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ENERGY SECURITY AND TURKEY

by

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ENERGY SECURITY AND TURKEY

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ABSTRACT

Energy security has acquired increasing importance in the Western world, as some energy producers are using oil and gas for political leverage. In addition, alongside established players, new and temporarily weak central Asian countries are also looking for guaranteed stability and a secure environment in order to sell their gas and oil on the world market, without any interruption or mandate by established producers.

Guided by the enduring legacy of Mustafa Kemal Atatürk, Turkey has been pursuing a policy of “Peace at Home and Peace Abroad” since the very establishment of the new Republic in incorporating this idea into Turkey’s energy security policy bona fides, the country is becoming a key ally for the U.S. in the region. Indeed, the U.S. will need this reliable partner in the near future, since that energy security will be one of the main challenges for U.S. foreign policy in the years ahead.

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LIST OF ACRONYMS AND ABBREVIATIONS

EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GNP	Gross National Product
GMEI	Greater Middle East Initiative
IEA	International Energy Agency
IFC	International Finance Corporation
IT	Information Technology
IMF	International Monetary Fund
ME	Middle East
MEFTA	Middle East Free Trade Area
MENA	Middle East and North Africa
NATO	North Atlantic Treaty Organization
OECD	Organization for Economic Co-operation and Development
SAPs	Structural Adjustment Programs
U.S.	United States
U.S.A.	United States of America
WB	World Bank
WTO	World Trade Organization

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I. INTRODUCTION

A. MAJOR RESEARCH QUESTION

This thesis examines Turkey as an emerging energy hub. In particular, it assesses this concept as an opportunity for both the United States and Turkey their future allied contributions to the emerging security issue as well as regional and global peace.

B. IMPORTANCE

Energy security has acquired increasing importance in the Western world, as some energy producers are using oil and gas for political leverage. In addition, alongside established players, new and temporarily weak central Asian countries are also looking for guaranteed stability and a secure environment in order to sell their gas and oil on the world market, without any interruption or mandate by established producers.

“Turkey is geographically located in close proximity to 71.8% of the world’s proven gas and 72.7% of oil reserves, in particular those in the Middle East and the Caspian basin. It thus, forms a natural energy bridge between the source countries and consumer markets and stands as a key country in ensuring energy security through diversification of supply sources and routes, considerations that have gained increased significance today.”¹

Guided by the enduring legacy of Mustafa Kemal Atatürk, Turkey has been pursuing a policy of “Peace at Home and Peace Abroad” since the very establishment of the new Republic in incorporating this idea into Turkey’s energy security policy bona fides, the country is becoming a key ally for the U.S. in the

¹ Commission of the Deputy Directorate General for Energy, Water and Environment of Turkey, *Turkey’s Energy Strategy* (Ankara, Türkiye: Enerji ve Tabii Kaynaklar Bakanlığı Yayinlari, 2008), <http://www.mfa.gov.tr> (accessed March 11, 2008).

region. Indeed, the U.S. will need this reliable partner in the near future, since that energy security will be one of the main challenges for U.S. foreign policy in the years ahead.²

The main goal of this thesis is to evaluate the importance, advantage, and inevitability of this alliance based on scholar research. The basic premise throughout this thesis is that Turkey, as an emerging energy hub, should expect to be supported in its progress based on the U.S. evaluation its own responsibility and rights to secure energy flow from and through the region.

Specifically, if the U.S. is seeking alternative courses of action for its future operations concerning energy security, and if these alternatives do not primarily include military actions, the suggested partnership should bring a cost-effective and sustainable stability and peace to the region and to the world.

C. PROBLEMS AND HYPOTHESES

One of the major problems regarding the future of energy security is the probable course of action of the United States in the next decade. Will the Middle East witness further armed interventions (Iran, Syria?), or will the new President choose a peaceful approach? The ability and willingness of Turkey to deepen strategic bilateral relations with the United States would play a great role in a peaceful approach. In this context, Moises Naim emphasizes some realities;

...and Erdogan (Turkish Prime Minister) are just two in a long list of world leaders who understand that while the United States may sometimes use a heavy hand, the alternatives are much worse. Few want to see the world's stage led by autocratic regimes such as those in Russia or China. An ineffectual Europe does not offer much in the way of leadership. And short of these options, there are few possibilities besides living in an anarchic vacuum. Many foreign leaders will therefore be willing to pay the price that comes with American leadership. They ask only that the price not include

² Daniel Yergin, "Ensuring Energy Security," *Foreign Affairs* 85, no. 2 (2001), <http://web.nps.navy.mil/> (accessed March 11, 2008).

subservience to the whims of a giant with more power than brains and whose legitimacy is undermined by regular displays of incompetence, recklessness and ignorance.³

It is not a secret that the European Union needs Turkey, but, obviously, there is no consensus accepting this big country into the Union. Moreover, Russia wants Turkey to carry only its own natural gas and oil, not any other future flow from the Caspian Basin or even from Central Asia.

Another important aspect regarding the topic is the future of Iraq. Would a divided Iraq create more stability? What would happen if one day Northern Iraqi Kurds declare independence from Iraq? Soner Cagaptay claims,

Perhaps the Kurdish Regional Government needs Turkey more than Turkey needs it. Even if the Iraqi Kurds were to establish control over Kirkuk's vast oil reserves, they could not export this oil without the Kirkuk–Ceyhan pipeline, the only oil transit line connecting landlocked northern Iraq to the Mediterranean Sea in Turkey. And, assuming that the Iraqi Kurds recover their frail relationship with Washington, once United States pulls out of Iraq, will the Kurds receive ready American protection without the Incirlik base in Turkey? Finally, the Iraqi Kurds have much to hope for in terms of economic development, but will this not prove difficult without Turkey's cooperation, as the only developed economy bordering Iraq?⁴

D. LITERATURE REVIEW

The growing importance of the issue, “Energy Security” is directing more scholars from different disciplines to the topic every day. This fact is creating a huge amount of valuable but at the same time a complex material accumulation. This fact also makes it impossible to provide a universal definition acceptable by all disciplines. However, international relations scholars appear to be the most successful in providing an understandable definition. Indeed, the term “energy

³ Naim Moises. “A Hunger for America,” *The Washington Post* (January 2, 2008), <http://www.washingtonpost.com/> (accessed March 22, 2008).

⁴ Soner Cagaptay, “Degrees from Erbil: The Iraqi Kurds Need Turkey,” *The Washington Post* (March 3, 2008), <http://www.washingtonpost.com/> (accessed March 12, 2008).

security” has been used widely with various meanings. However, scholars and other writers usually describe “energy security” in the national strategic (grand strategy) level as the following.

- For energy producing countries, the predictability of the demand and orderliness of the supply
- For energy consuming countries, guaranteeing the supply of the needed energy raw materials with the proper price, place and time (guaranteed access/security of the supply)
- For governments, ensuring national security interests, sustaining economic development and, from the perspective of meeting users’ needs, guaranteed access and procurement of energy resources in a stable market environment⁵

No doubt, energy security is becoming a more and more important motive for international relations, and, according some scholars, is already the main cause of struggle in the international arena. Indeed, “the protection of critical raw materials and transit routes - which today means predominantly energy security - has, of course, been a major theme in American security policy for a very long time.”⁶

The problem is, obviously, whether the United States will be able to continue to conduct its leading role in 21st century. No one can expect an isolated “America,” but real politics indicates some serious challenges for the United States. In this context, some academics are predicting “the rise of the new energy world order.”

Energy of all sorts was once hugely abundant, making possible the worldwide economic expansion of the past six decades. This expansion benefited the United States above all - along with its “First World” allies in Europe and the Pacific. Recently, however, a select group of former “Third World” countries - China and India in particular - have sought to participate in this energy bonanza by industrializing their economies and selling a wide range of goods to

⁵ Hasan Dogan, *The Energy Security Case* (Ankara, Turkey: Turkish General Staff, 2006).

⁶ Michael T. Klare, *Resource Wars: The New Landscape of Global Conflict* (New York, NY: Metropolitan Books, 2001).

international markets. This, in turn, has led to an unprecedented spurt in global energy consumption - a 47% rise in the past 20 years alone, according to the U.S. Department of Energy (DoE).⁷

Taking into account reflections and results of this new harsh environment, many scholars share the idea that Turkey is becoming an energy hub, not simply an energy corridor. In this context, and as mentioned in a recent publication by Katinka Barysch, "Turkey's development as an European energy hub looks natural, given its lucky location between countries that harbor 70 per cent of the world's oil and gas reserve to its east, north and south, and one of the world's biggest energy markets in the west."⁸

Alongside many other scholars, Alex Petersen also does not limit Turkey's energy hub status as only a European one. According to the writer, "...the functional links that bind the NATO member and EU aspirant to transatlantic structures are being strengthened. The most important of these functional links is Turkey's growing role as an energy hub, the crossroads in the vaunted East-West transport corridor, connecting the exporters of Central Asia, with the consumers of Western Europe. The implications of this role stretch beyond mere energy infrastructure: not only reducing Europe's unwise dependence on Russian sources, but facilitating Western integration in strategic parts of Eurasia."⁹

Furthermore, many scholarly authorities mention the peace-friendly nature of the Turkish approach to the energy security issue and the many vital U.S. benefits in it. Indeed, besides many other gains, Turkey as a stable energy hub would serve also to warm "chilling" energy-related relations between the United States and Russia, too. In this context,

⁷ Michael T. Klare, *Rising Powers, Shrinking Planet: The New Politics of Energy* (New York, NY: Metropolitan Books, 2008).

⁸ Katinka Barysch, "Turkey's Role in European Energy Security," *Centre for European Reform Essays* (December 2007), <http://www.cer.org.uk/> (accessed February 2, 2008).

⁹ Alex Petersen, "Turkey: The Transatlantic Energy Hub," *Young Professionals in Foreign Policy* (July 22, 2007), <http://www.yfpf.org/> (accessed March 13, 2008).

