁸⁸

Now, the situation has changed. Europe, the United States and Turkey are again thinking about building the Trans-Caspian pipeline due to Russia's aggressive energy policy. But, now there is some debate over the route. At first it was thought to be from Turkmenistan due to the proximity of Azerbaijan and Turkmenistan. It would be

²⁸⁴ Ahmet Davutoglu, "Turkey's Foreign Policy Vision: An Assessment of 2007," *Insight Turkey* 10, no. 1 (2008), 91.

²⁸⁵ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

²⁸⁶ Botas Petroleum Pipeline Corporation, *Transcaspian Turkmenistan-Turkey-Europe Natural Gas Pipeline Project*, <http://www.botas.gov.tr/index.asp>.

²⁸⁷ *Ibid.*

²⁸⁸ Stratfor Global Intelligence, *EU, Kazakhstan: The Geopolitics of Energy Cooperation*, December 05, 2006, http://www.stratfor.com/eu_kazakhstan_geopolitics_energy_cooperation?fn=1214219661.

only a 47 mile-pipeline but under the Caspian Sea.²⁸⁹ Now, the pipeline can be directly brought from Kazakhstan, because the Kazakh portion of the Caspian Sea is shallower, about 30 feet compared to the 1600 feet of Turkmenistan portion of the Caspian Sea.²⁹⁰

However, Turkmenistan is not waiting for Europe and the U.S.'s decision and is beginning construction. It has made an agreement with Iran to export its natural gas to Turkey. Because of Russia's ceasing to purchase Turkmen gas, Turkmenistan needs to find a new market in which to sell its natural gas, an important source of income for Turkmenistan. For that reason, Turkmenistan, Iran and Turkey expect to transport Turkmen gas to Turkey via Iran. It is also important to stress that Turkey is considering the re-sale the Turkmen natural gas to Europe.²⁹¹

3. Turkey-Iran Natural Gas Pipeline

Turkey and Iran signed a \$20 billion, 25-year agreement on building natural gas pipelines from Iran in 1996. The pipeline is completed and started gas deliveries to Turkey from Iran in 2001, despite the United States' objection.²⁹² Its route is from Tebriz in Iran to Erzurum in Turkey. Turkey receives 10 billion cubic meters of natural gas per year from Iran through this pipeline.²⁹³

There are several reasons for Turkey to have chosen Iran as a natural gas supplier in spite of the United States' objections. First, Iran can satisfy Turkey's huge gap between its energy demand and supply by its natural gas sources. Second, Iran is geographically close to Turkey. To build a pipeline between Turkey and Iran is relatively

²⁸⁹ Stratfor Global Intelligence, *Azerbaijan, Turkmenistan: Nabucco at Impasse*, July 14, 2009, http://www.stratfor.com/analysis/20090714_azerbaijan_turkmenistan_nabucco_impasse?fn=3114913236.

²⁹⁰ Stratfor Global Intelligence, *EU, Kazakhstan: The Geopolitics of Energy Cooperation*, December 05, 2006, http://www.stratfor.com/eu_kazakhstan_geopolitics_energy_cooperation?fn=1214219661.

²⁹¹ Stratfor Global Intelligence, *Turkmenistan, Iran, Turkey: A New Phase in Energy Competition?*, January 06, 2010, http://www.stratfor.com/analysis/20100106_turkmenistan_iran_turkey_new_phase_energy_competition.

²⁹² Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 233–234.

²⁹³ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 140.

easy and would be close to the energy rich areas of Central Asia and the Middle East. So, the Iran route is suitable for Turkey to diversify its energy sources beyond Russia. Third, Iran has the second largest natural gas supply in the world. Turkey can use this in favor of its energy policy of becoming an energy hub between Europe and the East. Iran has enough gas to become an alternative supply for Europe.²⁹⁴

Another reason for Turkey is Turkmenistan. Iran is the most logical and economical route to carry Turkmen natural gas to Turkey. Iran is a neighbor of Turkmenistan and Turkey. It has the significant pipeline network within. In comparison to the cost of the Trans-Caspian pipeline, the Iran route is cheaper to build to carry Turkmen gas to Turkey and later to Europe.²⁹⁵ Furthermore, Iran and Greece signed a memorandum for cooperation in natural gas transportation in March 2002. Turkey can re-sell excess Iranian natural gas to Greece and transport it by the Turkey-Greece interconnector natural gas pipeline.²⁹⁶ All of these reasons caused Turkey to approach Iran as a natural gas supplier country despite the Iran Sanctions Act of the United States, which opposes any investment in Iran exceeding \$20 million dollars.²⁹⁷

4. Turkey-Middle East

a. Iraq-Turkey Crude Oil Pipeline

The Iraq-Turkey crude oil pipeline was Turkey's very first oil pipeline. It is a 600-mile pipeline connecting Turkey and Iraq. There are two parallel pipelines, which have a united capacity of 1.6 million barrels a day.²⁹⁸

²⁹⁴ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 233.

²⁹⁵ Narsi Ghorban, "By Way of Iran: Caspian's Oil and Gas Outlet," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 153.

²⁹⁶ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 140.

²⁹⁷ Kenneth Katzman, "The Iran Sanctions Act (ISA)," *Congressional Research Service*, April 09, 2009, http://assets.opencrs.com/rpts/RS20871_20100409.pdf.

²⁹⁸ Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

Turkey changed its policy towards the Middle East from exclusive to more inward after the oil crisis of 1973, because cheap oil was no longer available. Turkey had to negotiate with Middle Eastern countries. Iraq was the best option for Turkey. Turkey negotiated with Iraq to build a crude oil pipeline from Kirkuk in Iraq to the Ceyhan Terminal in Turkey.²⁹⁹ The first tanker loaded its crude oil from Ceyhan in 1977. Turkey and Iraq agreed on the expansion of this pipeline by a second crude oil pipeline parallel to old one. In 1983, construction started and was completed in 1984. Thus, the annual capacity of the pipelines reached 70.9 million tonnes of oil or 1.6 million barrel per year.³⁰⁰

In this way, Iraq was the major exporter of crude oil to Turkey until 1991.³⁰¹

However, the first Gulf War changed the situation completely .The Iraq-Ceyhan pipeline was closed due to United Nations' sanctions on Iraq. For that reason, Turkey lost important revenues of up to \$1.2 billion per year.³⁰² In 1996, the Iraq-Turkey pipeline reopened under the UN resolutions of oil for food. After Saddam's fall in 2003, new negotiations resulted in the transport of oil through the pipeline as before the first Gulf War, but it has never reached the amount of pre 1991 levels. In 2009, 167,600 barrels of oil were transported.³⁰³ Negotiations to reach the before first Gulf level are ongoing.

²⁹⁹ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 39.

³⁰⁰ Botas Petroleum Pipeline Corporation, *Iraq-Turkey Crude Oil Pipeline*, <http://www.botas.gov.tr/index.asp>.

³⁰¹ Ali Tekin and Paul A. Williams, "Europe's External Energy Policy and Turkey's Accession Process," *Center for European Studies Working Paper Series #170*, 2009, http://aei.pitt.edu/11786/01/CES_170.pdf.

³⁰² Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 39, 86.

³⁰³ Botas Petroleum Pipeline Corporation, *Iraq-Turkey Crude Oil Pipeline*, <http://www.botas.gov.tr/index.asp>.

b. *Iraq-Turkey Natural Gas Pipeline*

According to the CIA World Factbook, Iraq has the world's eleventh largest natural gas reserves, but its production is not efficient. For that reason, Iraq is not now exporting natural gas.³⁰⁴

Turkey has been interested in Iraq's untapped natural gas reserves since the 1990s. Turkey began negotiations with Iraq on natural gas reserves in 1996. The Turkey's main goal was to import Iraqi natural gas to Turkey and then re-sell it to the other markets. According to a proposed agreement, Turkey would import 10 billion cubic meters per year by a pipeline parallel to the Iraq-Turkey crude oil pipeline.³⁰⁵ However, the UN did not lift its sanctions so Turkey could not implement its plans in Iraq until the fall of Saddam Hussein.

After the fall of Saddam Hussein and along with the increasing gas demands of Europe, Turkey restarted its negotiations with Iraq to develop its natural gas reserves. Consequently, Turkey and Iraq signed a Memorandum of Understanding on August 7, 2007, in order to supply Iraqi natural gas to Turkey and via Turkey to Europe.³⁰⁶

c. *Arab-Natural Gas Pipeline*

Turkey's energy policy has the goal of becoming an energy hub not only on the axis of west and east, but also on the axis of south and north. As a result of this policy, Turkey would like to transport Egyptian natural gas to Europe through Turkish soil by a pipeline. For that reason, Turkey opened negotiations with Egypt in 1996.³⁰⁷

³⁰⁴ CIA World Fact Book, *Iraq*, <https://www.cia.gov/library/publications/the-worldfactbook/geos/iz.html>.

³⁰⁵ Ali Tekin and Paul A. Williams, "Europe's External Energy Policy and Turkey's Accession Process," *Center for European Studies Working Paper Series #170*, 2009, http://aei.pitt.edu/11786/01/CES_170.pdf.

³⁰⁶ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

³⁰⁷ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 124.

However, a plan was not implemented until 2004. In 2004, Turkey and Egypt signed a preliminary agreement on importing Egypt natural gas to Turkey. In 2006, a Memorandum of Understanding was signed. According to the agreement, Egypt would export 2-4 billion cubic meters of natural gas Turkey and 2-6 billion cubic meters of natural gas to Europe via Turkey.³⁰⁸

The first delivery of natural gas was expected in 2009,³⁰⁹ but the plan has not been in operation yet. Egyptian natural gas is expected to be delivered in the future and to be an important component of the south-north energy corridor and of Turkey to meet its own increasing natural gas demand.

d. Turkey-Israel Pipeline

Turkey has ambitions for Israel in regard to the south-north axis in terms of energy. Prime Minister Recep Tayyip Erdogan proposed to Israel building a pipeline, which would carry oil from the Ceyhan oil terminal to Haifa through Cyprus, in May 2005. He proposed not only an oil pipeline but also pipelines to transport water, gas, electricity, and even fiber-optic cables.³¹⁰

Turkey also officially agreed with Israel on building a pipeline system linking the Black Sea – mainly for Russian oil and gas – to the Red Sea, so Israel will be converted into a hub that transports Russian and Eurasian gas and oil to Asia.³¹¹ Turkey and Israel agreed on this pipeline system in 2007. In this regard, the Baku-Tblisi-Ceyhan oil pipeline, which ends in Ceyhan, near Israel, is seen as a first step.³¹²

³⁰⁸ Botas Petroleum Pipeline Corporation, *Egypt-Turkey Natural Gas Pipeline Project*, <http://www.botas.gov.tr/index.asp>.

³⁰⁹ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

³¹⁰ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 86.

³¹¹ Brenda Shaffer, "Turkey's Energy Policies in a Tight Global Energy Market," *Insight Turkey* 8, no. 2 (April/June 2006), 100.

³¹² Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 118–119.

5. Turkey-Europe

a. Nabucco Natural Gas Pipeline

The Nabucco natural gas pipeline is projected to transport Caspian and Middle Eastern natural gas via Turkey to Europe.³¹³ Its length and capacity will be exactly 3282 kilometers and 25.5-31.0 billion cubic meters.³¹⁴ The main goal of the pipeline is to increase the European Union's energy security by diversifying its supplies from and reliance on Russia.³¹⁵

Europe's dependence on natural gas is expected rise 80 percent by 2030. Today, Europe can meet only 42 percent of its natural gas demands by its indigenous production. The remainder is imported from Russia, Norway, and Algeria, along with a small amount from other sources.³¹⁶

However, due to a natural gas cutoff, because of the Russian-Belarus crisis in 2007, caused more than 80 percent of natural gas from Russia to Europe to pass through Ukraine. The crises in 2006 and 2009 highlighted the importance of energy security in Europe and the unreliability of Russia as a supplier country.³¹⁷ In this regard, Europe is attempting to diversify its source of energy supplies. In terms of energy, the Nabucco pipeline is the one of the most important projects for Europe.³¹⁸

From Turkey's perspective, the Nabucco project has essential importance. Turkey is also heavily dependent on Russian natural gas and trying to diversify its energy

³¹³ Nabucco Natural Gas Pipeline Project, *Project Description/Pipeline Route*, <http://www.nabucco-pipeline.com/project/projectdescription-pipeline-route/project-description.html>.