Initially, the United States and its partners, particularly Turkey, strongly supported energy development in both Russia and the Caspian states, including the creation of multiple export routes, in the sure knowledge that energy security would contribute to their national independence. At the end, it is Russia and the Caspian states that are contributing increasingly to U.S. energy security, and its ability to depend less on OPEC states for its energy requirements. There is a certain beauty in this historical moment.¹⁰

“Central Asian gas transit routes that are not controlled by Russia are scarce and are currently limited to the as yet unfinished Baku–Tbilisi–Erzerum pipeline, from Azerbaijan to Turkey, and Korpedzhe–Kurt-Kui, which is short, extending only from Turkmenistan to Iran.”¹¹ Of course, in addition to these optimistic ideas, there are also some claims that some important problems that Turkey is confronting are formidable obstacles on the country’s way to becoming an energy hub. According to them, some structural problems within the region have no exemption to Turkey. These problems are briefly described by Robert Looney: population increases; a youth explosion, especially in the twenty-to-twenty-four age bracket; a failure to achieve global competitiveness, diversify economies, and create productive jobs; a steady decline in non-petroleum exports; over urbanization; broad problems in integrating women effectively and productively into the work force; growing pressures on young men and women; little regional trade; increasing water scarcity; and failed or inadequate growth in infrastructure.¹² In this sense, and alongside other international challenges, these problem areas are also to be tested.

One other fact to examine are the current regional and international developments, particularly the new era in Turkish-U.S. relations, and their impact on the issue. Is a golden age of Turkish-U.S. relations beginning only now? On

¹⁰ Jan H. Kalicki and David L. Goldwyn, *Energy and Security: Toward a New Foreign Policy Strategy* (Baltimore, MD: The John Hopkins University 2005).

¹¹ Ariel Cohen, “U.S. Interests and Central Asia Energy Security,” *The Heritage Foundation Backgrounder* 1984, (2006): 5.

¹² Robert E. Looney, “U.S. Middle East Economic Policy: The Use of Free Trade Areas in the War on Terrorism,” *Mediterranean Quarterly* 3 (2005): 108.

the other hand, were all these high-level visits in late 2007 and in the beginning of 2008, support and cooperation in the war on PKK terror and other important-looking improvements in bi-lateral relations only illusions, or, worse, only preparations for an Iran campaign? In this context, the fresh statements of the Turkish President Abdullah Gul are important: "Our relations with the United States have an importance that goes beyond our relations with any other country. The United States is not [just] any ally for us; it is the most important ally."¹³ In addition, some U.S. "think-tank" institutions have begun to emphasize the necessity that U.S.–Turkey relations require a new emphasis on energy security. In this regard, the recent press release by the Atlantic Council mentions that "the United States should expand its new emphasis on Turkey as an energy partner to include Turkey in more transatlantic efforts to fight global terrorism and to build stability in the broader Middle East."¹⁴

Furthermore, a recently published report of the U.S. Army Strategic Studies Institute also emphasizes that one the three pillars of the new era in the Turkish-U.S. bilateral relations should be an energy security alliance: "The U.S.-Turkey partnership must be rebuilt. A stronger partnership will relieve the isolation that leads Turkey to defend its interests so intently within NATO. A stronger partnership will also benefit the United States—Turkey, along with most of its neighborhood, is of vital importance to U.S. national security. In many ways, Turkey is now more important to the achievement of U.S. strategic objectives than it was during the Cold War. Turkey could play an especially vital role in three areas: enhancing energy security; restraining Islamic radicalism and terrorism; and stabilizing the wider Middle East region."¹⁵

¹³ Abdullah Gul, "Press Release," Press Bulletin of the Office of the President of the Turkish Republic," (January 2008), <http://www.cankaya.gov.tr/> (accessed April 23, 2008).

¹⁴ Nicholas Burns, "The Future of the U.S.-Turkey Relationship," *The Atlantic Council Press Release* (September 13, 2007), <http://www.acus.org/> (accessed March 12, 2008).

¹⁵ Frances G. Burwell, *The Evolution of Turkish-U.S. Relations in a Transatlantic Context: Colloquium Report* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, April 2008), <http://www.strategicstudiesinstitute.army.mil> (accessed May 30, 2008).

The NATO front is also concerned with energy security problems. The Alliance perceives energy as a security issue. Although most European allies believe that a market solution exists to ensure the security of energy supplies, NATO has begun to discuss the issue as an allied concern. A political role in energy security for NATO seems most likely in the near future.¹⁶ Turkey, which is a long-time NATO member with important commitments, would be an indispensable vanguard player for the Alliance. Furthermore, one of the important disagreement areas, the questioning of Turkey's further membership in NATO, must also be examined in the light of the emerging energy security concerns.

Also, regarding NATO, Russia's new dangerous energy-based policies needs to be evaluated. Indeed, the developments following the Russian Federation's cutting off the gas supply to Ukraine in January 2006, created effects that led to the increase of the importance and priority of energy security on the global agenda. This political maneuver of the Russian Federation did not only create a deterrent effect on Ukraine, but also led other European countries and the European Union, which are highly dependent on Russia for energy imports, to assess that the possibility of Russia putting into practice similar maneuvers over the European Union poses a strategic risk. The individual measurements such as bilateral gas agreements taken by NATO and/or EU members endanger the benefits of these alliances. In this respect, Turkey's expected contributions as a partner/or member would guarantee the survival of the solidarity of these intuitions.

E. METHODS AND SOURCES

This thesis examines the fact that Turkey is becoming an energy hub as a case study. In particular, a number of scenarios will be developed tracing the logical consequences of alternative energy alliances such as between Turkey and the U.S., Turkey and the EU, and Turkey and Russia. In this context, the

¹⁶ Paul Gallis, "NATO and Energy Security," *Congressional Research Service Report* RS22409 (2007), <http://www.fas.org/> (accessed March 09, 2008).

study will argue that the best option for Turkey, the U.S., the region, and the world is the first one. The study will also discuss other probable future developments and their effects on the issue.

These studies will draw on scholarly sources, as well as those others working in the area of energy security. It will also use explanations by related countries' officials, predominantly people from the U.S., Turkey, the EU, Russia, Iran, China, Israel, and Saudi Arabia. Additionally, the author's thoughts formed while serving as an energy security working group action officer on the Turkish General Staff will be important sources for these arguments.

F. THESIS OVERVIEW

Because of its wide and diversified definitions, the strategically minded meaning of the term energy security will be explained within its historical background. In this context, U.S. energy security doctrines will be examined. Then, the current U.S., Turkish energy, and energy security strategies will be compared. After this, the neighboring regions (The Middle East, Southeast Europe, and Caucasus) of Turkey will be evaluated in respect of the topic. In this context, the probable opportunities (diverse strategic alliances, cooperation fields) and threats and their consequences will be examined. As conclusion, the answer to the question will be tried to be given: Is the best option for U.S., Turkey, region, and world, a new multidimensional U.S.-Turkish energy alliance? If yes, why and how?

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II. TURKEY'S ENERGY STRATEGY, CURRENT AND FUTURE PROJECTS, AND CHALLENGES

A. INTRODUCTION

Turkey has a unique geographical location. It is in close proximity to 72% of the world's proven gas reserves and 73% of its oil reserves, in particular those in the Middle East and the Caspian basin. The Caspian basin's oil reserves only, are at least at 17 to 33 billion barrels. By 2010, countries in the Caspian basin could produce 2.5 to 6 million barrels of oil per day, exceeding Venezuela's production. Moreover, the Caspian basin is also home to an estimated 232 trillion cubic feet (Tcf) of proven natural gas reserves, which is comparable in size to Saudi Arabia's reserves. The region's natural gas production in 2003 was approximately 4.5 Tcf, which was comparable to the combined production of South America, Central America, and Mexico.¹⁷ In addition to the well-known energy sources-rich Middle East region, the Caspian basin's growing share of the world energy market gives Turkey more and more importance, concerning regional and global energy security.

Turkey forms a natural energy bridge between the source countries and consumer markets and stands as a key to ensuring energy security through diversification of supply sources and routes of delivery. These are considerations that have gained increased significance for neighboring energy markets including Europe today.

In short, Turkey has established or considered a number of pipeline projects that could transport oil into Turkey without relying on the crowded Bosphorus Straits.

¹⁷ Karen Harbert, "Remarks at the 25th Annual Conference on U.S.-Turkish Relations," (March 27, 2006), <http://www.pi.energy.gov/library.html> (accessed October 6, 2008).

B. MAIN ENERGY TRANSPORTATION INFRASTRUCTURE ARTERIES AND IMPORTANT PROJECTS

Major pipeline projects, realized and under construction, will inevitably contribute to Europe's energy supply security. These projects are enhancing Turkey's role as an important transit country on the Eurasia energy axis and energy hub in the region. To this end, Turkey has concentrated its efforts for the transportation of Caspian oil and gas reserves to Western markets at the realization of the East-West Energy Corridor, often referred to as the Silk Road of the 21st century. The pipeline projects linking the Caucasus and Central Asia to Europe will be essential for the region's integration with the West. Secure and commercially profitable pipelines will help bring stability and prosperity to the region.

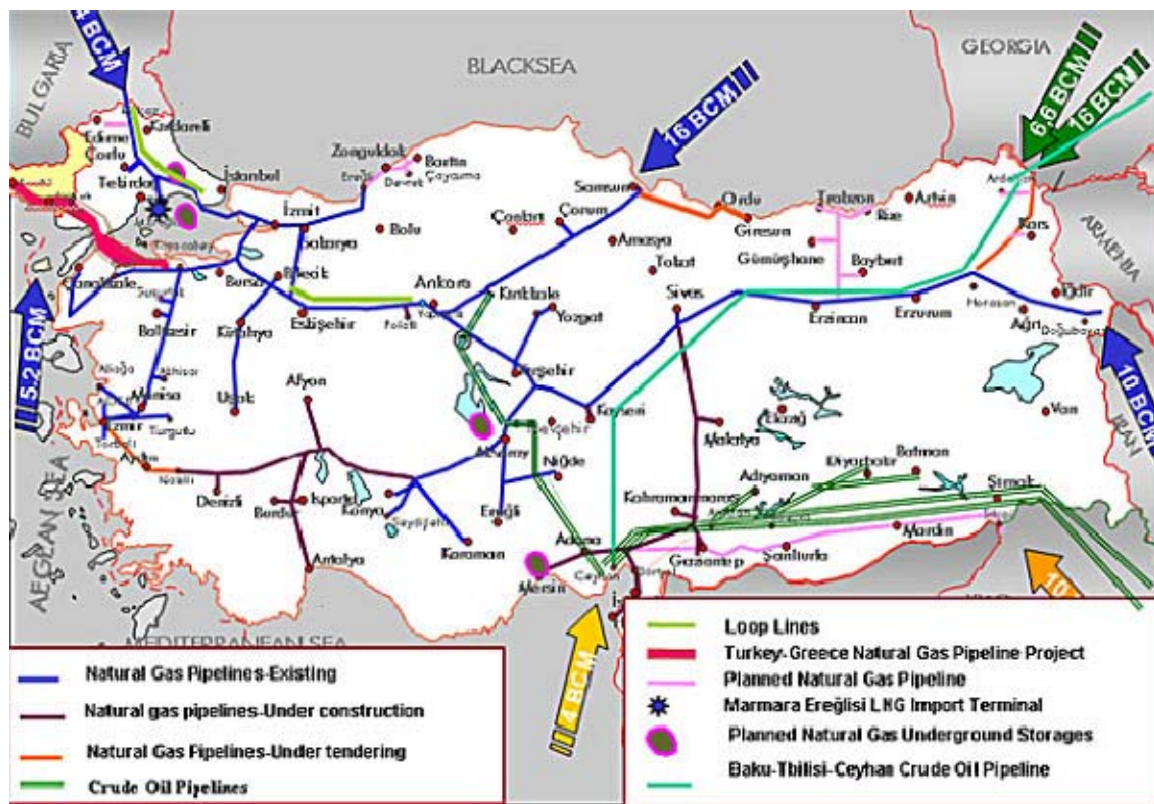


Figure 1. Major Pipeline Projects in, from, and to Turkey¹⁸

¹⁸ Hasan Dogan, *The Energy Security Case* (Ankara, Turkey: Turkish General Staff, 2006).

1. Nabucco Project

The Nabucco project represents a new gas pipeline connecting the Caspian region, Middle East and Egypt via Turkey, Bulgaria, Romania, and Hungary with Austria and further on with the Central and Western European gas markets.¹⁹

The pipeline length is approximately 3,300 Kilometers, starting at the Georgian/Turkish and/or Iranian/Turkish border respectively, leading to Baumgarten in Austria. In this respect it must be taken into account that a reasonable amount of the gas volumes, upon reaching Baumgarten have to be further transported through Austria to the Central and Western European Countries.²⁰

According to market studies, the pipeline has been designed to transport a maximum amount of 31 bcm/y. The Nabucco project is included in the EU Trans-European Energy Network program and a feasibility study for the Nabucco pipeline has been performed under a EU project grant. Construction of pipeline is expected to begin in 2010 and is planned to be finished in 2013. It is estimated to cost around €7.9 billion. The company leading the project is OMV from Austria.²¹

Nabucco pipeline highlights Turkey's strategic importance to the EU. The U.S.-backed Nabucco pipeline project increased Turkey's strategic importance to the EU, and two key opponents of Turkey's EU membership, France and Austria, are softening their objections to the ongoing accession talks. Nabucco is at the centre of Europe's efforts to reduce dependence on Russian natural gas.

¹⁹ Ariel Cohen, U.S. "Interests and Central Asia Energy Security," *Backgrounder by Heritage Foundation* 1984, November 15, 2006, 2.

²⁰ Ibid., 3.

²¹ *Energy Security: Cause for Cooperation or Competition?* Senator Richard Lugar, The Brookings Institution 90th Leadership Forum Series March 13, 2006 (Transcript Prepared from a Tape Recording).



Figure 2. The Nabucco Project²²

2. Baku-Tbilisi-Ceyhan Pipeline

The central component of the East-West Energy Corridor is the Baku-Tbilisi-Ceyhan (BTC) pipeline, which is a dedicated crude oil pipeline system that extends from the Azeri-Chirag-Deepwater Gunashli (ACG) field through Azerbaijan and Georgia to a terminal at Ceyhan on the Mediterranean coast of Turkey, bypassing the environmentally sensitive Black Sea and the Turkish Straits.

This is one of those turning points in history," says Mike Bilbo, director of communications and external affairs for BP in Turkey. "It changed the picture for Turkey overnight." By his reckoning, existing shipping arrangements through the Bosphorus Straits plus the new pipeline mean that 5% of the world's oil now traverses Turkey.²³

²² Necdet Pamir, "Energy in Security and the Most Recent Lesson: The Russia - Ukraine Gas Crisis," *Center for Eurasian Strategic Studies (ASAM)*, Ankara, Turkey, April 21, 2008, www.asam.org.tr/temp/temp111.doc (accessed May 21, 2008).

²³ Republic of Turkey Ministry of Energy and Natural Resources\Statistics, <http://www.enerji.gov.tr/index.php?dil=en&sf=webpages&b=yapimasamasi&bn=&hn=&id=4833> (accessed November 21, 2008).

The pipeline can transport up to 1 million barrels per day (approximately 1.5% of the world's oil supply), and at 1760 kilometers is the second longest of its kind in the world. The first cargo of oil, which had traveled through the BTC pipeline to Ceyhan, was loaded onto a tanker on June 4, 2006.²⁴

On June 16, 2006, Kazakhstan officially joined the BTC oil-pipeline project. A Host Government Agreement to that effect was signed on that day in Almaty by the Presidents of Azerbaijan and Kazakhstan, İlham Aliyev and Nursultan Nazarbayev, respectively. Under the agreement, Kazakh crude oil will be shipped to Baku across the Caspian Sea, and then pumped through the BTC pipeline to Ceyhan. A grand ceremony to mark the official inauguration of the BTC pipeline was held in Turkey on July 13, 2006 and as of February 8, 2008, the 374th cargo had been lifted at the Ceyhan Terminal.²⁵



Figure 3. BTC Pipeline²⁶

At the forefront of this effort is the Baku-Tbilisi-Ceyhan (BTC) Pipeline, the first direct pipeline to deliver crude oil from the Caspian Sea to the Mediterranean without crossing Russian soil or passing through the Bosphorus or Turkish Straits.

²⁴ Republic of Turkey Ministry of Energy and Natural Resources\Statistics, <http://www.enerji.gov.tr/index.php?dil=en&sf=webpages&b=yapimasamasi&bn=&hn=&id=4833> (accessed November 21, 2008).

²⁵ Ibid.

²⁶ Necdet Pamir. "Energy in Security and the Most Recent Lesson: The Russia - Ukraine Gas Crisis," *Center for Eurasian Strategic Studies (ASAM)*, Ankara, Turkey, April 21, 2008, www.asam.org.tr/temp/temp111.doc (accessed May 21, 2008).

The 1,100-mile pipeline cost nearly \$4 billion to build, and is operated by a BP-led consortium of 11 national and international oil companies.²⁷ “In May 2005, Azerbaijan began test filling the Azeri section of the pipeline, and on July 13, 2006, the first tanker at the Turkish port of Ceyhan was filled with oil from BTC.”²⁸ The line is estimated to have a peak capacity of more than one million bbl/d, and Turkey is expected to earn between \$140 and \$200 million per year in transit and operating fees from the project.²⁹

The construction of the BTC Pipeline was carried out by an integrated project team that simultaneously led the construction of the Southern Caucasus Pipeline (SPC), which will transport natural gas parallel to the BTC for most of its route before connecting to the Turkish gas pipeline network near the town of Horasan.³⁰ The BTC Pipeline passes a considerable distance through rugged terrain, reaching an elevation of more than 9,000 feet when traversing the Caucasus Mountains. Security was a key factor considered in the design of the BTC Pipeline, with the entire length of the line buried to help protect against possible sabotage.³¹

3. Seeking Alternatives for the Turkish Straits

From the energy security perspective, the *Turkish Straits* are of particular importance as around 3.7% of the world's daily oil consumption is shipped

²⁷ BTC Project, *International Finance Corporation World Bank Group*, <http://www.ifc.org/btc> (accessed September 12, 2008).

²⁸ Republic of Turkey Ministry of Energy and Natural Resources\Statistics, <http://www.enerji.gov.tr/index.php?dil=en&sf=webpages&b=yapimasamasi&bn=&hn=&id=4833> (accessed November 21, 2008).

²⁹ Ibid.

³⁰ “Pipelines, Politics and Power,” *Centre for European Reform Publications*, (February 2008), http://www.cer.org.uk/pdf/rp_851.pdf (accessed May 19, 2008).