³¹⁴ Botas Petroleum Pipeline Corporation, *Egypt-Turkey Natural Gas Pipeline Project*, <http://www.botas.gov.tr/index.asp>.

³¹⁵ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 140-141.

³¹⁶ Nabucco Natural Gas Pipeline Project, *Markets for Nabucco*, <http://www.nabucco-pipeline.com/company/markets-sources-fornabucco/markets-sources-for-nabucco.html>.

³¹⁷ Stratfor Global Intelligence, *Russia, Turkey: Untangling Pipeline Problems*, http://www.stratfor.com/analysis/20090521_russia_turkey_untangling_pipeline_problems.

³¹⁸ Katinka Barysch, "Turkey's Role in European Energy Security," *Centre for European Reform Essays*, December 2007, http://www.cer.org.uk/pdf/essay_turkey_energy_12dec07.pdf.

supplies as is Europe. Furthermore, Nabucco is a cornerstone for the energy hub policies of Turkey.³¹⁹ Turkey plays a crucial role as a pivotal state in the Nabucco project from the perspective of Europe and the United States, a strong supporter of the Nabucco project.³²⁰

However, the Nabucco project faces many obstacles. First, is financial. The cost of Nabucco is about 7.9 billion as a preliminary estimate, but it is expected to rise to at least \$11 billion and it is still uncertain who pay this amount.³²¹ Second is who will supply the Nabucco. According to the official on-line site of the Nabucco project, “this route offers a wide range of supply sources for Nabucco gas pipeline, getting gas from Azerbaijan, Turkmenistan, Kazakhstan, Egypt, Russia and from Iran at a later point in time. Furthermore, it remains to be seen if also gas from Iraq will be linked with the Nabucco pipeline system.”³²² There are several debates on this issue. Iran presents the most difficulty on this issue due to its ongoing dispute with the United States. The United States has stated that it sees no place for Iranian gas in a Southern energy corridor and Nabucco is one leg of the Southern energy corridor. Iraq is another problem. It still has difficulties on territorial integrity as well as insurgencies. There are always sabotages on the pipelines. So, the security of pipelines is difficult for Iraq to arrange even though former Prime Minister Nouri Al-Maliki suggested to 15 billion cubic meters for Nabucco.³²³ A third problem with Nabucco is Eurasian suppliers. All central Asian countries are heavily dependent on Russia in terms of transportation of energy. Also, the Georgian war in 2008 demonstrated that the West is too weak to protect these countries

³¹⁹ John Gorvett, "Who's Got the Pipeline? Turkey's Quest for Energy Significance," *Washington Report on Middle East Affairs*, November 2007, http://www.wrmea.com/archives/November_2007/0711036.html, 36–37.

³²⁰ U.S. Energy Information Administration, Independent Statistics and Analysis, *Turkey Country Analysis Briefs, Oil*, <http://www.eia.doe.gov/emeu/cabs/Turkey/Oil.html>.

³²¹ Stratfor Global Intelligence, *Russia, Turkey: Untangling Pipeline Problems*, http://www.stratfor.com/analysis/20090521_russia_turkey_untangling_pipeline_problems.

³²² Nabucco Natural Gas Pipeline Project, *Markets for Nabucco*, <http://www.nabucco-pipeline.com/company/markets-sources-for-nabucco/markets-sources-for-nabucco.html>.

³²³ Jessica Sims, "Balancing Pipeline Politics," *Wise Men Center for Strategic Studies*, April 09, 2010, http://www.bilgesam.org/en/index.php?option=com_content&view=article&id=266:balancing-pipeline-politics&catid=128:energy&Itemid=143.

from Russian aggressive policy. So, if the West wants to realize the Nabucco, it should give strong incentives to Eurasian countries.³²⁴

Despite all these problems, an intergovernmental agreement was signed in Ankara on July 13 2009,³²⁵ which means that Nabucco is still at the centre of European diversifying prospects for oil and gas distribution.

b. Turkey-Greece Interconnector

In 2003, an intergovernmental agreement was signed between Greece and Turkey. The construction of a pipeline started in 2005 and was completed in 2007. Natural gas delivery started on November 18, 2007.³²⁶ Also, the project will be extended to Italy. In 2007, a trilateral intergovernmental agreement was signed. The capacity of the pipeline is expected to reach 11 billion cubic meters, 3 billion cubic meters for Turkey and 8 billion cubic meters for Greece and Italy.³²⁷ The source of the pipeline's product will be Azerbaijan's Shah Deniz Natural Gas reserves. The extension to Italy is expected to be operational in 2012.³²⁸

The Turkey-Greece interconnector is another important pipeline, about which Europe and Turkey's goals converge. The project is the first leg of the "South European Gas Ring project" of Europe's INOGATE (Interstate Oil and Gas Transport to Europe) program.³²⁹ The South European Gas Ring's aim is to transport natural gas from the Caspian Basin, Russia, the Middle East, southern Mediterranean countries and other

³²⁴ Jeffrey Mankoff, "Eurasian Energy Security," *Council on Foreign Relations*, February 2009, http://www.cfr.org/publication/18418/eurasian_energy_security.html, 20–22.

³²⁵ Nabucco Natural Gas Pipeline Project, *Project Phases & Milestones*, <http://www.nabucco-pipeline.com/project/project-phasesmilestones/index.html>.

³²⁶ Botas Petroleum Pipeline Corporation, *Turkey-Greece-Italy Natural Gas Pipeline Project*, <http://www.botas.gov.tr/index.asp>.

³²⁷ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

³²⁸ Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

³²⁹ Ali Tekin and Paul A. Williams, "Europe's External Energy Policy and Turkey's Accession Process," *Center for European Studies Working Paper Series #170*, 2009, http://aei.pitt.edu/11786/01/CES_170.pdf.

international sources via Turkey and Greece to Europe with energy security.³³⁰ From Turkey's perspective, it is an important project in order to reach European markets as well as to allow Turkey to become an energy hub for Europe.³³¹ Another important significance of the project is that it is initiated, supported and favored by European states.³³²

D. RELIABILITY

Reliability is an important issue in terms of energy security. Western countries as the major energy consumers in the world have concerns about energy exporters' reliability as well as that of transit countries, because of the unpredictability of interruption of supplies by internal political turmoil as in the Russia-Ukraine example.³³³

In this regard, Turkey has a pivotal position, because Turkey is one of the few countries in the region where Western institutions are the most developed.³³⁴ Turkey has had strong ties and a special relationship with the United States for more than fifty years. Turkey and United States share common interests in promoting peace, stability, and democratic values in the Middle East and Caspian regions, which are energy rich, but democracy poor regions.³³⁵ Turkey also maintains strong economic and political ties as a member of Organization for Economic Co-operation and Development (OECD) and NATO. It is a Customs Union member with the European Union. Beyond all of this, Turkey's policy of "zero problems" towards its neighbors contributes to the peace in the

³³⁰ Botas Petroleum Pipeline Corporation, *Turkey-Greece-Italy Natural Gas Pipeline Project*, <http://www.botas.gov.tr/index.asp>.

³³¹ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 141.

³³² Gokhan Bacik, "Turkey and Pipeline Politics," *Turkish Studies* 7, no. 2 (June 2006), 300.

³³³ Arianna Checchi, Arno Behrens and Egenhofer Christian, "Long-Term Energy Security Risks for Europe: A Sector-Specific Approach," *Center for European Policy Studies, CEPS Working Document, No. 309*, January 2009, <http://www.ceps.eu/node/1608>.

³³⁴ Atila Eralp, "Turkey and The European Union," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 65.

³³⁵ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

region and the reliable position of Turkey in the region.³³⁶ Turkey's energy policy is based on turning Turkey in to an energy hub and terminal by using Turkey's geostrategic position within the framework of the regional cooperation process.³³⁷

Because of all these issues and Turkey's relatively stable domestic politics Turkey can be seen as one of the most reliable countries in its region in terms of secure transit routes for energy.

E. ENERGY INFRASTRUCTURE OF TURKEY

The energy infrastructure of Turkey is in relatively good condition. Turkey has four main oil refineries, two underground natural gas storage facilities and the Ceyhan terminal for natural gas and oil. Also, Turkey's domestic pipeline network has grown with the international pipeline connections. (See Figure 3.1)³³⁸

1. Refineries

Even though Turkey does not have significant oil resources, it has a considerable oil refining capacity and it is a refined oil exporter country. Turkey sells a third of its refined oil to OECD countries, and another third to Middle Eastern countries.³³⁹

Turkey has four refineries. They are Aliaga in Izmir, Izmit, Kirikkale and Batman. All these refineries belong to Turkish Petroleum Refineries Corporations. Turkey's total refinement capacity is 28.1 million tonnes per year. In 2009, Turkey refined 16.98 million tonnes of crude oil. However, the amount decreased due to the lack of demand

³³⁶ Haim Malka, "Turkey and the Middle East," *Center for Strategic and International Studies, Final Report of the CSIS U.S.-Turkey Strategic Initiative*, March 2009, http://csis.org/files/media/isis/pubs/090330_flanagan_turkeyevolvingdynamics_web.pdf, 37.

³³⁷ Republic of Turkey Ministry of Energy and Natural Resources, *Strategic Plan (2010-2014)*, http://www.enerji.gov.tr/yayinlar_raporlar_EN/ETKB_2010_2014_Stratejik_Planı_EN.pdf, 29.

³³⁸ Langdon D. Clough, "Energy Profile of Turkey," *The Encyclopedia of Earth*, July 10, 2007, http://www.eoearth.org/article/Energy_profile_of_Turkey.

³³⁹ Brenda Shaffer, "Turkey's Energy Policies in a Tight Global Energy Market," *Insight Turkey* 8, no. 2 (April/June 2006), 97.

because of the worldwide economic recession.³⁴⁰ Total sales of petroleum products by the refineries in 2008 was 25,957 thousands tonnes.³⁴¹

According to the Energy Market Regulatory Authority in Turkey, there are several companies that have applied to open new refineries; they are Calik Energy and Indian Oil company (IOC). Also, there are some ventures to build a new refinery at the Ceyhan oil terminal by TPAO (Turkish Petroleum Corporation). If it manages to build a \$15 billion refinery in Ceyhan, Ceyhan will have the refinement capacity of 35 million tonnes of crude oil alone.³⁴² Turkey's oil refinement capacity, therefore, will be doubled.

2. Underground Storage

Turkey imports natural gas from importer countries under the "take-or-pay" regulations. Because of these regulations, even though Turkey's demand in summer decreases, Turkey had to pay the same amount of money for natural gas in summer as in winter. Thus, Turkey has started to build natural gas storage facilities. These natural gas facilities are important not only for storing the prepaid natural gas, but also for reducing the vulnerabilities of Turkey's supply interruptions during crises such as those of Russia and Ukraine in 2006 and in 2009.³⁴³

The very first natural gas storage was North Marmara and Degirmenkoy Natural Gas Underground Storage. Its capacity is 1.6 billion cubic meters. It became operational in 2007.³⁴⁴ Turkey also plans to increase its current capacity by 77 percent by the end of

³⁴⁰ Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *2009 Yili Petrol ve Dogal Gaz Sektor Raporu (Oil and Natural Gas Report of 2009)*, http://www.tpao.gov.tr/v1.4/condocs/pla/sektor_rapor2009.pdf, 16–17.

³⁴¹ Tupras (Turkish Petroleum Refineries Corporation), *Products*, <http://www.tupras.com.tr/detailpage.en.php?redirect=production.en.php&lRedirectPageID=1212>.

³⁴² Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *2009 Yili Petrol ve Dogal Gaz Sektor Raporu (Oil and Natural Gas Report of 2009)*, http://www.tpao.gov.tr/v1.4/condocs/pla/sektor_rapor2009.pdf, 16–17.

³⁴³ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 139–140.

³⁴⁴ Botas Petroleum Pipeline Corporation, *Natural Gas Underground Storage Projects*, <http://www.botas.gov.tr/index.asp>.

2014.³⁴⁵ A second important natural gas storage project is the Salt Lake Natural Gas underground project. Its storage capacity will be 1 billion cubic meters and its main goal will be to meet the gas supply deficit that is expected in years to come.³⁴⁶

These two underground storage facilities are very important for increasing energy security. During a crisis period, underground natural gas storage can reduce the vulnerabilities of Turkey, as well as other consumer countries if storage is expanded.

3. Ceyhan Oil Terminal

The Ceyhan oil terminal has emerged as a major energy supplier for the Baku-Tblisi-Ceyhan oil pipeline.³⁴⁷ Beside the BTC pipeline, the Iraq-Turkey crude oil pipeline also ends at the Ceyhan oil terminal. Moreover, there are other projects, such as the Samsun-Ceyhan oil bypass projects, extension of the Blue Stream gas pipeline and the Turkey Israel energy corridor project, which make Ceyhan an even bigger hub of energy supply.³⁴⁸ According to Turkey's Ministry of Foreign Affairs, the Ceyhan terminal will become the largest outlet terminal in the eastern Mediterranean by the completion of these projects and by which it is anticipated that 6 to 7 percent of the global oil supply will transit Turkey.³⁴⁹

The Ceyhan terminal is important not only because of the pipeline projects, but also its infrastructure. The Ceyhan terminal already has a modern tanker loading and storage facility that can handle the largest tankers in service. Its handling capacity is far more than that of the Bosphorus and the Russian oil terminal of Novorossiysk on the

³⁴⁵ Türkiye Petrolleri Anonim Ortaklığı (Turkish Petroleum Corporation), *2009 Yılı Petrol ve Doğal Gaz Sektör Raporu (Oil and Natural Gas Report of 2009)*, http://www.tpao.gov.tr/v1.4/condocs/pla/sektor_rapor2009.pdf, 15.

³⁴⁶ Botas Petroleum Pipeline Corporation, *Natural Gas Underground Storage Projects*, <http://www.botas.gov.tr/index.asp>.

³⁴⁷ Soner Cagatay and Nazli Gencsoy, "Startup of the Baku-Tblisi-Ceyhan Pipeline: Turkey's Energy Role," *The Washington Institute for Near East Policy, Policy Watch #998*, May 27, 2005, http://www.ciaonet.org/pbei/winep/policy_2005/2005_998/.

³⁴⁸ Ibid.

³⁴⁹ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

Black Sea.³⁵⁰ Another important feature of Ceyhan is its warm climate, which lets Ceyhan operate 365 days annually. On the other hand, the Russian oil terminal of Novorossiysk's cold climate requires it to close, usually two months in a year.³⁵¹

In addition to the Ceyhan oil terminal's infrastructure, there are ongoing projects to build several refineries and gas storage facilities at the Ceyhan terminal.³⁵² According to the Energy Market Regulatory Authority, it is planned to invest for a new refinery about 15 billion dollars in Ceyhan. In this respect, it is expected that Ceyhan will be an energy hub with the capacity to process 35 million tonnes of crude oil.³⁵³ All these projects make the Ceyhan terminal attractive as an energy hub.

F. A GROWING ENERGY MARKET

Turkey is undeniably a substantial energy market.³⁵⁴ Turkey's energy needs increase at 6 to 8 percent per year³⁵⁵ due to its increasing industrialization and population. Oil and natural gas meet the main share of the Turkey's energy requirements. Turkey imports the 93 percent of its oil requirements and 97.3 percent of its natural gas requirements from Russia, Iran, Caspian Sea Basin countries and the Middle East.³⁵⁶

³⁵⁰ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 30.

³⁵¹ Brent Sasley, "Turkey's Energy Politics in the Post-Cold War Era," *Middle East Review of International Affairs Journal* 2, no. 4 (November 1998).

³⁵² U.S. Energy Information Administration, Independent Statistics and Analysis, *Turkey Country Analysis Briefs, Oil*, <http://www.eia.doe.gov/emeu/cabs/Turkey/Oil.html>.

³⁵³ Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation), *2009 Yili Petrol ve Dogal Gaz Sektor Raporu (Oil and Natural Gas Report of 2009)*, http://www.tpao.gov.tr/v1.4/condocs/pla/sektor_rapor2009.pdf, 16–17.

³⁵⁴ William Hale, "Economic Issues in Turkish Foreign Policy," in *Turkey's New World: Changing Dynamics in Turkish Foreign Policy*, ed. Alan Makovsky and Sabri Sayari (Washington DC: Washington Institute for Near East Policy, 2000), 27–28.

³⁵⁵ Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, January 2009, [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf).

³⁵⁶ Republic of Turkey Ministry of Energy and Natural Resources, *Strategic Plan (2010-2014)*, http://www.enerji.gov.tr/yayinlar_raporlar_EN/ETKB_2010_2014_Stratejik_Planı_EN.pdf, 25–26.

Since Turkey possesses almost no recoverable oil and gas reserves, it will remain for the foreseeable future an importer of oil and gas.³⁵⁷ Furthermore, Turkey is a fast growing market in terms of economy. For that reason, since the mid 1990s, the U.S. Department of Commerce has described Turkey as a “Big Emerging Market.”³⁵⁸ Thus, Turkey’s heavy reliance on imported hydrocarbon energy sources, specifically oil and natural gas, is the biggest long-term challenge for Turkey, if Turkey wants to maintain its economic growth. For that reason, Turkey spent \$35 billion on oil and gas imports in 2007.³⁵⁹

All these reasons make Turkey an attractive energy market for the energy rich Caspian area, Russia and the Middle East.³⁶⁰ Turkey’s energy hub policy contributes to the energy rich countries as well as to Turkey’s and the West’s energy security in this respect. Because Turkey needs energy urgently, it is difficult for Turkey to cut off the flow of energy due to political reasons which would hurt Turkey more than any other consumer country.

³⁵⁷ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 101.

³⁵⁸ Ian O. Lesser, "Turkey and the United States: Anatomy of a Strategic Relationship," in *The Future of Turkish Foreign Politics*, ed. Lenore G., and Dimitris Keridis Martin (Cambridge: MIT Press, 2004), 92.

³⁵⁹ Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

³⁶⁰ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 101.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. WHY NOT TURKEY?

Energy pipelines are the most important part of Turkey's energy policy. Turkey seeks to become an energy hub in its region by exploiting its location. However, the achievement of this goal has been challenged by several factors. These challenges threaten Turkey's energy policies in its region. These challenges can be separated in two ways. First are external challenges. External challenges are mainly the instability problems of the supplier countries. Especially countries in the Caspian Sea Basin and the Middle East have many problems regarding instabilities such as ethnic tensions.³⁶¹

Other than instability, regional powers' aggressive policies to hold the region under their control create threats to Turkey's energy policies. In this regard, Russia's aggressive foreign policy in Eurasia, especially Russia's ability to manipulate ethnic tension, is the main threat for Turkey. For instance, the Russia-Georgia war in 2008 occurred due to South Ossetia's declaration of independence, and caused a short-time interruption of the flow of oil through the Baku-Tbilisi-Ceyhan pipeline.³⁶²

If external challenges are not considered, the most important challenge for Turkey's aims is the Kurdistan Worker's Party (PKK) Terrorist Organization. It is a terrorist organization that Turkey has been fighting against for more than thirty years. The PKK's attack on the Baku-Tbilisi-Ceyhan pipeline in 2008 raised questions about Turkey as an energy hub.³⁶³

These external and internal challenges affect Turkey's aim to become an energy hub in its region. It affects mainly the investors since these problems make them consider pipeline routes other than Turkey's. For that reason, Turkey has been trying to persuade investors that despite the challenges Turkey is the best option as an energy hub in terms of energy security.

³⁶¹ Fiona Hill, "Caspian Conundrum: Pipelines and Energy Networks," in *The Future of Turkish Foreign Politics* (Cambridge: MIT Press, 2004), 211–212.

³⁶² Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

³⁶³ Ibid.

A. EXTERNAL CHALLENGES

1. Instability in Middle East

Turkey still imports most of its crude oil from the Middle East. Furthermore, Turkey seeks to import some natural gas from the Middle East. For that reason, Turkey has been trying to sign agreements with Iraq, Qatar, Israel, Syria, and Lebanon. However, this dependence on the Middle East makes Turkey vulnerable to regional developments and creates unbalanced trade structures.³⁶⁴ Even though the Turkish economy does not rely largely on the Middle East, Turkey's substantial oil, and natural gas dependence creates an unbalanced trade structure. Turkey's economy may be vulnerable to disruptions of oil and gas supplies that could result from Middle East crises.³⁶⁵ Consequently, these disruptions affect countries that may have chosen Turkey as a transit country for energy.

Turkey shares three of its borders with three Middle Eastern countries. They are Iran, Iraq and Syria. It is no wonder that Turkey has concerns about these three countries. Other than these Middle Eastern countries, the Middle East is indigenously an unstable region. Over the last few decades, and before, the Middle East has been a scene of conflicts: the Arab-Israeli wars between 1967 and 1973, the Iranian Revolution in 1979, the Iran-Iraq war between 1980 and 1988, the Gulf war in 1991, and the Iraq war in 2003. Moreover, all these wars caused disruptions of the transportation of energy directly or indirectly.³⁶⁶ The Arab Israeli wars caused the disruption of oil transportation and high oil prices. The Iranian Revolution caused the isolation of Iran and Iran's energy sector

³⁶⁴ Kemal Kirisci, "Turkey and the Muslim Middle East," in *Turkey's New World: Changing Dynamics in Turkish Foreign Policy*, ed. Alan, and Sabri Sayari Makovsky (Washington DC: Washington Institute for Near East Policy, 2000), 44.

³⁶⁵ G. Lenore, and Dimitris Keridis Martin, *The Future of Turkish Foreign Politics* (Cambridge: MIT Press, 2004), 165–166.

³⁶⁶ *Ibid.*, 161–164.

from the world. The Gulf war caused the curtailment of oil flows from the Iraq-Turkey oil pipeline by United Nations' sanctions of which the cost was \$35 billion for Turkey.³⁶⁷

For Turkey, Iran and Iraq are the most vulnerable part of Turkey's energy ambitions. Turkey imports a high quantity of natural gas and oil from Iran. However, Iran has tension with Western countries due to the nuclear weapons issue. Turkey imports small amounts of oil from Iraq, but Turkey has aims for Iraq to exploit Iraq's untapped large natural gas reserves and galvanize the Iraq-Turkey crude oil pipeline as before the Gulf war in 1991. Furthermore, Turkey has goals to carry natural gas and oil from Iran and Iraq to Western markets. Focal points of problems related to Iran and Iraq for Turkey are Iraq's Kurd region and the sabotage against the Iraq-Turkey crude oil pipeline by insurgents in Iraq and Iran-United States tense relations. Turkey is hoping to balance either its concerns about Iraqi Kurds' ambitions to become independent and/or the tense relations between Iran and the United States.³⁶⁸

a. Iraq

Turkey has mainly two concerns about Iraq. First of them is the Kurdish ambitions of becoming independent. Second is the sabotage on Iraq-Turkey crude oil pipelines by insurgents.

After the Gulf war in 1991, Northern Iraq posed a series of challenges for Turkey. First of all, Turkey wanted all Iraqi Kurds to remain at home for fear of refugee flow such as in 1987. In 1987, between 40,000 and 50,000 Iraqi Kurds moved to Turkey. Second, Turkey did not want to see the emergence of a separate Kurdish entity in northern Iraq, because Turkey has fears that this would establish the basis of a Kurdish

³⁶⁷ Kemal Kirisci, "Turkey and the Muslim Middle East," in *Turkey's New World: Changing Dynamics in Turkish Foreign Policy*, ed. Alan, and Sabri Sayari Makovsky (Washington DC: Washington Institute for Near East Policy, 2000), 44.

³⁶⁸ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 118–119.

state as both a model and a source of inspiration for Turkey's own Kurdish population. Third, Turkey does not want a created heaven in northern Iraq for the separatist Kurdish Worker's Party (PKK) terrorist organization.³⁶⁹

For these reasons, Turkey wanted the United Nations and United States to stop the flood of Kurdish refugees to Turkey in 1991. Any repetition of 1987 Kurdish refugee flood could have caused unforeseeable consequences for Turkey's domestic stability and its international relations. Thus, Turkey reluctantly accepted "Operation Provide Comfort," which was to provide a safer place for the Kurdish population against Saddam Hussein's aggressive policy against Kurds. Turkey allowed the idea of leaving developments in northern Iraq to the political skill and ambitions of the Iraqi Kurds and of providing Turkish NATO facilities for allied air control.³⁷⁰ So PKK has found a heaven for itself, which had been protected by the U.S., which Turkey supported the creation of a free area for the Kurds of Iraq. In this respect, Turkey itself contributed to the creation of the situation.