³¹ Turkey: Implications of a Blast on the BTC Pipeline Stratfor Analysis, http://www.stratfor.com/analysis/turkey_implications_blast_btc_pipeline (accessed August 29, 2008).

through the Turkish Straits. The amount of oil and oil products transported through the Strait of Istanbul has increased dramatically from 60 million tons in 1996 to 145.4 million tons in 2007.³²

In 1979 and in 1994, tanker crashes in the Bosphorus claimed 41 and 28 deaths, respectively, and officials have long warned that the increase in maritime traffic, coupled with the growing size of the tankers and of Istanbul's population, make for a disaster waiting happen. A tanker explosion in the Bosphorus, would result in a human and environmental disaster of immense proportions. Turkish Coast Guard figures show that in 2003, 46,930 vessels crossed the straits, more than 8,000 of them laden with dangerous cargo, mostly oil or liquid petroleum gas. The estimated figure for this year is 53,000 ships, some of them carrying petroleum products totaling 144 million tons, most of them aboard Russian tankers. This figure is expected to reach around 190-200 million tons in 2009 due to the expected throughput from the Caspian Sea reaching the Black Sea in addition to the large amounts of Russian oil. In view of the heavy tanker traffic, as well as the physical characteristics and peculiarities of the Turkish Straits, a maritime disaster caused by a tanker carrying hazardous cargo seems inevitable sooner or later. In addition to the humanitarian and environmental perils, such a disaster would interrupt the regular flow of oil to world markets. The solution lies at the use of alternative oil export options that by-pass the Straits.³³

Energy companies are aware of the seriousness of the situation and they recognize that there is a limit to the amount of oil that can be transported through the Turkish Straits. A set of "Voluntary Principles" on by-pass pipelines was

³² Turkey's Energy Security, http://ec.europa.eu/enlargement/pdf/european_energy_policy/turkeys_energy_strategy_en.pdf (accessed October 30, 2008).

³³ Turkish Coast Guard Annual Report, 2008.

adopted in December 2000 by the Governments of the U.S. and the UK as well as companies such as Chevron, Texaco, Conoco, Shell and BP and several NGOs.³⁴

The 17-mile long Turkish Straits, only a half mile wide at its narrowest point, is one of the world's busiest shipping lanes. The straits are also increasingly an important oil transit point, with oil tankers bringing shipments from the Black Sea to the Mediterranean for export.

The Turkish government has raised concerns that increased oil tanker traffic through the narrow and twisting Bosphorus heightens the risk of an oil spill. Exports through the Bosphorus have grown substantially since the breakup of the former Soviet Union. One project that will increase oil transit through the Bosphorus is the Russian-backed Northern Route Export Pipeline, a 990-mile pipeline that transports oil from Kazakhstan's Caspian Sea area oil deposits to the Russian Black Sea port of Novorossiysk. The pipeline, built by the Caspian Pipeline Consortium (CPC), delivered up to 650,000 bbl/d of oil by year-end 2006. After reaching Novorossiysk, oil for export is then loaded onto tankers and shipped through the Bosphorus onto world markets. To ease increasing oil traffic through the Bosphorus Straits, a number of Bosphorus bypass options are under consideration in southeastern Europe and Turkey itself. The BTC Pipeline is the first of several bypass projects under consideration over the last decade to have materialized.³⁵

4. Trans-Anatolian (Samsun-Ceyhan) By-Pass Oil Pipeline

Another project currently under consideration is the Samsun-Ceyhan bypass, which would transport oil from Turkey's Black Sea port of Samsun to Ceyhan on the Mediterranean coast. Turkey's Council of Ministers gave initial approval to the construction of the planned 350-mile, one million bbl/d line in May 2006. The project is being developed by a 50-50 joint venture between Italy's Eni and Turkey's Calik Energy, called the Trans-Anadolu Pipeline Company

³⁴ Sinan Ogan, "Turkish Straits," *Turkish Centre for International Relations & Strategic Analysis TUSAM*, <http://www.turksam.org/en/a195.html> (accessed December 1, 2008).

³⁵ Ibid.

(TAPPCO), which as of September 2006 holds the only Turkish government license to develop a Bosphorus bypass project. Eni holds an 18.5% interest in the Kashagan oil field in the Kazakh section of the Caspian Sea, which would likely be a primary source for the Samsun-Ceyhan pipeline.³⁶



Figure 4. Trans-Anatolian By-pass Oil Pipeline³⁷

Among the various by-pass proposals, the Turkish Government has decided to support the Trans Anatolian (Samsun-Ceyhan) By-pass Oil Pipeline. The advantages of the project over its alternatives can be summarized as follows.

- The proximity of Samsun to the oil outlets on the Eastern Black Sea will minimize the seaborne transportation of oil on the Black Sea
- The existing energy infrastructure in Ceyhan obviates the need for undertaking new and costly infrastructure investments
- It constitutes the most environmentally manageable by-pass option

The ground-breaking ceremony of the Trans Anatolian Pipeline was held on April 24, 2007 in Ceyhan.³⁸

³⁶ Nilgun S. Acikalin, "Energy Corridor: Turkey," *International Energy Agency Roundtable on Caspian Oil & Gas Scenarios Presentation*, <http://etd.lib.metu.edu.tr/upload/12607216/index.pdf> (accessed September 21, 2008).

³⁷ Republic of Turkey, Ministry of Energy and Natural Resources\Statistics, <http://www.enerji.gov.tr/index.php?dil=en&sf=webpages&b=yapimasamasi&bn=&hn=&id=4833> (accessed November 21, 2008).

³⁸ Nilgun S. Acikalin, "Energy Corridor: Turkey," *International Energy Agency Roundtable on Caspian Oil & Gas Scenarios Presentation*, <http://etd.lib.metu.edu.tr/upload/12607216/index.pdf> (accessed September 21, 2008).

5. The Baku-Tbilisi-Erzurum (BTE) Natural Gas Pipeline

The second component of the East-West Energy Corridor, namely the Baku-Tbilisi-Erzurum (BTE) Natural Gas Pipeline, became operational on July 3, 2007. Designed to transport natural gas from the Shah Deniz field in the Azerbaijan sector of the Caspian Sea, through Georgia and on to the Georgia-Turkey border, it is expected that the pipeline will export 6,6 billion cubic metres a year. It is also considered as the first leg of the Trans-Caspian Natural Gas Pipeline Project which will tap into the world's 4th largest natural gas reserves located in Turkmenistan and those in Kazakhstan. The Trans-Caspian Natural Gas Project is of particular urgency as it will contribute to the further diversification of routes and resources. From the supply security perspective, it is also of importance that Kazakhstan and Turkmenistan not become dependent on any one country or any one route for exporting their natural gas and oil to western markets.



Figure 5. BTE Natural Gas Pipeline³⁹

³⁹ Republic of Turkey, Ministry of Energy and Natural Resources\Statistics, <http://www.enerji.gov.tr/index.php?dil=en&sf=webpages&b=yapimasamasi&bn=&hn=&id=4833> (accessed November 21, 2008).

6. Kirkuk-Ceyhan Pipeline

The Kirkuk-Ceyhan Pipeline is Iraq's largest crude oil export line. Turkey's port of Ceyhan is also the destination for oil exports from northern Iraq on the Kirkuk-Ceyhan oil pipeline. The 600-mile dual pipeline consists of two parallel lines that have a maximum throughput of around 1.6 Mmbbl/d.⁴⁰ However, Kirkuk-Ceyhan has been a major target for sabotage since June 2003, and is only open sporadically. Both lines have often been closed down after being severely damaged in sabotage attacks by PKK (Kurdistan Worker's Party) Terror organization.⁴¹ The terrorist attack challenge against these pipelines will be discussed in the next section of this chapter.



Figure 6. The Position of the Kirkuk-Ceyhan Pipeline⁴²

⁴⁰ Nilgun S. Acikalin, "Energy Corridor: Turkey," *International Energy Agency Roundtable on Caspian Oil & Gas Scenarios Presentation*, <http://etd.lib.metu.edu.tr/upload/12607216/index.pdf> (accessed September 21, 2008).

⁴¹ As of the end of November 2008, PKK terrorists' latest bombing attack on the Kirkuk-Ceyhan Pipeline occurred on November 21, 2008.

⁴² Republic of Turkey, Ministry of Energy and Natural Resources\Statistics, <http://www.enerji.gov.tr/index.php?dil=en&sf=webpages&b=yapimasamasi&bn=&hn=&id=4833> (accessed November 21, 2008).

7. Other Important Projects

The transportation of Caspian oil and natural gas resources via multiple pipelines to Europe through such projects as the interconnection of the gas pipeline networks of Turkey, Greece and Italy within the *Southern Europe Gas Ring Project* will also constitute an essential component of Europe's energy diversification efforts.⁴³

The incorporation of Turkey's energy network with that of the EU was realized with the conclusion of the Intergovernmental Agreement on the Turkey-Greece Interconnector signed in February 2003 and the Sale and Purchase Agreement between BOTAŞ and DEPA in December 2003. The trilateral Intergovernmental Agreement for the Turkey-Italy-Greece Interconnector was signed in Rome on July 26, 2007. In the plateau period, the volume of gas to be transported via Turkey is expected to reach 3 bcm and 8 bcm for Greece and Italy, respectively.⁴⁴

Turkish Prime Minister Erdoğan met with Greek Prime Minister Karamanlis on 3 July 2005 at Ipsala on the Turkish-Greek border for the ground breaking ceremony of the joint natural gas pipeline construction project. The Turkey-Greece Interconnector became operational as of 18 November 2007, following the inauguration ceremony held in Ipsala with the participation of Prime Ministers of both countries. Efforts are also underway to construct the Nabucco Natural Gas Pipeline project which envisages the transportation of natural gas via Turkey through Bulgaria, Romania and Hungary to Austria. Former Dutch Foreign Minister, H.E. Jozias van Aartsen, has been assigned as the EU Coordinator for the Nabucco Project. Full construction and operation of the Arab Natural Gas Pipeline to carry Egyptian gas to Turkey via Jordan and Syria is scheduled for 2009.⁴⁵

⁴³ "Romania Ready to Back Both Nabucco and South Stream," <http://www.roconsulboston.com/Pages/InfoPages/Commentary/OilEmp/GasBypass07.html> (accessed November 28, 2008).

⁴⁴ "Press Release from the Turkish Embassy of Copenhagen," July 30, 2005, <http://www.turkishembassy.dk/cms/index.php?page=general-information> (accessed August 22, 2008).

⁴⁵ "The Turkey-Greece Interconnector," *Turkish Daily News*, July 4, 2005.