Another important aspect is the Kirkuk issue. Kirkuk has the second most important oil reserves in northern Iraq. Turkey wants to ensure all Iraqi oil is placed under centralized control of central government rather than a federal Kurdish government in northern Iraq. In this way, Turkey is trying to prevent a Kurdish government from using revenues from Kirkuk to strengthen its own autonomy or even future independence.³⁷¹

Therefore, Turkey sees Iraq's future territorial integrity as vitally important to its own security and stability, fearing an irredentist contamination among its own Kurdish population, if the Kurdish region of Iraq were to gain formal independence. However, the 2003 U.S.-led invasion confirmed Turkish fears of Kurdish separatism in northern Iraq and created unprecedented instability on its borders. With the events

³⁶⁹ Philip Robbins, *Suits and Uniforms: Turkish Foreign Policy Since the Cold War* (Seattle: University of Washington Press, 2003), 313–314.

³⁷⁰ Heinz Kramer, *A Changing Turkey The Challenge to Europe and the United States* (Washington DC: Brookings Institution Press, 2000), 121.

³⁷¹ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 101.

spiraling out of control, Turkey sought a greater role in Iraq with the aim of protecting its interests and influencing the future direction of its neighbor. Gradually, through its growing network of political contacts and trade links, Turkey has become a force of stability.³⁷²

Turkey has ambitions to exploit Iraq's huge oil and natural gas reserves and carry them to Europe through Turkey by pipelines, an important part of Turkey's energy hub aims. However, anything related to the Kurdish region's independence can cause instability in Turkey and the region, or even a war between Turkey and Iraq.

The intensity of attacks on Iraqi oil pipelines, oil installations and oil personnel by insurgents is another major problem with Iraq.³⁷³ There have been 469 attacks on Iraq-Turkey crude oil pipelines and other oil installations from 2003 to 2008.³⁷⁴ This situation is also a big concern for Turkey because even if Turkey and Iraq manage to establish a natural gas pipeline parallel to the existing crude oil pipeline and have the oil pipeline reach the pre-Gulf war level Iraq must ensure the security of the pipeline. If Turkey and Iraq cannot manage to do so, it will have a negative effect on Turkey's energy hub policies.

b. Iran-U.S. Relations

Iran is another important issue for Turkey's ambitions to become an important energy hub from east to west. Iran has the third largest oil reserves and second largest natural gas reserves.³⁷⁵ Turkey seeks to exploit Iran's huge reserves in favor of Turkey's energy hub goals.

³⁷² Haim Malka, "Turkey and the Middle East," *Center for Strategic and International Studies, Final Report of the CSIS U.S.-Turkey Strategic Initiative*, March 2009, http://csis.org/files/media/isis/pubs/090330_flanagan_turkeyevolvingdynamics_web.pdf (accessed March 12, 2010), 38.

³⁷³ Gal Luft, "Fencing in Looters and Saboteurs in Iraq, Energy Security," *Institute for the Analysis of Global Security*, September 29, 2003, <http://www.iags.org/n0929032.htm>.

³⁷⁴ Iraqi Pipeline Watch, *Attacks on Iraqi Pipelines, Oil Installations, and Oil Personnel, Energy Security*, March 27, 2008, <http://www.iags.org/iraqipipelinewatch.htm>.

³⁷⁵ CIA World Fact Book, *Iran*, <https://www.cia.gov/library/publications/the-worldfactbook/geos/ir.html>.

Iran is not only an important hydrocarbon reserve but also an important potential energy corridor for the Caspian Sea's landlocked energy rich countries. Considering the enormous cost of new pipelines, Iran is one of the most viable and economically practical alternatives for exporting oil and gas from the Caspian Sea Basin landlocked energy rich countries. First, the Iran route would bypass the politically unstable areas of the Caucasus.³⁷⁶ Second, Iran's unique geographical position between Caucasia, the Caspian Sea, Central Asia, the Persian Gulf, Gulf of Oman, Turkey, Iraq and Pakistan makes Iran a perfect natural bridge between the regions.³⁷⁷ Another important advantage of Iran is the already present pipeline networks, refineries and the ports on the Caspian Sea. The pipeline network and port infrastructure on the Caspian coast are largely in place or can be provided at reasonable cost and time. Iran's existing refineries at Tabriz, Teheran, Arak, and Isfahan could receive oil from the north.³⁷⁸

For all these reasons, Turkey is seeking investments in Iran in terms of energy. Turkey's biggest import from the Middle East is Iran's natural gas and Iran's oil. Turkey wants to carry Iranian gas to Europe via Greece. Turkey, Iran and Greece have already signed agreements on this. According to the project plans that Iran and Turkey signed, new oil and gas wells will be drilled and the transportation of energy to Europe via Turkey and Greece will be by existing gas pipelines currently crossing Turkey. Turkey also has plans to facilitate the export of Iranian oil via pipelines to the Ceyhan terminal in the Mediterranean. The European Union strongly supports Iranian energy imports to lessen extreme dependence on Russian energy sources.³⁷⁹

³⁷⁶ Hooshang Amirahmadi, "Introduction: Challenges of the Caspian Region," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 17.

³⁷⁷ Narsi Ghorban, "By Way of Iran: Caspian's Oil and Gas Outlet," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 149.

³⁷⁸ Hooshang Amirahmadi, "Introduction: Challenges of the Caspian Region," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 17.

³⁷⁹ Graham E. Fuller, *The New Turkish Republic* (Washington DC: United States Institute of Peace Press, 2008), 112.

However, Iran, Turkey and the European Union have an obvious disadvantage on transportation of Iranian energy sources: The United States' Iran Sanctions Act (ISA).³⁸⁰

According to the ISA, any investment above \$20 million by any company will be subject to sanctions by the United States. In this respect, construction of energy routes to or through Iran is subject to sanctions; such routes will help Iran to develop its petroleum resources and its nuclear weapons program.³⁸¹

Despite the sanctions, Turkey has been importing natural gas from Iran via a natural gas pipeline since 2001, and has signed a new agreement with Iran to carry more gas and oil from Iran to Europe. This situation is creating tension between the United States and Turkey and can cause disruption if the United States strongly opposes Turkey's ambitions to exploit Iran's natural gas and oil in favor of itself and Iran.

2. Instability in the Caspian Sea Basin Area

The Caspian Sea states are landlocked, so they need to cooperate with their neighbors for pipeline outlets for hydrocarbon exports. Pipelines provide investments, jobs, royalties, long-term access to energy sources and considerable political and economic leverage.³⁸²

Without a pipeline, the Caspian Sea states do not have a means of getting energy resources out of the region to the world's energy markets and they remain dependent on old system of selling oil and gas to Russia. This situation makes the Caspian Sea states

³⁸⁰ Jennifer DeLay, "The Caspian Oil Pipeline Tangle: A Steel Web of Confusion," in *Oil and Geopolitics in the Caspian Sea Region*, ed. Michael P. Croissant and Bulent Aras (Westport: Praeger, 1999), 64.

³⁸¹ Kenneth Katzman, "The Iran Sanctions Act (ISA)," *Congressional Research Service*, April 09, 2009, http://assets.opencrs.com/rpts/RS20871_20100409.pdf.

³⁸² Hooshang Amirahmadi, "Introduction: Challenges of the Caspian Region," in *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*, ed. Hooshang Amirahmadi (New York: St. Martin's Press, 2000), 16.

dependent on Russia's leverages and the situation creates a great deal of ethnic tension in the region of more than one hundred ethnic groups.³⁸³

There are many ethnic conflicts in the region: The Georgian regions of Abkhazia and South Ossetia; the dispute over Nagorno-Karabakh between Armenia and Azerbaijan; Kazakhstan's large ethnic Russian population; and, Chechnya. Apart from these problems, the legal status of the Caspian Sea is another important source of the tension.³⁸⁴

The worst thing is that Nagorno-Karabakh, South Ossetia and Abkhazia have demonstrated that the disputes between the ethnicities can easily turn into wars.³⁸⁵

a. Nagorno-Karabakh Issue

Dispute between Armenia and Azerbaijan over Nagorno-Karabakh has a direct relation with Turkey. After the war between Armenia and Azerbaijan over Nagorno-Karabakh, Turkey has been on the Azerbaijan side and closed its borders and diplomatic ties with Armenia. Thus, Russian backed Armenia and Turkish backed Azerbaijan's relationship have direct links to Turkey's situation in this region.

For both Azerbaijan and Armenia, the state building process has been shaped by the dispute over Nagorno-Karabakh. After the independence of Azerbaijan, there was a conflict between the ethnic Armenians in Nagorno-Karabakh and the Azerbaijan government. However, Armenia entered the conflict and took control of almost one-fifth of Azerbaijan's territory by 1993. The Minsk Group of the Organization

³⁸³ Dru C. Gladney, "China's Interest in Central Asia: Energy and Ethnic Security," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 220.

³⁸⁴ Robert Ebel and Rajan Menon, "Introduction: Energy, Conflict, and Development in the Caspian Sea Region," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 7-8.

³⁸⁵ Martha Bill Ollcott, "Regional Cooperation in Central Asia and the South Caucasus," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 125.

for Security and Cooperation in Europe (OSCE) has tried to establish peace between Azerbaijan and Armenia over Nagorno-Karabakh, but the OSCE has failed.³⁸⁶

Turkey is on the side of Azerbaijan due to the close ethnic and cultural relations with Azerbaijan, and has closed its borders and frozen diplomatic relations with Armenia.

When the war stopped, Armenia was the indisputable victor. It has occupied 20 percent of Azerbaijan's territory. Since Azerbaijan's military was too weak to challenge the Armenian military, the result has been the stable status quo.³⁸⁷ However, Azerbaijan's hydrocarbon export based economy has been developed and natural gas and oil pipelines have resulted in the development of Azerbaijan's economy. Thus, Azerbaijan's military budget is fed by petro-dollars. For that reason, in Azerbaijan, some thoughts of getting Nagorno-Karabakh back and taking revenge on Armenia are reemerging. The balance of power is shifting by petro-dollars in favor of Azerbaijan.³⁸⁸

For Turkey and Europe, any war in the Caucasus between Azerbaijan and Armenia would cause a disaster in terms of energy. The Baku-Tblisi-Ceyhan oil pipeline and Baku-Tblisi-Erzurum natural gas pipeline come from Azerbaijan. A war would cause the stop of oil and natural gas. Also, a war could destroy all plans of the areas which were thought of becoming an east-west corridor between Europe and energy rich Eurasia. Furthermore, a war would mean the end of the Nabucco pipeline project, which is one of the most important projects in terms of energy security for Europe and Turkey. Moreover, a war could make Europe and Turkey much more dependent on Russian gas and oil due to the disruption of energy flows from Eurasia.

³⁸⁶ Martha Bill Ollcott, "Regional Cooperation in Central Asia and the South Caucasus," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 135.

³⁸⁷ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 45.

³⁸⁸ Afet Mehtiyeva and Matt Robinson, "Azerbaijan: Karabakh Key to Turkish-Armenian Peace," *Reuters*, April 23, 2010, <http://www.reuters.com/article/idUSLDE63M23L>.

b. Georgia-Abkhazian-South Ossetia

Georgia is comprised of various ethnic groups, each with their own language and religion. Georgia is distinguished by the existence of a high number of autonomous entities in its territory. Abkhazians in the northwest, South Ossetians in north-central part of Georgia, and Muslim Ajaris in the southwest of Georgia are the most important ethnic groups in Georgia... All of them have their autonomous status.³⁸⁹ Consequently, there have always been ethnic tensions between these groups and Georgians themselves.

Georgia has had a crucial place in history and now has a role as a link between the regions of Central Asia, the Caucasus and Europe. It is the only country, along with Russia, which has ports on the sea in the region. It is not landlocked as are other Eurasian countries. It is one of the transit routes for the landlocked countries of Eurasia.³⁹⁰ Thus, Georgia holds a crucial position in pipeline politics, geographically, as the most logical and economical export route for oil and natural gas from Azerbaijan and other Eurasian countries to the Black Sea, Turkey and Europe.³⁹¹

However, Abkhazian and South Ossetian conflicts have weakened Georgia as an energy transit country. Because of the Russia-Georgian war in 2008, the Baku-Tblisi-Ceyhan pipeline was closed for a time. This has raised questions concerning the energy security of Europe and Turkey. The conflict and pipeline closure demonstrated the willingness of Russia to regain its influence on its near abroad. Furthermore, it demonstrated the weakness of the West against Russian assertive policies in terms of energy.³⁹² Moreover, the situation demonstrated the manipulative power of Russia on the ethnicities of the region.