Turkey is also interested in the development of Iraqi natural gas reserves. Iraqi natural gas could easily be connected to the Turkish national grid through a pipeline to be constructed parallel to the Kirkuk-Ceyhan oil pipeline using the right of way of the latter. 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.⁴⁶

The extension of the Blue Stream Gas Pipeline to Ceyhan and hence to Ashkelon with a view to supplying Israel with Russian natural gas is also under consideration. Turkey continues to import natural gas from Iran through the existing natural gas pipeline, which has a capacity of 10 billion m³/y. Moreover, a Memorandum of Understanding related to cooperation in the fields of oil and gas was signed between Turkey and Iran in Ankara on July 14, 2007. Technical discussions continue among the relevant authorities. Turkey's objective is to become Europe's fourth main artery of energy supply following Norway, Russia and Algeria through the realization of these projects. This will open up a new avenue for cooperation between Turkey and the EU that will also reinforce Europe's ties to Asia.⁴⁷

Moreover, through the completion of the projects cited above and more, it is anticipated that 6 to 7% of global oil supply will transit Turkey by 2012 and that Ceyhan will become a major energy hub and the largest oil outlet terminal in the Eastern Mediterranean. The Ceyhan Terminal has already been designed to receive the crude oil reaching Ceyhan from Kirkuk, Baku and Samsun. One of the many advantages of the Ceyhan Terminal is the existence of an established and state-of-the art infrastructure that allows for loading biggest tankers throughout the year.⁴⁸

⁴⁶ "Iraqi Gas for Turkey," *The New Anatolian*, August 9, 2007.

⁴⁷ "Turkey-Iran Memorandum of Understanding," *Turkish Daily News*, July 16, 2007.

⁴⁸ Moin Siddiqi, "Oil and Gas," *Middle East*, June 2008.

These developments attest to the strategic role Turkey will increasingly assume as a major transit energy highway between the world's economic centers and sources of energy. In this context, President Abdullah Gul's statements at the Baku Energy Summit held on November 14, 2008 emphasizes the importance of the projects mentioned in this chapter:

Nowadays, the concept of "energy supply security" which is gradually gaining importance, is often being associated with "foreign policy," "national security," "economic welfare" and "global stability." Meanwhile, energy security also compels the energy producer, consumer and transit countries to adopt a cooperative approach amongst them. This is a situation of interdependency. Therefore, with respect to some significant regional energy projects, we have to embrace an approach based on cooperation and mutual trust. With such projects, as it was the case with Baku-Tbilisi-Ceyhan, we have to transform our interdependency into a productive cooperation, which would bring together regional powers, big companies and players. I strongly believe that regional cooperation in the field of energy, beyond addressing the energy supply security, will make significant contributions to the regional stability, peace and prosperity. The crisis which broke out last August in Georgia confirmed that the unsolved conflicts in the region constitute a major threat from the perspectives of security and stability in the South Caucasus. We see that these conflicts represent a difficulty which should be overcome also in terms energy security. Undoubtedly, the secure transport of Caspian energy sources to European markets is linked to the continuity of regional stability and establishment of good neighbourly relations in the region. We believe that the existing problems can be solved through establishing mutual trust among the peoples who for centuries have been living together a common life in the South Caucasus. With such an understanding, among other issues, the necessary conditions to deepen and expand the existing cooperation in the field of energy, may also be established. Our proposal related to the Caucasus Stability and Cooperation Platform, which we brought up again last August, is in fact a result of this understanding. Our ideal is to transform the South Caucasus from a geography remembered for its conflicts and disagreements into a region which would set an example to the world with its common understanding and solidarity. Our ideal is the transformation of the South Caucasus into a region which would greatly contribute to Europe's energy security and whose name would be mentioned together with welfare, stability and peace, through the expansion and development of the productive

cooperation started in the field of energy. With the belief that the region harbors the necessary potential to reach this objective, we are determined to pursue our endeavours with the neighbour countries. Turkey's energy strategy is multi-dimensional. Our main policy objectives are diversification of sources and routes as well as of our energy mix and to contribute to Europe's energy security. The Middle East and the Caspian Basin being the foremost examples, Turkey is located in a region where almost two thirds of world's proven gas and oil reserves lie. Moreover, given the fact that the countries in Caucasasia and Central Asia, to achieve economic welfare, need to exploit their energy resources in the most rational manner as they also need those resources to be transported to the Western markets, Turkey, together with Azerbaijan, Georgia and the U.S., developed the idea of the East-West Energy Corridor concept. The Baku-Tbilisi-Ceyhan Oil Pipeline (BTC) and the Baku-Tbilisi-Erzurum Natural Gas Pipeline are the two main components of the East-West Energy Corridor. As of 10 November 2008, more than 480 million barrels of oil has been carried through the BTC pipeline to the consumer countries. Kazakhstan has participated in the said pipeline in 2006 and for the first time, Kazakh oil has been transported to Baku by tankers and then to the world markets through this pipeline early this month. We deem this as a significant development. The BTE natural gas pipeline, the second component of the East-West Energy Corridor, has become operational as of July 2007. The Turkish National Petroleum Company TPAO, which also participates in "upstream" projects along the BTC and BTE, has invested more than 3 billion dollars in the Caspian region. In terms of the North-South Axis, in cooperation with Russia and Italy, Turkey has developed the Blue Stream Project, launched in 2003. Following the implementation of the BTC and BTE projects, the Southern Gas Corridor has been placed at the top of our agenda. Within the framework of this corridor, the NABUCCO, Turkey-Greece-Italy and the Trans-Adriatic natural gas pipelines are being developed. The Turkey-Greece Interconnector, the first leg of the Turkey-Greece-Italy Natural Gas Pipeline has become operational in 2007. For the first time, the Azeri gas has been carried to Europe through Turkey by way of implementation of the said project. In line with our objective to connect the Turkish energy grid with Europe, this project bears great importance. For moving gas further towards Austria over Bulgaria, Romania and Hungary, technical and legal studies are also underway to realize the Nabucco Natural Gas Pipeline Project. The Turkish Government has the necessary determination and the political will for the realization of this project. Above all, the success of the Nabucco project depends on the gas supply. In this respect,

we are in close contact with Azerbaijan and Turkmenistan. We are of the opinion that in the years to come, Uzbek gas can also be carried to Europe through the Southern Corridor. I hope that one day we will be able to transport natural gas from the East shore of the Caspian Sea to its West shore the same way the Kazakh oil has been carried through BTC. On the other hand, we continue to be in contact with the Iraqi Government with a view to enabling the Iraqi gas to be connected to the Turkish grid and the Southern Corridor by a pipeline to be constructed in South-North axis. Important steps were taken with respect to the realization of the Egypt-Syria-Turkey pipeline. Once in the future we have the suitable international political environment, I hope that the Iranian gas will be taken on board as well. While transporting the energy sources from producer to the consumer countries, the environment and the other social assets shall be given utmost care. The drawbacks of transporting the Caspian Basin energy resources through the Turkish Straits and the increasing tanker traffic as well as the consequences on environmental and human security are well known. Taking into account the situation in the Turkish Straits, our country is pursuing work related to projects which would present additional alternatives. To lighten the traffic in the Straits, we attach importance to the realization of the Samsun-Ceyhan oil pipeline. The realization of this pipeline is as important for environmental and human security as it is for the strengthening of the North-South Corridor. Consequently, as I have stressed at the beginning of my speech, Turkey wishes to transform the interdependency in the field of energy into a productive cooperation among the regional countries. I am totally convinced that beyond our energy needs, in the years to come we will gradually contribute more to the energy security of European countries. In this respect we will continue our endeavours in cooperation with all our neighbours, friends and partners. I hope that the Baku Energy Summit will give impetus to our endeavours.⁴⁹

⁴⁹ "Statement of H.E. Abdullah Gül President of the Republic of Turkey at the Baku Energy Summit," November 14, 2008, <http://www.tccb.gov.tr/basin/konusma/konusmaDetay.aspx?id=3846&dil=en> (accessed November 29, 2008).

C. MAIN CHALLENGES FOR THE ENERGY TRANSPORTATION INFRASTRUCTURE OF TURKEY

1. Pipelines: Sitting Ducks as Targets

In the wake of the conflict in Georgia, the future of energy transportation from the Caspian basin and Central Asia to world markets is once again a concern. By looking at the attack by the Kurdistan Workers' Party (PKK) on the Baku-Tbilisi-Ceyhan (BTC) pipeline in August 2008, it is worth discussing how growing instability in the region highlights the interconnectedness for Turkey of the security of energy pipelines, terrorism and regional stability.

Given the political, military and economic implications of oil and natural gas production and transportation, one can better appreciate the search, on the part of producers, investors and consumers, for cheaper and more secure energy transportation routes. Even a seemingly technical decision over the optimal transportation lines is shaped by political competition. The rivalry is present at all stages of energy transportation including project development, construction and management. Such struggles range from securing investment capital to sharing profits, providing physical security, and ensuring political stability in the countries involved. Today, in addition to their high economic value, energy pipelines play important roles in diplomatic, economic, military and ecological terms. In addition to offering immediate economic benefits to transit and terminal countries, pipelines may act as the building blocks of alliances and boost cooperation among states. Likewise, pipelines may shape domestic politics in countries that are increasingly dependent on imported energy for heating or power.⁵⁰

One strategy that appeals to countries situated astride alternative pipeline routes is to engage in activities designed to undermine the profitability of rival existing routes and render them risky for investors. Since investors will be

⁵⁰ Nihat Ali Özcan, "Energy Security and the PKK Threat to the Baku-Tbilisi-Ceyhan Pipeline," <http://www.humansecuritygateway.info/showRecord.php?RecordId=26379> (accessed November 30, 2008).

discouraged from financing projects in volatile and insecure regions, destabilizing rival routes by sponsoring terrorist or insurgent organizations that operate in the transit corridors is a common strategy.⁵¹

Terrorist groups around the world often attack energy pipelines and the personnel working there. “Through acts of sabotage, bombing and kidnapping, terrorist or insurgent groups may seek to derail the construction of pipelines or the flow of oil or gas. Such attacks have occurred in many countries, including Colombia, Nigeria, Sudan, Algeria, Iraq, and Saudi Arabia.”⁵² Likewise, during the last 25 years, the PKK has threatened the security of pipelines running through Turkish territory and from time to time has mounted actual attacks on them.