³⁸⁹ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 72.

³⁹⁰ *Ibid.*, 73–74.

³⁹¹ *Ibid.*, 125.

³⁹² Igor Tomberk, "Impact of Five-Day War on Global Energy," *Centre for Research on Globalization*, September 03, 2008, <http://www.globalresearch.ca/index.php?context=va&aid=10042>.

Georgia has the backbone of the South Caucasus pipeline system comprised of the Baku-Tblisi-Ceyhan oil pipeline, Baku-Supsa oil pipeline and Baku-Tblisi-Erzurum natural gas pipeline. These pipelines were closed during the war. Thus, while Georgia suffered from the war, energy supplier and energy consumer countries also suffered from the lack of energy transportation through Georgia.³⁹³ Georgia has a special role in terms of energy security and the energy hub policy of Turkey. If a disruption occurs in Georgia, in terms of energy it affects Turkey directly.

c. Kazakhstan

Kazakhstan is one of the most vulnerable countries to Russian influence. It has significant amounts of oil and gas reserves, but it is located between Russia and Central Asia and has difficulties accessing international transport routes.³⁹⁴

Kazakhstan and Russia share a 5,000-mile border. Moreover, ethnic Russians form 20 percent of the population. Thus, Russia has the opportunity to manipulate and to stir up ethnic Russians in Kazakhstan.³⁹⁵ Aside from Russian influence on ethnic Russians, Kazakhstan's economy is highly dependent on Russia. Especially its oil and natural gas economy is dependent on Russia's pipeline system even though Kazakhstan contributes oil to the Baku-Tblisi-Ceyhan pipeline.³⁹⁶

Russia does not want to leave Kazakhstan due to its huge amount of oil and gas reserves, nor does it want a former Soviet country to become a rival in terms of energy exports.³⁹⁷ Therefore, Russia has tried to take Kazakhstan under control.

³⁹³ Mamuka Tsereteli, "The Impact of the Russia-Georgian War on the South Caucasus Transportation Corridor," *The Jamestown Foundation*, 2009, http://www.jamestown.org/uploads/media/Full_Mamuka_RussiaGeorgia.pdf, 8–9.

³⁹⁴ Jennifer DeLay, "The Caspian Oil Pipeline Tangle: A Steel Web of Confusion," in *Oil and Geopolitics in the Caspian Sea Region*, ed. Michael P. Croissant and Bulent Aras (Westport: Praeger, 1999), 57.

³⁹⁵ Stratfor Global Intelligence, *Russia's Expanding Influence: Part 1: The Necessities*, March 09, 2010, http://www.stratfor.com/theme/russias_expanding_influence_special_series, 7.

³⁹⁶ Jennifer DeLay, "The Caspian Oil Pipeline Tangle: A Steel Web of Confusion," in *Oil and Geopolitics in the Caspian Sea Region*, ed. Michael P. Croissant and Bulent Aras (Westport: Praeger, 1999), 59.

³⁹⁷ *Ibid.*, 59.

d. Legal Status of Caspian Sea Basin

During the time of the Soviet Union, Iran and the Soviet Union had signed two agreements on demarcation of the Caspian Sea, in 1921 and 1940. Because of the demise of the Soviet Union, a new agreement should be signed between the new littoral states. However, the vast energy resources of the Caspian Sea have caused a dispute over the demarcation of the sea.³⁹⁸

All five littoral states have different thoughts of sharing the Caspian Sea. The common point is to get a larger share of the Caspian Sea. If the Caspian is defined as a sea, according to 1982 United Nations Convention on the Law of the Sea UNCLOS, littoral states can claim rights of sovereign waters up to twelve miles from shore and an exclusive economic zone (EEZ) within 200 miles from the coast. If the Caspian is defined as a lake, the littoral states will divide the water's resources equally between them.³⁹⁹

Russia supports the agreements that were signed during the Soviet times between Iran and the Soviet Union. According to Russia, the Caspian Sea is not a sea covered by the 1982 United Nations Convention on the Law of the Sea (UNCLOS), because the Caspian is in fact a "special inner sea" and has no natural connection with any other sea.⁴⁰⁰ Therefore, according to Russia, it should be treated like a lake. Russia will have a larger portion of the Sea if it is accepted as a lake rather than a sea.⁴⁰¹

³⁹⁸ Shah Alam, "Pipeline Politics in the Caspian Sea Basin," *Strategic Analysis: A Monthly Journal of the IDSA* XXVI, no. 1 (Jan-Mar 2002).

³⁹⁹ Brent Sasley, "Turkey's Energy Politics in the Post-Cold War Era," *Middle East Review of International Affairs Journal* 2, no. 4 (November 1998).

⁴⁰⁰ Geoffrey Kemp, "U.S.-Iran Relations: Competition or Cooperation in the Caspian Sea Basin," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 148.

⁴⁰¹ Brent Sasley, "Turkey's Energy Politics in the Post-Cold War Era," *Middle East Review of International Affairs Journal* 2, no. 4 (November 1998).

Iran somewhat supports the idea of a lake, but it has contended that the oil and gas in the seabed would not be utilized except by the consensus of the five littoral states.⁴⁰² Therefore, Iran would have access to the energy rich oil fields of the middle of the Caspian Sea.⁴⁰³

Azerbaijan and Kazakhstan support the idea of a sea. According to them, the Caspian Sea should be treated as a sea under the UNCLOS of 1982, which defines the Caspian as a semi enclosed or enclosed sea.⁴⁰⁴ By the UNCLOS description, both of them can keep their large offshore resources and do not need to share their offshore reserves.⁴⁰⁵

Turkmenistan has not made a clear decision on this issue. It maintains both stands. Its only concern is the dispute with Azerbaijan on several major oilfields such as the Kapaz (Serdar) and Chirag oil fields.⁴⁰⁶

The dispute on the demarcation of the Caspian States has added further geopolitical tension in terms of peace and energy security. Because of this dispute, Caspian Sea resources cannot be exploited and any pipeline under the Caspian Sea such as the Trans-Caspian cannot be built until a consensus between the littoral states is reached. Thus, the Caspian Sea is another potential source of friction and tension in Eurasia in terms of energy security.

⁴⁰² Shah Alam, "Pipeline Politics in the Caspian Sea Basin," *Strategic Analysis: A Monthly Journal of the IDSA XXVI*, no. 1 (January–March 2002).

⁴⁰³ Geoffrey Kemp, "U.S.-Iran Relations: Competition or Cooperation in the Caspian Sea Basin," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 149.

⁴⁰⁴ *Ibid.*, 148.

⁴⁰⁵ Brent Sasley, "Turkey's Energy Politics in the Post-Cold War Era," *Middle East Review of International Affairs Journal 2*, no. 4 (November 1998).

⁴⁰⁶ Shah Alam, "Pipeline Politics in the Caspian Sea Basin," *Strategic Analysis: A Monthly Journal of the IDSA XXVI*, no. 1 (January–March 2002).

3. Russia's Foreign Policy

Russia, as a natural gas and oil supplier, has pursued an aggressive foreign policy to hold its influence over Eurasia and its regional hegemony.⁴⁰⁷ For holding its energy hegemony, Russia demonstrated how serious it is by the Russia-Georgia war, cut-offs of natural gas to Ukraine and Belarus, some rumors that Russia had been involved helping Armenians in the Nagorno-Karabakh war and helping the PKK, the terrorist organization, in Turkey. An analyst from Stratfor Intelligence Service has described Russia's aggressive policy in terms of energy with these words:

“Moscow got its point across: Europe can sink its money into projects designed to leave Russia in the cold (mainly east-west energy corridor projects like Baku-Tblisi-Ceyhan, Baku-Tblisi-Erzurum, and Nabucco), but the Russians still have the will and capacity to disrupt many of these projects.”⁴⁰⁸

Russia has mainly two reasons to legitimize its aggressive foreign policy. These are economic and political. Russia purchases Eurasian, mainly Central Asian, natural gas and then sells it and its own natural gas to Europe at higher prices. Thus, all this natural gas goes through Russian soil. This situation makes Russia dependent on a continuing and reliable flow of natural gas from former Soviet States. If former Soviet States diversify their exports, this can create a problem for Russia in terms of its economy.⁴⁰⁹ Hence, Russia cannot afford any reduced energy market share since its economy receives a huge amount of energy benefit.⁴¹⁰

⁴⁰⁷ Ibrahim Mazlum, "Twenty First Century Energy Security Debates: Opportunities and Constraints for Turkey," in *Contentious Issues of Security and The Future of Turkey*, ed. Nursin Atesoglu Guney (Burlington: Ashgate Publishing Limited, 2007), 143–144.

⁴⁰⁸ Tuncay Babali, "Turkey At the Energy Crossroads, Turkey Past and Present," *Middle East Quarterly*, Spring 2009, <http://www.meforum.org/2108/turkey-at-the-energy-crossroads..>

⁴⁰⁹ Woodrow Wilson International Center for Scholars, *Turkey's Energy Politics: Neither East or West, Southeast Europe Project, Event Summary*, September 01, 2009, http://wilsoncenter.org/index.cfm?topic_id=109941&fuseaction=topics.event_summary&event_id=546092.

⁴¹⁰ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 112.

The second reason is mainly political. Russia believes that the United States and the West are trying to dislodge Russia from Eurasia,⁴¹¹ which Russia considers it has historic rights over and sees as its “Near Abroad.”⁴¹² Because of this perception, Russia has pursued an aggressive policy towards Eurasia, the United States, Turkey and the West over Eurasia. Furthermore, Russia considers NATO’s expansion as a threat. Russia has stated that NATO’s expansion is a threat in its new military doctrine.⁴¹³

The United States and Europe see Russia as a threat and questions Russia about its foreign policy. The United States wants a “whole and free” Europe and Russia is the main threat against those foreign policy goals.⁴¹⁴ From Europe’s side, Russia is a main concern. Europe uses its energy leverage to assert its foreign policy goals. The Russian-Georgian war and natural gas cut-offs in Ukraine confirm Russia’s aggressive energy policy toward Europe. Russia uses its energy sources as a weapon to assert its policy.⁴¹⁵

However, Turkey is a different story for Russia’s foreign policy. Turkey is not as powerful as Europe or the United States, but pursues their policy goals. On the other hand, Turkey is an important outlet for Russia in terms of energy. For Turkey, Russia is an important energy supplier and important trading partner. Turkey is important for Russia to carry Russian natural gas and oil to Israel. In this picture, Turkey and Russia have many common interests. However, in Eurasia, Russia and Turkey are regional rivals,⁴¹⁶ because Turkey is the main component of the United States’ east-west energy

⁴¹¹ Robert Ebel and Rajan Menon, "Introduction: Energy, Conflict, and Development in the Caspian Sea Region," in *Energy and Conflict in Central Asia and the Caucasus*, ed. Robert Ebel and Rajan Menon (New York: National Bureau of Asian Research, 2000), 7.

⁴¹² Oktay F. Tanrisever, "Turkey and Russia in Eurasia," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 129.

⁴¹³ Rianovosti, *Factbox: Russia's New Military Doctrin*, February 05, 2010, <http://en.rian.ru/russia/20100205/157786616.html>.

⁴¹⁴ Vincent Morelli, "NATO Enlargement: Albania, Croatia, and Possible Future Candidates," *Congressional Research Service*, April 14, 2009, <http://www.fas.org/sgp/crs/row/RL34701.pdf>, 17.

⁴¹⁵ Arianna Checchi, Arno Behrens and Egenhofer Christian, "Long-Term Energy Security Risks for Europe: A Sector-Specific Approach," *Center for European Policy Studies, CEPS Working Document, No. 309*, January 2009, <http://www.ceps.eu/node/1608>.

⁴¹⁶ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 134.

corridor, which circumvents Russia. In this respect, Russia clashes with Turkey over Eurasia, which can be formulated as a zero-sum game.⁴¹⁷

The east-west energy corridor is the most important part of Turkey's energy policy. It is the main component of Turkey's energy hub concept. However, Russia seeks to prevent this energy hub with its aggressive policies. For that reason, Russia and Turkey have had disputes over the PKK and Chechen war. Both countries accused the other helping the PKK and the Chechens.⁴¹⁸

Another important point of Russia's foreign policy is Russia's ability to manipulate the minorities in Eurasia.⁴¹⁹ Russia demonstrated its success in influence minorities in the Russia-Georgian war by manipulating Ossetians and Abkhazians,⁴²⁰ and in Nagorno-Karabakh by manipulating Armenians.⁴²¹

All these aggressive acts by Russia create instability in Eurasia, an area that is important for Turkey's energy hub policy. If Russia goes further and takes control of oil and natural gas flows from Eurasia to the west, there can be devastating results for Turkey's energy policy.⁴²²

⁴¹⁷ Oktay F. Tanrisever, "Turkey and Russia in Eurasia," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 137.

⁴¹⁸ Oktay F. Tanrisever, "Turkey and Russia in Eurasia," in *The Future of Turkish Foreign Politics*, ed. Lenore G. Martin and Dimitris Keridis (Cambridge: MIT Press, 2004), 139.

⁴¹⁹ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 125–126.

⁴²⁰ William Courtney and Kenneth Yallowitz, "Russia's Bid to Control Caspian Energy," *The Boston Globe*, October 04, 2008, http://www.boston.com/bostonglobe/editorial_opinion/oped/articles/2008/10/04/russias_bid_to_control_caspian_energy/.

⁴²¹ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 41.

⁴²² Greg Bruno, "Turkey at An Energy Crossroads," *Council on Foreign Relations*, November 20, 2008, <http://www.cfr.org/publication/17821/>.

B. INTERNAL CHALLENGES

1. PKK Sabotage on Pipelines

In terms of terrorism, pipelines are relatively easy and effective targets for terrorists in the world.⁴²³ In Turkey, the most dangerous terrorist organization is the Kurdish Worker's Party (PKK), which is a separatist Kurdish group conducting terrorist attacks against Turkey.

Turkish officials and the Turkish military have been fighting against the PKK for more than thirty years. Turkey has been relatively successful against the PKK; however, the PKK has more advantages compared to Turkish officials because the PKK can use any means of pursuing its interests. One of these is sabotage against pipelines.

The PKK have conducted several attacks on pipelines. In 1998, Mahir Valat, a representative of the National Salvation Front of Kurdistan in the Commonwealth of Independent States (CIS) and Eastern Europe threatened Turkey:

“The question is whether the oil will actually flow uninterrupted into pipes. Militants could ensure that the pipe becomes a sieve: its fate would depend on us and not on Turkey. We oppose the BTC pipeline construction as an element of Turkish expansion against our Motherland. To realize its plan, Turkey will have to completely destroy our armed formations. Let it try.”⁴²⁴

The first sign of the attacks to come were those words. Later, the PKK sabotaged the Kirkuk-Yumurtalik (Iraq-Turkey) oil pipeline, the Iran-Turkey natural gas pipeline, the Baku-Tblisi-Erzurum natural gas pipeline and most recently, the Baku-Tblisi-Ceyhan oil pipeline. All are very important for Turkey's energy policy and goal of becoming an energy hub in its region.

Secure transportation routes are the main component of energy security. Turkey wants to be an energy hub to connect energy rich Russia, Eurasia, and the Middle East

⁴²³ Selma Stern, "Turkey's Energy and Foreign Policy," *Globalization*, 2003, http://globalization.icaap.org/content/v3.1/03_stern.html.

⁴²⁴ Emanuel Karagiannis, *Energy and Security in the Caucasus* (London: RoutledgeCurzon, 2002), 97–98.

with energy hungry Europe. However, terrorist attacks, especially on the Baku-Tblisi-Ceyhan pipeline that is the most important part of the east-west energy corridor, cause doubts within the mind of energy investors. Turkey needs to find a way to persuade investors about the reliability, security and stability of Turkey. Otherwise, energy investors may look for alternative routes to those of Turkey.⁴²⁵

⁴²⁵ Nihat Ali Ozcan, "Energy Security and the PKK Threat to the Baku-Tblisi-Ceyhan Pipeline," *The Jamestown Foundation*, September 22, 2008, http://www.jamestown.org/programs/gta/single/?tx_ttnews%5Btt_news%5D=5170&tx_ttnews%5BbackPid%5D=167&no_cache=1.

V. CONCLUSION

Until the oil crisis of 1973, energy was not a matter of foreign policy for Turkey. Even though Turkey does not have significant indigenous oil reserves, (oil was the main energy resource until late 1970s), cheap oil imported from the Middle East was enough for Turkey's energy needs. However, while the oil crisis of 1973 caused an increase in the price of oil, it also quadrupled the cost of oil imports to Turkey. While the increase of oil prices combined with Turkey's growing consumption of oil, energy was the main foreign policy concern for the first time in Turkish history. Turkey's increased dependence on the Middle Eastern oil-exporting countries caused a shift in Turkey's foreign policy from passive neutrality to a more active policy, especially economically.

Following the oil crisis, Turkey started to rebuild economic bridges with the Middle East. First, Turkey negotiated with Iraq on an Iraq-Turkey crude oil pipeline and started to import crude oil from Iraq by that pipeline. In the mid-1980s, Turkey also turned its face to the north and negotiated with its Cold War enemy, the Soviet Union, on importing natural gas via a pipeline through Bulgaria called the Trans-Balkan pipeline. In this way, oil and natural gas pipelines have become a political policy concern for Turkey.

Until the 1990s, Turkey's foreign policy on energy was related to meeting the increasing demand for energy. Its foreign policy concern was mainly related to getting cheaper oil and natural gas from the energy export-countries of the Middle East and the Soviet Union. However, in the beginning of the 1990s, the collapse of the Soviet Union opened the gate to a new era on energy. Newly independent states of Central Asia and the Caucasus resulted in new prospects for Turkey on energy and regional leadership. Turkey immediately tried to increase its influence on Central Asian and Caucasus countries due to its close ethnic and cultural ties. For that reason, sometimes it is said that the twenty-first century is the "Turkish Century" which has caused the blossoming of Pan-Turkism. However, Turkey quickly became aware of the hardship of becoming a leading power for those countries due to its lack of economic capacity to help newly independent Turkic

States. Even though the demise of the Soviet Union opened new opportunities for Turkey's becoming a regional power, it was not enough for a pan-Turkic empire or union.

Before the early 1990s, Turkey had met its increasing energy demand with Iraq-Turkey crude oil and the Soviet Union's natural gas pipelines. However, in the 1990s, Turkey's energy needs continued to increase due to increasing industrialization and growing population. In addition, the close of the Iraq-Turkey crude oil pipeline, which was the main oil supply for Turkey, by United Nations' sanctions due to the Gulf war of 1991, defeated Turkey's energy policy. Thus, Turkey was forced to look for alternatives for energy. The opened gate of newly independent energy-rich Eurasian states, Europe's increasing dependence on Russia in terms of energy, natural gas cut-offs in Ukraine and Belarus, the United States' east-west energy corridor policy, and Turkey's urgent high energy needs have driven Turkey to play an active role in pipeline politics which encourage the transport of oil and natural gas from the Middle East and Eurasia to Europe via Turkey. In addition to all these developments, the aggressive energy policy of Russia has raised the question of energy security.

In this situation, the United States and Europe have considered Turkey a key component for their energy policies in terms of energy security due to Turkey's geographic location in the middle of Europe and the energy rich Middle East, Eurasia and Russia, and Turkey's reliability in terms of democracy, stability, and the shared values of Europeans.. From Turkey's perspective, this was a perfect opportunity for Turkey to meet its increasing energy demand and establish itself as a regional power. Thus, Turkey has exploited Europe and United States' energy security policies in favor of itself and developed a new energy policy—the goal of which is to become an energy hub for Europe. For this reason, Turkey has signed agreements with Russia, Iran, Iraq, Saudi Arabia, Syria, Lebanon, Israel, Algeria, Nigeria and newly independent states of Eurasia.

In the beginning of the 1990s, newly independent Eurasian states were at the center of the energy competition between the Turkey-United States alliance, and Russia and Iran. Newly independent states had no outlet other than Russia for selling their energy supplies. They are landlocked states, which do not have any access to

international transportation routes. Thus, they were heavily dependent on the old Russian pipeline network. The West seeks to build new pipelines to break the Russian monopoly of these energy rich states. Also, newly independent states of Eurasia are seeing alternative energy outlets for their energy supplies. Thus, the Baku-Tblisi-Ceyhan oil pipeline, and the Baku-Tblisi-Erzurum natural gas pipeline were built and the Trans-Caspian pipeline and Nabucco natural gas pipeline are planned to be built in ten years. All these developments are in favor of Turkey as an energy corridor from east to west.

The West's ventures to break Russia's monopoly on energy have urged Russia to re-establish its authority over Russia's "near abroad." While the West has begun to establish new pipelines to implement its east-west energy corridor from Eurasia to Europe through Turkey, Russia has used its power to manipulate ethnic tensions within the Eurasian states as trump card against the West's energy policies. South Ossetia and Abkhazia in Georgia and Nagorno-Karabakh between Armenia and Azerbaijan are the best examples of Russian power used to manipulate ethnic tensions in favor of itself.

Russia also has used the Kurdistan Workers' Party (PKK) against Turkey while Turkey used Chechens against Russia in terms of rivalry. However, even so, in the late 1990s, Turkey and Russia began to cooperate on energy transportation. Turkey needed energy and Russia needed outlets for energy exports. Turkey provides a good opportunity as an outlet with its highly increasing industrialization and population. So, interdependence between Russia and Turkey has been established on energy. Turkey imports natural gas via the Trans-Balkan and Blue Stream natural gas pipelines, and oil, and exports many economic commodities to Russia. Furthermore, Russia and Turkey now seek an energy transportation corridor from north, Russia, to south, Israel. Thus, the intensity of interdependence between Russia and Turkey has increased by the north-south axis of an energy corridor.

Turkey also signed agreements with Iran on importing natural gas. Iran already provides most of Turkey's oil. Now, Turkey also imports natural gas from Iran. For that reason, Turkey and Iran constructed a natural gas pipeline from Tebriz in Iran to Erzurum in Turkey. Through the energy agreements, Turkey and Iran have increased trade relations. Also, Turkey and Iran signed an agreement on carrying Turkmenistan's natural

gas to Europe through Iran and Turkey. However, the close relationship between Iran and Turkey has upset the United States due to the United States' isolation policies against Iran. Despite the United States' opposition, Turkey and Iran have continued their close relationship on energy and economy. Moreover, Turkey expects Iran's participation in the Nabucco natural gas agreement due to Iran's large natural gas reserves. This situation has created a heavy interdependence between Iran and Turkey, which is in favor of regional peace.

Turkey signed crude oil and natural gas agreements with Iraq, too. Turkey wants to exploit the untapped natural gas reserves of Iraq and reach the maximum levels of the Iraq-Turkey crude oil pipelines' capacities. Also, Turkey wants to add Iraq to the Nabucco natural gas project.

Turkey signed an agreement, not only with Iraq from the Middle East, but also with Egypt and Qatar on natural gas transportation. By the agreements with Egypt and Qatar, Turkey seeks establishment of south-north energy transportation corridor along with the east-west and north-south energy corridors. The oil and natural gas pipelines will connect all these corridors to each other. According to this policy, Turkey will stay at the center of these energy corridors and Turkey will be promoted from a transit country to the hub of an energy network.

However, there are many obstacles to Turkey's energy hub policies in contrast to the advantages to Turkey. Ethnic tensions in Eurasia and the Middle East, Russia's aggressive energy policies despite the cooperation with Turkey, The United States' isolation policies towards Iran, and the terrorist organization of the Kurdistan Workers' Party (PKK) against Turkey's stability are the main challenges for Turkey. However, Turkey still is one of the best options in terms of energy security despite these challenges. Turkey is the only country that has close relationships with the energy competitors of the United States, Russia, Iran, Europe, and newly independent states of Eurasia. In this regard, Turkey is the only common link to all these competitors whose interests converge on Turkey in terms of energy transportation. In addition, Turkey's energy security concerns overlap those of Europe. Turkey has a fortuitous location between energy-consumer Europe and the energy-rich Middle East, Eurasia and Russia Turkey is reliable

as a democratic and stable country, which has established international oil and natural gas pipelines. Turkey has an energy infrastructure, and Turkey's own highly increasing energy demand already promotes Turkey as a key player in respect to energy security.

In respect to the future, the demand for energy will continue to increase worldwide and the transportation of energy will remain as a main issue. Furthermore, Turkey will keep its place as a central part in the transportation of oil and natural gas if pipelines continue as the main means of transportation of oil and natural gas. Even though Turkey lacks indigenous oil and natural gas resources, Turkey's key position for transportation of oil and natural gas provides many opportunities for Turkey to meet its own energy demand and establish peace in the highly unstable region by interdependence. If Turkey manages to connect more countries by pipelines, it can establish interdependence between the regional competitors, and can manage to avoid conflicts and provide more peace in the region.