Various reasons explain why pipelines are targeted by terror organizations and their sponsors. First, the direct and indirect impact of pipelines on society makes them highly valuable targets. The effects of attacks range from the interruption of heating in winter conditions to environmental disasters, fluctuations in world energy markets, and diplomatic and legal disputes over compensation. These repercussions empower terrorist organizations in terms of bargaining power and propaganda purposes. Second, because securing infrastructure is extremely difficult, the physical vulnerability of pipelines and related facilities make them easy targets. Given the availability of explosives, blowing up pipelines can be accomplished by terrorists easily, further complicating security. Third, since petroleum and natural gas can easily ignite, terrorists prefer to attack them with explosives. Despite many safeguards developed to reduce the impact of sabotage acts and resume the operation of pipelines through quick repairs, overall pipelines are still considered vulnerable targets.⁵³

⁵¹ Nihat Ali Özcan, “Energy Security and the PKK Threat to the Baku-Tbilisi-Ceyhan Pipeline,” <http://www.humansecuritygateway.info/showRecord.php?RecordId=26379> (accessed November 30, 2008).

⁵² Necdet Pamir, “Energy in Security and the Most Recent Lesson: The Russia - Ukraine Gas Crisis,” *Center for Eurasian Strategic Studies (ASAM)*, Ankara, Turkey, April 21, 2008, www.asam.org.tr/temp/temp111.doc (accessed May 21, 2008).

⁵³ Nihat Ali Özcan, “Energy Security and the PKK Threat to the Baku-Tbilisi-Ceyhan Pipeline,” <http://www.humansecuritygateway.info/showRecord.php?RecordId=26379> (accessed November 30, 2008).

2. The PKK and Kirkuk-Yumurtalik Pipeline

Turkey currently has two strategically important trans-border pipelines, aside from the ones serving domestic needs: Kirkuk-Yumurtalik and Baku-Tbilisi-Ceyhan. When the Nabucco pipeline project is finalized it will connect the Baku-Tbilisi-Erzurum (Turkey) and the Tabriz (Iran)-Erzurum gas pipelines to Austria, feeding extensive European gas networks. During the deliberations over the selection of these projects, their implementation, and the administration of pipelines, multinational companies had to factor the instability caused by the PKK's terror campaign into their calculations, making the PKK an indirect player in the game.⁵⁴

Turkey completed the construction of the first strategic oil pipeline, Kirkuk-Yumurtalik, between 1978 and 1984. The center of gravity of the Iran-Iraq war shifted from the Persian Gulf to northern Iraq in 1984. Having benefited enormously from oil revenues in financing the war, Iraq negotiated with Turkey to build a parallel line. To undermine the feasibility of the Kirkuk-Yumurtalik pipeline, Iran supported a Kurdish sabotage force in Northern Iraq and the PKK in Turkey. Coincidentally, the PKK initiated its terror campaign around the same time.⁵⁵

3. The PKK and the Baku-Tbilisi-Ceyhan Pipeline

The new political geography of the Caucasus and Central Asia following the dissolution of the Soviet Union led to a power struggle between Russia, Iran and Turkey. More importantly, the growing demand for energy worldwide directed the attention of the developed countries seeking to diversify their suppliers to the

⁵⁴ Nihat Ali Özcan, "Energy Security and the PKK Threat to the Baku-Tbilisi-Ceyhan Pipeline," <http://www.humansecuritygateway.info/showRecord.php?RecordId=26379> (accessed November 30, 2008).

⁵⁵ Necdet Pamir, "Energy in Security and the Most Recent Lesson: The Russia - Ukraine Gas Crisis," *Center for Eurasian Strategic Studies (ASAM)*, Ankara, Turkey, April 21, 2008, www.asam.org.tr/temp/temp111.doc (accessed May 21, 2008).

vast energy resources in these regions. "The discussions concerning the transportation of Azerbaijan's energy resources to the world markets brought Turkey to the forefront, agitating Iran and Russia."⁵⁶

The BTC route emerged as the most efficient option for the transportation of Azeri gas and oil to the West. It was eventually expected to be expanded to carry the rest of the Caspian basin resources.

Since the lynchpin of these developments was the transportation of Azeri and Caspian resources to the West in circumvention of Russian-controlled lines, preventing or delaying the BTC project was in the interests of Russia, Iran and Armenia. Russia was concerned about losing its influence in the region and being left outside the calculations concerning the Caspian region. Iran was worried that oil revenues might boost Azerbaijan's power and increase separatist sentiments among Azeris in Iran. Armenia was naturally irked by the close relations between Azerbaijan and Turkey and by the likely increase in Azerbaijan's power.⁵⁷

The strategy of Russia, Iran and Armenia was based on portraying the BTC corridor as risky and unstable. Through acts of omission and commission they contributed to this perception in the 1990s. Armenia's conflict with Azerbaijan in 1993 and its invasion and ongoing occupation of Nagorno-Karabakh played a role in perpetuating instability in the Caucasus. Russia's support for Armenia and meddling in the domestic affairs of Azerbaijan and Georgia in 1992-1993 prompted instability in these countries. The escalating PKK violence inside Turkey raised questions about the safety of the transportation corridor, further delaying the project.⁵⁸

⁵⁶ Necdet Pamir, "Energy in Security and the Most Recent Lesson: The Russia - Ukraine Gas Crisis," *Center for Eurasian Strategic Studies (ASAM)*, Ankara, Turkey, April 21, 2008, www.asam.org.tr/temp/temp111.doc (accessed May 21, 2008).

⁵⁷ "Turkey Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal," *Energy Information Administration Country Analysis Briefs-Turkey*, October 2007, <http://www.eia.doe.gov/emeu/cabs/> (accessed November 21, 2008).

⁵⁸ Nihat Ali Özcan, "Energy Security and the PKK Threat to the Baku-Tbilisi-Ceyhan Pipeline," <http://www.humansecuritygateway.info/showRecord.php?RecordId=26379> (accessed November 30, 2008).

During the debates on the Baku-Ceyhan pipeline, the Turkish Armed Forces (TSK – Turk Silahlı Kuvvetleri) came close to eliminating the PKK through a cross-border operation in northern Iraq in September 1992. The PKK had to relocate to camps in Zeli in northern Iraq, far from the Turkish border. The deteriorating conditions forced PKK terror organization leader Abdullah Ocalan to declare a unilateral ceasefire in March 1993. In May 1993, during his visit to Turkey, the Azerbaijani prime minister signed the contract for the construction of the pipeline. In the intervening period, the PKK maintained close ties with Iran and Russia. On May 24, 1993, the PKK resumed violence, ambushing a military convoy on the Elazığ-Bingöl highway, killing 33 recruits discharged from their duties. As the TSK intensified its counter-terrorism operations, the conflict escalated. Consequently, growing instability in the energy corridor forced investors to suspend the project.⁵⁹

Around the same time, Russia and Iran stepped up their efforts to sell Turkey their natural gas. The Blue Stream pipeline (a trans-Black Sea natural gas pipeline supplying Russian gas to Turkey) that increasingly rendered Turkey dependent on Russian gas was initiated under these conditions. Turkey also signed a contract with Iran for the construction of a pipeline to carry Iranian gas to Turkey. The resumption of the BTC project came only in the early 2000s, after Turkey expended enormous resources to capture Ocalan and bring PKK violence under control.⁶⁰

4. New Russian Security and Foreign Policy Doctrine

Russian foreign and security policies in the Putin era were centered on a new doctrine that sought to channel energy revenues to the realization of

⁵⁹ Nihat Ali Özcan, "Energy Security and the PKK Threat to the Baku-Tbilisi-Ceyhan Pipeline," <http://www.humansecuritygateway.info/showRecord.php?RecordId=26379> (accessed November 30, 2008).

⁶⁰ Ibid.

Russia's strategic priorities.⁶¹ "The sustainability of this approach depends on the maintenance of Russia's influence over ex-Soviet countries, and the continuation of the West's dependence on hydrocarbons and continuing high energy prices."⁶²

Russia's interest in the production, marketing and transportation of oil and natural gas is particularly visible in the case of the Baku-Tbilisi-Ceyhan pipeline, hence in its policies as well toward Azerbaijan, Georgia and Turkey. Anxious to diversify energy supply routes and break down Russia's dominance, the United States and the European countries have grown increasingly interested in the BTC as well as other routes through Turkey. Although, the BTC and the Baku-Tbilisi-Erzurum gas pipeline are buried underground, concerns over their security have never fully disappeared.⁶³

In this context, the recent conflict in Georgia has refocused attention on energy security in the Caucasus. Coincidentally, prior to the outbreak of hostilities in Georgia, the Baku-Tbilisi-Ceyhan pipeline came under attack on August 5, 2008, disrupting oil transportation for 14 days. The pipeline had been pumping 850,000 to 900,000 barrels per day before the explosion. Although some 200,000 barrels per day were diverted to underused pipelines running through Russia and Georgia, the financial loss over 14 days still came to over 1 billion dollars.⁶⁴ The oil that burned, expenses for putting out the fire, personnel and repairs cost another 20 million dollars.⁶⁵

These economic losses aside, the security of the BTC corridor and reliability of Turkey as an alternative supply route again came into

⁶¹ "Russia Moves to Reassert Influence in Central Asia, Caucasus," <http://www.eurasianet.org/departments/insight/articles/eav121602.shtml> (accessed December 9, 2008).

⁶² "National Security Concept of the Russian Federation," <http://www.fas.org/nuke/guide/russia/doctrine/gazeta012400.htm> (accessed September 22, 2008).