Turkey does not have significant energy resources. Turkey imports 90 percent of its oil demand and more than 90 percent of its natural gas demand. Therefore, Turkey will continue to be dependent on oil and natural gas imports if oil and natural gas keep their key positions as primary energy resources. Thus, it is almost impossible to think of a significant decrease in Turkey's dependence on oil and natural gas imports. For that reason, Turkey is seeking long-term energy transportation agreements. Thus, Turkey will create interdependence among the energy consumer and energy rich countries and regions. This situation will contribute to interdependence and indirectly to peace in the region rather than only Turkey's dependence on energy.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

Books

- Amirahmadi, Hooshang. *The Caspian Region at a Crossroad: Challenges of A New Frontier of Energy and Development*. New York: St. Martin's Press, 2000.
- Atesoglu Guney, Nursin. *Contentious Issues of Security and the Future of Turkey*. Burlington: Ashgate Publishing Limited, 2007.
- Croissant, Michael P., and Bulent Aras. *Oil and Geopolitics in the Caspian Sea Region*. Westport: Praeger, 1999.
- Ebel, Robert, and Rajan Menon. *Energy and Conflict in Central Asia and the Caucasus*. New York: National Bureau of Asian Research, 2000.
- Fuller, Graham E. *The New Turkish Republic*. Washington DC: United States Institute of Peace Press, 2008.
- Hale, William. *Turkish Foreign Policy 1774-2000*. London: MPG Books Ltd, 2002.
- Jung, Dietrich, and Wolfgang Piccoli. *Turkey at the Crossroads Ottoman Legacies and A Greater Middle East*. New York: Zed Books, 2001.
- Kalicki, Jan H., and David L. Goldwyn. *Energy Security Toward a New Foreign Policy Strategy*. Washington DC: Woodrow Wilson Center Press, 2005.
- Karagiannis, Emanuel. *Energy and Security in the Caucasus*. London: RoutledgeCurzon, 2002.
- Kramer, Heinz. *A Changing Turkey The Challenge to Europe and the United States*. Washington DC: Brookings Institution Press, 2000.
- Larrabee, F. Stephen, and Ian O. Lesser. *Turkish Foreign Policy in an Age of Uncertainty*. Santa Monica, California: RAND National Security Research Division, 2003.
- Makovsky, Alan, and Sabri Sayari. *Turkey's New World: Changing Dynamics in Turkish Foreign Policy*. Washington DC: Washington Institute for Near East Policy, 2000.
- Martin, G. Lenore, and Dimitris Keridis. *The Future of Turkish Foreign Politics*. Cambridge: MIT Press, 2004.

Nachmani, Amikam. *Turkey, Facing a New Millennium: Coping with Intertwined Conflicts*. Manchester: Manchester University Press, 2003.

Robbins, Philip. *Suits and Uniforms: Turkish Foreign Policy Since the Cold War*. Seattle: University of Washington Press, 2003.

Willrich, Mason. *Energy and World Politics*. New York: Free Press, 1975.

Articles

Acikalin, Serpil. "Turkey-Iraqi Relations in Light of Davutoglu's Visit to Iraq." *International Strategic Research Organization (Uluslararası Stratejik Araştırmalar Kurumu-USAK)*. August 21, 2009.
<http://www.usak.org.tr/EN/makale.asp?id=1029> (accessed December 22, 2009).

Alam, Shah. "Pipeline Politics in the Caspian Sea Basin." *Strategic Analysis: A Monthly Journal of the IDSA* XXVI, no. 1 (January-March 2002).

Arsu, Sebnem. "Turkey and Russia Conclude Energy Deals." *The New York Times*. August 06, 2009.
http://www.nytimes.com/2009/08/07/world/europe/07turkey.html?_r=2 (accessed February 10, 2010).

Babali, Tuncay. "Turkey At the Energy Crossroads, Turkey Past and Present." *Middle East Quarterly*. Spring 2009. <http://www.meforum.org/2108/turkey-at-the-energy-crossroads> (accessed October 23, 2009).

Bacik, Gokhan. "Turkey and Pipeline Politics." *Turkish Studies* 7, no. 2 (June 2006): 293–306.

Barysch, Katinka. "Turkey's Role in European Energy Security." *Centre for European Reform Essays*. December 2007.
http://www.cer.org.uk/pdf/essay_turkey_energy_12dec07.pdf (accessed September 27, 2009).

Beehner, Lionel. "The Challenge in Iraq's Other Cities: Kirkuk." *Council On Foreign Relations*. June 30, 2006. <http://www.cfr.org/publication/11036/> (accessed December 2, 2009).

Biresselioglu, Mehmet Efe. "Turkey: Europe's Emerging Energy Corridor for Central Eurasian." *Caucasian and Caspian Oil and Gas*. January 20, 2007.
<http://www.balkananalysis.com/2007/01/20/turkey-europe's-emerging-energy-corridor-forcentral- Eurasian-caucasian-and-caspian-oil-and-gas/> (accessed October 19, 2009).

- Birpinar, Mehmet E., Gonca F. Talu, Gonul Su, and Mehmet Gulbey. "The Effect of Dense Maritime Traffic on the Bosphorus Strait and Marmara Sea Pollution." *The Regional Directorate of Istanbul, Ministry of Environment and Forestry*. http://www.balwois.com/balwois/administration/full_paper/ffp-746.pdf (accessed April 15, 2010).
- Bruno, Greg. "Turkey at An Energy Crossroads." *Council on Foreign Relations*. November 20, 2008. <http://www.cfr.org/publication/17821/> (accessed October 11, 2009).
- Cagatay, Soner, and Nazli Gencsoy. "Improving Turkish-Russian Relations: Turkey's New Foreign Policy and Its Implications for the United States." *The Washington Institute for Near-East Policy*. January 12, 2005. http://www.ciaonet.org/pbei/winep/policy_2005/2005_942/ (accessed January 23, 2010).
- . "Startup of the Baku-Tblisi-Ceyhan Pipeline: Turkey's Energy Role." *The Washington Institute for Near East Policy, Policy Watch #998*. May 27, 2005. http://www.ciaonet.org/pbei/winep/policy_2005/2005_998/ (accessed March 1, 2010).
- Caha, Havva. "Energy Security of Turkey." *International Conference on Human and Economic Resources*. 2006. <http://eco.ieu.edu.tr/wpcontent/proceedings/2006/0608.pdf> (accessed January 15, 2010).
- Carlisle, Tamsin, and Chris Stanton. "Turkey Touts Proposed Gas Pipeline From Qatar." *The National*. January 18, 2010. <http://www.thenational.ae/apps/pbcs.dll/article?AID=/20100118/BUSINESS/701189852/1005> (accessed March 22, 2010).
- Checchi, Arianna, Arno Behrens, and Egenhofer Christian. "Long-Term Energy Security Risks for Europe: A Sector-Specific Approach." *Center for European Policy Studies, CEPS Working Document, No. 309*. January 2009. <http://www.ceps.eu/node/1608> (accessed March 19, 2010).
- Clough, Langdon D. "Energy Profile of Turkey." *The Encyclopedia of Earth*. July 10, 2007. http://www.eoearth.org/article/Energy_profile_of_Turkey (accessed December 29, 2009).
- Courtney, William, and Kenneth Yallowitz. "Russia's Bid to Control Caspian Energy." *The Boston Globe*. October 4, 2008. http://www.boston.com/bostonglobe/editorial_opinion/oped/articles/2008/10/04/russias_b_id_to_control_caspian_energy/ (accessed April 05, 2010).

- Davutoglu, Ahmet. "Turkey's Foreign Policy Vision: An Assessment of 2007." *Insight Turkey* 10, no. 1 (2008): 77–96.
- Fellers, Gordon. "Where are the World's Oil Transit Chokepoints?" *Pipeline & Gas Journal*.
http://findarticles.com/p/articles/mi_m3251/is_6_231/ai_n25092295/?tag=content;coll (accessed March 23, 2010).
- Gnedina, Elena, and Michael Emerson. "The Case for a Gas Transit Consortium in Ukraine: A Cost-Benefit Analysis." *Center for European Policy Studies, CEPS Policy Brief, No. 180*. January 2009. <http://aei.pitt.edu/10766/01/1782.pdf> (accessed March 23, 2010).
- Gorvett, John. "Who's Got the Pipeline? Turkey's Quest for Energy Significance." *Washington Report on Middle East Affairs*. November 2007.
http://www.wrmea.com/archives/November_2007/0711036.html (accessed February 22, 2010).
- Katulis, Brian. "The U.S. Needs Turkey for Its Middle East Agenda." *Atlantic-Community*. November 23, 2009. http://atlanticcommunity.org/index/articles/view/The_U.S._Needs_Turkey_for_its_Middle_East_Agenda (accessed December 21, 2009).
- Katzman, Kenneth. "The Iran Sanction Act (ISA)." *CRS Report for Congress*. October 12, 2007. <http://www.fas.org/sgp/crs/row/RS20871.pdf> (accessed March 23, 2010).
- . "The Iran Sanctions Act (ISA)." *Congressional Research Service*. April 09, 2009. http://assets.opencrs.com/rpts/RS20871_20100409.pdf (accessed March 23, 2010).
- Larrabee, F. Stephen. "Turkey Rediscovered The Middle East." *Foreign Affairs* 86, no. 4 (July/August 2007): 103–114.
- Luft, Gal. "Energy Security Challenges for Israel Following the Gaza War." *International Analyst Network*. February 25, 2009. http://www.analystnetwork.com/article.php?art_id=2799 (accessed November 21, 2009).
- . "Fencing in Looters and Saboteurs in Iraq, Energy Security." *Institute for the Analysis of Global Security*. September 29, 2003.
<http://www.iags.org/n0929032.htm> (accessed October 14, 2009).

- Malka, Haim. "Turkey and the Middle East." *Center for Strategic and International Studies, Final Report of the CSIS U.S.-Turkey Strategic Initiative*. March 2009. http://csis.org/files/media/csis/pubs/090330_flanagan_turkeyevolvingdynamics_web.pdf (accessed March 12, 2010).
- Mankoff, Jeffrey. "Eurasian Energy Security." *Council on Foreign Relations*. February 2009. http://www.cfr.org/publication/18418/eurasian_energy_security.html (accessed January 20, 2010).
- Mehtiyeva, Afet, and Matt Robinson. "Azerbaijan: Karabakh Key to Turkish-Armenian Peace." *Reuters*. April 23, 2010. <http://www.reuters.com/article/idUSLDE63M23L> (accessed April 24, 2010).
- Ming, Chen. "Turkey Emerges as World Energy Hub After Big Deals." *Turkish Weekly*. August 26, 2009. <http://www.turkishweekly.net/news/87662/turkeyemerges-as-world-energy-hub-after-big-deals.html> (accessed October 12, 2009).
- Morelli, Vincent. "NATO Enlargement: Albania, Croatia, and Possible Future Candidates." *Congressional Research Service*. April 14, 2009. <http://www.fas.org/sgp/crs/row/RL34701.pdf> (accessed March 29, 2010).
- Ogutcu, Mehmet, and Danilla Bochkarev. "Rivals Become Partners." *European Voice*. September 21, 2009. <http://www.europeanvoice.com/article/2009/09/rivals-become-partners-/65924.aspx> (accessed December 11, 2009).
- Ozcan, Nihat Ali. "Energy Security and the PKK Threat to the Baku-Tblisi-Ceyhan Pipeline." *The Jamestown Foundation*. September 22, 2008. http://www.jamestown.org/programs/gta/single/?tx_ttnews%5Btt_news%5D=5170&tx_ttnews%5BbackPid%5D=167&no_cache=1 (accessed March 28, 2010).
- Petersen, Alex. "Russia's War for Oil Supplies." *Young Professionals in Foreign Policy*. August 18, 2008. <http://www.yppf.org/content/russias-war-oil-supplies> (accessed October 9, 2009).
- Petersen, Alexandros. "Turkey's Multivector Energy Hub: Ignore At Your Own Peril." *Radio Free Report Radio Liberty*. August 31, 2009. http://www.rferl.org/content/Turkeys_Multivector_Energy_Hub_Ignore_At_Your_Peril/1811254.html (accessed December 07, 2009).
- Sasley, Brent. "Turkey's Energy Politics in the Post-Cold War Era." *Middle East Review of International Affairs Journal* 2, no. 4 (November 1998).
- Shaffer, Brenda. "Turkey's Energy Policies in a Tight Global Energy Market." *Insight Turkey* 8, no. 2 (April/June 2006): 97–104.

- Sims, Jessica. "Balancing Pipeline Politics." *Wise Men Center for Strategic Studies*. April 9, 2010.
[http://www.bilgesam.org/en/index.php?option=com_content&view=article&id=266:bala ncing-pipeline-politics&catid=128:energy&Itemid=143](http://www.bilgesam.org/en/index.php?option=com_content&view=article&id=266:bala%20ncing-pipeline-politics&catid=128:energy&Itemid=143) (accessed April 15, 2010).
- Socor, Viladimir. "Samsun-Ceyhan Pipeline Project Designed to Divert Kazakhstani Oil." *The Jamestown Foundation*. October 23, 2009.
http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Bsword%5D=8fd5893941d69d0be3f378576261ae3e&tx_ttnews%5Bany_of_the_words%5D=samsun&tx_ttnews%5Btt_news%5D=35645&tx_ttnews%5BbackPid%5D=7&cHash=6a00af2e93 (accessed March 10, 2010).
- Stern, Selma. "Turkey's Energy and Foreign Policy." *Globalization*. 2003.
http://globalization.icaap.org/content/v3.1/03_stern.html (accessed January 3, 2010).
- Tekin, Ali, and Paul A. Williams. "Europe's External Energy Policy and Turkey's Accession Process." *Center for European Studies Working Paper Series #170*. 2009. http://aei.pitt.edu/11786/01/CES_170.pdf (accessed February 5, 2010).
- Tomberk, Igor. "Impact of Five-Day War on Global Energy." *Centre for Research on Globalization*. September 03, 2008.
<http://www.globalresearch.ca/index.php?context=va&aid=10042> (accessed April 3, 2010).
- Tsereteli, Mamuka. "The Impact of the Russia-Georgian War on the South Caucasus Transportation Corridor." *The Jamestown Foundation*. 2009.
http://www.jamestown.org/uploads/media/Full_Mamuka_RussiaGeorgia.pdf (accessed April 6, 2010).
- Yukse, Omer, Murat Kankal, Murat Ihsan Komurcu, Hizir Onsoy, and Adem Akpinar. "The Importance of Hydropower Plants in Turkey's Energy Planning." *General Directorate of State Hydraulic Works*.
http://www.dsi.gov.tr/english/congress2007/chapter_2/57.pdf (accessed February 21, 2010).
- Zeylanov, Mahir. "Turkey Becomes World's Largest Energy Hub Through Recent Deals." *Sunday's Zaman*. August 23, 2009.
<http://www.sundayszaman.com/sunday/detaylar.do?load=detay&link=184792> (accessed December 21, 2009).

Institutions, Governments and Non-Governmental Organizations

- Botas Petroleum Pipeline Corporation. *Egypt-Turkey Natural Gas Pipeline Project*.
<http://www.botas.gov.tr/index.asp> (accessed February 23, 2010).
- . *Iraq-Turkey Crude Oil Pipeline*. <http://www.botas.gov.tr/index.asp> (accessed February 23, 2010).
- . *Natural Gas Underground Storage Projects*. <http://www.botas.gov.tr/index.asp> (accessed March 02, 2010).
- . *Transcaspian Turkmenistan-Turkey-Europe Natural Gas Pipeline Project*.
<http://www.botas.gov.tr/index.asp> (accessed February 23, 2010).
- . *Turkey-Greece-Italy Natural Gas Pipeline Project*.
<http://www.botas.gov.tr/index.asp> (accessed February 23, 2010).
- BP Global. *BP in Azerbaijan, BTC*.
<http://www.bp.com/sectiongenericarticle.do?categoryId=9015374&contentId=7028018> (accessed February 21, 2010).
- CIA World Fact Book. *Iran*. <https://www.cia.gov/library/publications/the-worldfactbook/geos/ir.html> (accessed March 03, 2010).
- . *Iraq*. <https://www.cia.gov/library/publications/the-worldfactbook/geos/iz.html> (accessed March 12, 2010).
- Commission of the European Communities. *Green Paper, A European Strategy for Sustainable, Competitive, and Secure Energy*. March 08, 2006.
http://europa.eu/documents/comm/green_papers/pdf/com2006_105_en.pdf (accessed January 12, 2010).
- Energy Market Regulatory Authority. *Petrol Piyasasi Sektor Raporu 2008 (Oil Market Sector Report of 2008)*.
http://www.epdk.gov.tr/yayin_rapor/petrol/2008sektorraporu/2008sektorraporu.pdf (accessed February 25, 2010).
- Eur-Lex. *Green Paper, Towards a European Strategy for the Security of Energy Supply*. 2000. <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52000DC0769:EN:HTML> (accessed January 12, 2010).
- European Commission. *White Paper, Energy for the Future: Renewable Sources of Energy*. November 26, 1997.
http://europa.eu/documents/comm/white_papers/pdf/com97_599_en.pdf (accessed January 9, 2010).

- General Directorate of Petroleum Affairs (Petrol Isleri Genel Mudurlugu). *Statistics (Istatistikler)*. <http://www.pigm.gov.tr/istatistikler.php> (accessed January 23, 2010).
- International Energy Agency. *Energy Security*. http://www.iea.org/subjectqueries/keyresult.asp?KEYWORD_ID=4103 (accessed November 20, 2009).
- . *Oil Supply Security*. www.iea.org/Textbase/about/copyright.asp (accessed October 13, 2009).
- Iraqi Pipeline Watch. *Attacks on Iraqi Pipelines, Oil Installations, and Oil Personnel, Energy Security*. March 27, 2008. <http://www.iags.org/iraqpipelinewatch.htm> (accessed November 12, 2009).
- Nabucco Natural Gas Pipeline Project. *Markets for Nabucco*. <http://www.nabucco-pipeline.com/company/markets-sources-for-nabucco/markets-sources-for-nabucco.html> (accessed March 02, 2010).
- . *Project Description/Pipeline Route*. <http://www.nabucco-pipeline.com/project/projectdescription-pipeline-route/project-description.html> (accessed February 24, 2010).
- . *Project Phases & Milestones*. <http://www.nabucco-pipeline.com/project/project-phasesmilestones/index.html> (accessed March 01, 2010).
- Republic of Turkey Ministry of Energy and Natural Resources. *Energy*. http://www.enerji.gov.tr/index.php?dil=en&sf=webpages&b=enerji_EN&bn=215&hn=&nm=40717&id=40717 (accessed October 23, 2009).
- . *Istatistik, Birincil Enerji Kaynaklari Tuketimi (Primary Energy Consumption)*. http://www.enerji.gov.tr/EKLENTI_VIEW/index.php/raporlar/raporVeriGir/4314/2 (accessed January 27, 2010).
- . *Istatistikler, 2008 yili Genel Energy Dengesi (General Energy Balance in 2008)*. http://www.enerji.gov.tr/EKLENTI_VIEW/index.php/raporlar/raporVeriGir/46124/2 (accessed January 25, 2010).
- . *Strategic Plan (2010-2014)*. http://www.enerji.gov.tr/yayinlar_raporlar_EN/ETKB_2010_2014_Stratejik_Plan_i_EN.pdf (accessed February 23, 2010).
- Republic of Turkey Ministry of Foreign Affairs. *Synopsis of The Turkish Foreign Policy*. <http://www.mfa.gov.tr/synopsis-of-the-turkish-foreign-policy.en.mfa>, (accessed November 22, 2009).

- . *Turkey's Energy Strategy*. January 2009.
[http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy%20Strategy%20(Ocak%202009).pdf) (accessed October 12, 2009).
- Rianovosti. *Factbox: Russia's New Military Doctrine*. February 05, 2010.
<http://en.rian.ru/russia/20100205/157786616.html> (accessed March 10, 2010).
- . *Turkey to Approve Construction of South Stream Pipeline*. August 05, 2009.
<http://en.rian.ru/russia/20090805/155735283.html> (accessed February 26, 2010).
- Stratfor Global Intelligence. *Azerbaijan, Turkmenistan: Nabucco at Impasse*. July 14, 2009.
http://www.stratfor.com/analysis/20090714_azerbaijan_turkmenistan_nabucco_impasse?fn=3114913236 (accessed March 1, 2010).
- . *EU, Kazakhstan: The Geopolitics of Energy Cooperation*. December 05, 2006.
http://www.stratfor.com/eu_kazakhstan_geopolitics_energy_cooperation?fn=1214219661 (accessed March 3, 2010).
- . *Russia, Turkey: Untangling Pipeline Problems*.
http://www.stratfor.com/analysis/20090521_russia_turkey_untangling_pipeline_problems (accessed February 27, 2010).
- . *Russia's Expanding Influence: Part 1: The Necessities*. March 09, 2010.
http://www.stratfor.com/theme/russias_expanding_influence_special_series (accessed March 24, 2010).
- . *Turkey: Implications of a Blast on the BTC Pipeline*.
http://www.stratfor.com/analysis/turkey_implications_blast_btc_pipeline (accessed December 7, 2009).
- . *Turkmenistan, Iran, Turkey: A New Phase in Energy Competition?* January 06, 2010.
http://www.stratfor.com/analysis/20100106_turkmenistan_iran_turkey_new_phase_energy_competition (accessed February 26, 2010).
- Tupras (Turkish Petroleum Refineries Corporation). *Products*.
<http://www.tupras.com.tr/detailpage.en.php?redirect=production.en.php&lRedirectPageID=1212> (accessed March 1, 2010).
- Turkish Statistical Institute. *Statistical Indicators 1923-2008*.
http://www.tuik.gov.tr/yillik/Ist_gostergeler.pdf (accessed December 23, 2009).

- Turkiye Petrolleri Anonim Ortakligi (Turkish Petroleum Corporation). *2008 Yili Petrol ve Dogalgaz Sektor Raporu (Oil and Natural Gas Sector Report of 2008)*. http://www.tpao.gov.tr/v1.4/condocs/petrol_sektor.pdf (accessed February 12, 2010).
- . *2009 Yili Petrol ve Dogal Gaz Sektor Raporu (Oil and Natural Gas Report of 2009)*. http://www.tpao.gov.tr/v1.4/condocs/pla/sektor_rapor2009.pdf (accessed March 25, 2010).
- . *TPAO 08 Annual Report*. http://www.tpao.gov.tr/v1.4/condocs/yillik_rapor_2008en.pdf (accessed February 17, 2010).
- U.S. Energy Information Administration, Independent Statistics and Analysis. *Turkey Country Analysis Briefs, Oil*. <http://www.eia.doe.gov/emeu/cabs/Turkey/Oil.html> (accessed February 9, 2010).
- . *Turkey Energy Profile*. http://tonto.eia.doe.gov/country/country_energy_data.cfm?fips=TU (accessed December 17, 2009).
- . *Turkey Primary Energy Production*. http://tonto.eia.doe.gov/country/img/charts/TU_prim_prod_large.png (accessed February 12, 2010).
- . *Turkey, Country Analysis Brief*. <http://www.eia.doe.gov/emeu/cabs/Turkey/Background.html> (accessed December 17, 2009).
- . *Turkey, Primary Energy Consumption*. http://tonto.eia.doe.gov/country/img/charts/TU_prim_conc_large.png (accessed February 12, 2010).
- Woodrow Wilson International Center for Scholars. *Turkey's Energy Politics: Neither East or West, Southeast Europe Project, Event Summary*. September 01, 2009. http://wilsoncenter.org/index.cfm?topic_id=109941&fuseaction=topics.event_summary&event_id=546092 (accessed March 29, 2010).
- The World Bank. *Data Statistics for Turkey*. <http://www.worldbank.org.tr/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/TURKEYEXTN/0,,menuPK:361738~pagePK:141132~piPK:141109~theSitePK:361712,00.html> (accessed December 12, 2009).

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. Robert Looney
National Security Affairs Department
Naval Postgraduate School
Monterey, California
4. Robert McNab
National Security Affairs Department
Naval Postgraduate School
Monterey, California
5. Hava Harp Okulu
Hava Harp Okulu Kutuphanesi
Yesilyurt, Istanbul, Turkey
6. Halil İbrahim TOKUŞ
Hava Kuvvetleri Komutanligi
Bakanliklar, Ankara, Turkey