⁶³ Nihat Ali Özcan, "Energy Security and the PKK Threat to the Baku-Tbilisi-Ceyhan Pipeline," <http://www.humansecuritygateway.info/showRecord.php?RecordId=26379> (accessed November 30, 2008).

⁶⁴ "U.S. Department of Energy, Energy Assurance Daily," (August 8, 2008), www.oetl.doe.gov/docs/eads/ead080805.doc (accessed September 22, 2008).

⁶⁵ "Global Trends 2025: A Transformed World," *Publication of the National Intelligence Council*, (November 2008), www.dni.gov/nic/NIC_2025_project.html (accessed November 12, 2008).

question, as in the 1990s. During the invasion of Georgia, the Russian army did not destroy the BTC pipeline but some railways and trains used for oil transportation were destroyed. The interruption of the railways and the sabotage of the pipeline temporarily forced Azerbaijan to divert some of its crude oil through routes controlled by Russia. In the wake of the Georgian crisis, Azerbaijan has become wary of the idea of bypassing Russia entirely in energy transportation, as reflected by the cool reception U.S. Vice President Dick Cheney received during his latest visit to urge Baku to commit to pipeline routes that would avoid Russian territory.⁶⁶

If Turkey cannot counter economically and politically costly attacks on pipelines in its territory and prevent instability in the surrounding regions, it will face enormous consequences. Not willing to incur billion dollar losses in every attack, multilateral corporations might explore alternative routes, and seek compromise with the PKK to cease its attacks on the pipelines. “As a country aspiring to become a major transportation hub connecting Middle Eastern and Caspian hydrocarbon reserves to Europe, Turkey will come under pressure to ensure security at home and in its neighborhood.”⁶⁷ Through its diplomatic initiatives, such as the proposal for a Caucasus Stability and Cooperation Platform, it has sought to stabilize relations in the Caucasus region. Likewise, it has to restore the credibility of its territory as a secure route, especially given its plans to push for the Nabucco pipeline and discussions on the integration of trans-Caspian pipelines into the BTC.

Turkey’s ambitions will paradoxically make it a target of the actors seeking to discredit the routes stretching through Turkey. As long as Turkish territory remains one of the main theaters of battle over energy transportation, the interest in the PKK either from Turkey’s regional competitors or from the West will not cease. “The motivations that led the PKK to sabotage the BTC in August are

⁶⁶ “Global Trends 2025: A Transformed World,” *Publication of the National Intelligence Council*, (November 2008), www.dni.gov/nic/NIC_2025_project.html (accessed November 12, 2008).

⁶⁷ Nihat Ali Özcan. “Energy Security and the PKK Threat to the Baku-Tbilisi-Ceyhan Pipeline,” <http://www.humansecuritygateway.info/showRecord.php?RecordId=26379> (accessed November 30, 2008).

unclear. In any case, this move shows that the PKK closely follows regional developments and is in search of new roles and potential supporters.”⁶⁸ By targeting the BTC pipeline, the PKK might have been attempting to find new strategic partners. There are grounds to be concerned that the PKK may be receiving limited international support, though as of yet no definitive evidence is available. This sabotage was the PKK’s first attack on the BTC; interestingly, it came on the eve of the crisis in the Caucasus. As the attack broke with the movement’s long-standing caution in avoiding alienating Europe and the United States, it is possible the PKK may have received guarantees from other potential sponsors. Given Russia’s record of limited support for the PKK in the past (such as harboring PKK leader Abdullah Ocalan), the August 5 PKK attack on the BTC pipeline may have to be analyzed within the context of broader debates on the future of energy transportation in the region and Russia’s attempts to solidify its dominant position as the major supplier of Caspian and Central Asian energy reserves.

⁶⁸ Alex Petersen, “Turkey: The Transatlantic Energy Hub,” Young Professionals in Foreign Policy (July 22, 2007), <http://www.yfp.org/> (accessed March 13, 2008).

III. TURKEY'S OWN ENERGY PROBLEM

A. INTRODUCTION

This chapter will analyze whether or not Turkey ensures its own energy security, by comparing criteria regarding various energy resources. The answer should provide a clearer view to understanding the real intent of Turkey's policies, which are aimed at making Turkey an energy hub.

First, the chapter will explain energy security concepts generally accepted by many international players. These concepts can be summarized as energy diversity and storage. Given the answer to the question of how energy security is perceived in countries such as the U.S., EU, China, and Russia, this chapter discusses Turkey's energy security. To determine the amount of Turkey's energy dependency, this chapter will concentrate on consumption and production of various "imported" energy resources such as oil and natural gas in the country. Then it will emphasize the diversification of energy suppliers and emergency policies under an energy crisis.

B. ENERGY SECURITY AS TURKEY'S OWN SERIOUS PROBLEM

Since very early times, Energy has been of vital importance in human life and is, perhaps, one of the most important factors in economic improvement.

On the eve of World War I, First Lord of the Admiralty Winston Churchill made a historic decision: to shift the power source of the British Navy's ships from coal to oil. He intended to make the fleet faster than its German counterpart. But the switch also meant that the Royal Navy would rely not on coal from Wales but on insecure oil supplies from what was then Persia. Energy security thus became a question of national strategy. Churchill's answer? "Safety and certainty in oil," he said, "lie in variety and variety alone." Since Churchill's decision, energy security has repeatedly emerged as an issue of great importance, and it is so once again today. But the subject now needs to be rethought, for what has been the paradigm of energy security for the past three decades is too limited and

must be expanded to include many new factors. Moreover, it must be recognized that energy security does not stand by itself but is lodged in the larger relations among nations and how they interact with one another.⁶⁹

There has been no exception for Turkey. Until 1970, energy was very inexpensive and was easily obtained when compared to today. Moreover, there were fewer needs for oil and especially, for natural gas. After the oil crisis of 1973, this situation dramatically changed and many countries began to confront the energy problem. Energy security has been one of the main foreign policy issue for many countries. The U.S. in particular implements very active foreign policies regarding energy security. The EU also maintains some important projects to secure energy for Europe. The IEA (International Energy Agency) puts a minimum requirement, such as 90 days of oil stocks, to prevent possible effects of an oil crisis for members.⁷⁰ No doubt, Turkey is a non self-sufficient country in respect to oil and natural gas according recent data. The country has to import from other countries to meet its growing energy demand. Therefore, energy security should be a main problem in Turkey's energy policies. Due to some vital mistakes made by former governments, today Turkey is confronting serious problems for natural gas unlike oil. "Turkey has no storage facility for natural gas. Turkey has not maintained the minimum 90 days oil stock as a necessary condition of the IEA, up to now. Finally, Turkey will encounter serious energy security problems if faced with any shortage in oil or natural gas."⁷¹

C. ENERGY SECURITY TOOLS

As mentioned in former chapters, energy security can be defined simply as the availability of energy sources in sufficient quantities and at reasonable

⁶⁹ Daniel Yergin, "Ensuring Energy Security," *Foreign Affairs* 85, no. 2 (March-April 2006): 69.

⁷⁰ "Energy, Resource Conflict, and the Emerging World Order," Michael T. Klare, interview by Barry S. Zellen, *Strategic Insights*, <http://www.ccc.nps.navy.mil/si/2008/Feb/klareFeb08.asp> (accessed December 10, 2008).

prices at the proper time. Disruption of energy supply may occur at any point in the energy supply chain and it can create an extremely dangerous energy crisis in a country, in a region or in the whole world.⁷² For instance, any disruption during long winter occurring in Baltic States such as Estonia, Latvia, or Lithuania could cause mass deaths. The death toll could rise to tens of thousands in several weeks.

There are some specific factors that cause energy supply disruptions:

- Political reasons: Since energy can be considered as a highly political issue, conflicts between energy producing countries and energy consuming countries (or energy transit countries) can cause supply disruptions.
- Economic reasons: A sudden increase in energy's price can lead to supply disruption. For example, the last natural gas conflict between Ukraine and Russia was based on a disagreement between two countries about the price of natural gas.
- Export restrictions or embargos from producers. For example, the oil crisis in 1973 was caused by export restrictions that were made by OPEC.
- War, terrorist attacks or political instability of an energy producing country: These factors may disrupt exploration, production, processing or transportation of energy. One of the vivid examples is terrorist attacks on pipeline infrastructures in Iraq.
- Natural disasters, accidents or technical reasons: For example, hurricane Katrina damaged energy infrastructure and caused some disruptions of energy supply in the U.S.⁷³

D. ENERGY SECURITY POLICIES

Energy security policies can be examined in two main sections, "short" and "long" term policies. The short-term energy security policies can be further divided into two main groups: "diversification" and "storage."

⁷¹ Havva Caha, "Energy Security of Turkey," *Natural Resources, International Conference on Human and Economic Resources* (2006).

⁷² Steven Mufson, "Disruptions in Oil Supply May Extend Price Rise," *The Washington Post* May 6, 2008, <http://www.washingtonpost.com/wp-dyn/content/article/2008/05/05/AR2008050500307.html> (accessed June 28, 2008).

⁷³ Hasan Dogan, *The Energy Security Case* (Ankara, Turkey: Turkish General Staff, 2006).

- Diversification: The most important policy to ensure security of energy supply is the diversification of energy sources, supply countries and supply routes. "Since the world economy seems to be entirely dependent on oil, other sources like coal and natural gas are considered as diversification tools for reducing oil dependency."⁷⁴

The U.S. puts very active foreign policies into practice for diversification of energy supply countries because of the fact that energy security problem is considered as a national security issue. Iraq is the main oil suppliers to the U.S. and this seems to be the most important reason of Iraqi War. Also European Union has been creating some diversification projects to secure energy for Europe and in order to satisfy this goal EU formed the INOGATE (Interstate Oil and Gas Transport to Europe) program. The Most important project of INOGATE is Trans-European Networks Project. This project promotes the regional integration of the pipeline systems and facilitates the transport of oil and gas from Caspian region to the European market. Russia is seen as a good example in that respect. As it is known Russia is the largest gas exporter country in the world and it tries to diversify its natural gas export pipelines routes to reduce its energy export dependency on Ukraine.⁷⁵

Ukraine provides the main transit route for Russian natural gas to Europe's markets and as of September 2008, 80% of Russian natural gas flows through Ukraine to Europe.

- Storage: The second short term tool for securing on energy supply is the storage capacity. After the first oil crisis, the International Energy Agency (IEA) required some minimum storage regulations to minimize effects of an unpredictable rise of oil prices or an unexpected disruption of oil supply. The minimum quantity of oil to be for stored, what is needed for, is 90 days. Today oil stocks of the members of IEA are approximately 4 billion barrels and 1.4 billion of these are under the direct control of member governments. The rest are in commercial stocks.⁷⁶

⁷⁴ Spencer Mallaby, "What 'Energy Security' Really Means," *The Washington Post*, July 3, 2006, <http://www.washingtonpost.com/wp-dyn/content/article/2006/07/02/AR2006070200675.html> (accessed November 2, 2008).

⁷⁵ IEA, "Fact Sheet on IEA Oil Stocks and Emergency Response Potential," 2005, <http://www.iea.org/Textbase/Papers/2004/factsheetcover.pdf> (accessed November 23, 2008).

⁷⁶ Ibid.

Although the IEA has not defined certain minimum requirements of gas storage as in the case of oil, those countries who use gas more have been establishing some storage facilities inside or outside their countries. Storage capacities of some countries for natural gas are as follows: Austria (32%), France (26%), Germany (22%), Italy (22%)⁷⁷

E. BEFORE TURKEY, GLOBAL ACTORS' POSITION WITH RESPECT TO THE ENERGY SECURITY

1. The European Union

In European countries, oil and natural gas are acquired from four main sources. Those are the following.

- Middle East Region
- Russian Federation
- North Sea (England and Norway)
- Algeria

The European Union's dependence on Russia for oil and natural gas constitutes about 40% of its energy imports. Since the beginning of 2000, diminishing this ratio is one of the strategic objectives of the European Union. The European Union assesses the resources in the Caspian Basin and Central Asia as an important alternative in order to cut down dependency on Russia, and endeavors to establish "special partnerships and relations" with the countries of the region possessing energy resources and with those countries situated along the routes of transportation to Europe.⁷⁸

In addition to the Middle East and North Africa, the "New Neighborliness Policy" of Europe, activated in 2003, is also applied to the South Caucasian

⁷⁷ Havva Caha, "Energy Security of Turkey," *Natural Resources, International Conference on Human and Economic Resources* (2006).

⁷⁸ Hasan Dogan, *The Energy Security Case* (Ankara, Turkey: Turkish General Staff, 2006).

region. In this regard, the neighborliness relations established with Georgia, Armenia and Azerbaijan, aim in essence to provide safe and secure access to the resources of the Caspian Basin and Central Asia.⁷⁹

From the perspective of the European Union, “transporting the energy raw materials of the Caspian Basin and Central Asia through a route out of Russian Federation” is a geopolitical necessity.

2. The Russian Federation

The policies of this country to once again become a global power are well known. The oil and natural gas resources of the Russian Federation appear to be the most important geopolitical lever in this respect.

Today, Russia owns 6% of global oil, and 30% of the natural gas. The country is completely self-sufficient with respect to energy security.⁸⁰

However, it is not clear whether the Russian Federation will follow a policy of the following.

- Mutual trade with consumer countries and organizations respectful of the principles of a free market
- Or, using energy as a “lever of political pressure and blackmail” in order to regain its former position as a global power
- The pressure applied to Ukraine in the beginning of 2007 because does natural gas not lead to an optimistic view of the future
- Additionally, with respect to the arrangements regarding the Russian state-owned energy firms such as GAZPROM and GAZPROM-NEFT; Russian Federation is preparing itself to use oil and natural gas as an effective weapon

The Caspian Basin countries such as Uzbekistan and Turkmenistan have closely tied themselves to the Russian Federation by signing bilateral treaties of

⁷⁹ “World Energy Outlook,” <http://www.allconferences.com/conferences/20080105132408/> (accessed December 2, 2008).

⁸⁰ Necdet Pamir, “Energy in Security and the Most Recent Lesson: The Russia - Ukraine Gas Crisis,” *Center for Eurasian Strategic Studies (ASAM)*, Ankara, Turkey, April 21, 2008, www.asam.org.tr/temp/temp111.doc (accessed May 21, 2008).

natural gas sales in 2000. Thanks to these treaties, the Russian Federation transports the gas, which it acquires from the above-mentioned countries with quite low prices, and sells it to European countries with high profits.

3. People's Republic of China

The biggest national growth in the global economy is achieved by China. The total growth of China in the last 10 years, almost 10% per year exactly, draws attention of the international community and the global powers. Currently, approximately 25% of the global production of cement and iron is consumed in China.⁸¹ In the case this country keeps this ratio of growth; in 2020 it will become the biggest economy of the world ahead of the United States. In 2030, China will require four times more oil and natural gas than it consumes today. This growth is also increasing China's dependency on oil and natural gas imports. China will have to supply most of its needs to oil and gas from the Persian Gulf and Middle East.⁸²

The dependency on oil and gas is about to turn out to be an important factor determining global geopolitical relations in other consumer countries, and the relations between China the Persian Gulf, and Middle Eastern countries as well.

Since the middle of the 1990s, China has signed bilateral and long-term treaties with all the important producer countries. China enjoys long-term sales agreements with all the producers in Africa and the Middle East.

For example, the treaty signed with Iran in 2005, which includes the sale of the gas in the Yadavaran Region for 100 billion USD to China in the next 25-year period, attracts attention. Such treaties apparently constitute the main reason behind China's opposition to U.S. policies.

⁸¹ "Cement in China to 2010 - Demand and Sales Forecasts, Market Share, Market Size, Market Leaders," <http://www.freedoniagroup.com/Cement-In-China.html> (accessed November 4, 2008).

⁸² Hasan Dogan, *The Energy Security Case* (Ankara, Turkey: Turkish General Staff, 2006).

F. Turkish Energy Outlook

Although Turkey is close geographically to rich oil and natural gas reserves in the Middle East and Caspian region, Turkey's proven oil and gas reserves seem to be very low. Like many countries, Turkey has large coal and lignite resources. However, Turkish coal and lignite have low calorific and high pollution values. Thus, Turkey has been importing high quality coal from Russia, in addition its enormous natural gas imports from Russia, since early 1990s.⁸³

Primary energy production of Turkey is insufficient for the Turkey's energy requirements. The quantity of Turkish primary energy production was nearly 23,4 mtoe (million tones equivalent) whereas consumption was approximately 79 mtoe and the amount of imported energy was nearly 55,6 mtoe in 2003. Turkey's oil consumption is 37,7% of total primary energy needs and nearly 92,5% of it is imported. Also, natural gas provides 22,4% of total primary energy demand and 97,4% of it is imported. Turkey needs to import gas from other countries in order to satisfy growing energy demands. This, eventually, brings Turkey to be entirely dependent on imported oil, and natural gas.⁸⁴

Turkey's growing energy requirements give rise to its dependency in respect to energy. As time passes, it seems that Turkey's dependency is respect further increasing. For instance, "Turkey's energy dependency has increased to 70.1% in 2003 from 45.8% in 1980. It is forecast that Turkey's energy dependency will reach 76.5% in 2020."⁸⁵

This growing import dependency brings serious problems for a country in respect to its costs and imported quantities. For example, the cost of energy imports increased from 13.4 billion dollars to 20.5 billion dollars in one year

⁸³ Turkey Oil and Gas Report Q4 2008, <http://www.marketresearch.com/product/display.asp?productid=2018343&xs=r&g=1&curr=USD&kw=&view=toc> (accessed November 2, 2008).

⁸⁴ Tupras, "Crude Oil Import," 2006, http://www.tupras.com.tr/faaliyet_5_1.asp (accessed September 10, 2008).

⁸⁵ Ibid.

between 2004 and 2005. In other words, the ratio of energy costs to total import increased from 14.2% in 2004 to 17.6% in 2005. The main reason behind this is the rise in oil prices and changes in the Euro/USD rate.⁸⁶

Turkey actually imports coal from various countries and there seems, currently, no risk of over-dependency on coal. Crude oil has been coming mainly from Iran, Libya, Saudi Arabia, and Russia and again Turkey were not seen to be overly dependent on any single country.⁸⁷ But, Turkey has a serious diversification problem in respect to natural gas. Actually, Russia seems to be the main supplier for Turkey providing 69% of the Turkey's natural gas consumption in 2007. Turkey's dependency on Russian natural gas will continue to increase up to 69.2% in 2020.⁸⁸

In order to further improve energy security and reduce the effects of an energy crisis, Turkey must prepare strategic reserves for oil and natural gas. Unfortunately, Turkey has no efficient policies to reduce the effects of supply distribution. For example, Turkey had no storage facility for natural gas nor did, it have any storage capacity for crude or processed oil until mid 2007. The National Oil and Natural Gas Company of Turkey (TPAO) was actually planning to operate the Silivri Underground Gas Storage Facility by mid-2006, but could not begin to operate until July, 2007.⁸⁹ Moreover, the Salt Lake Underground Storage Gas Facility is also on the agenda and is planned to be completed by 2015.

The World Bank claims the construction of The Salt Lake Underground Storage Gas System capacity will reach 6% of the total consumption after the

⁸⁶ Havva Caha, "Energy Security of Turkey," *Natural Resources, International Conference on Human and Economic Resources* (2006).

⁸⁷ Devlet Planlama Teskilati 2001 Enerji Raporu, 21.

⁸⁸ Havva Caha, "Energy Security of Turkey," *Natural Resources, International Conference on Human and Economic Resources* (2006).

⁸⁹ "Silivri Underground Natural Gas Complex Opens-Silivri yer alti dogalgaz tesisi acildi," <http://www.haberler.com/silivri-yeralti-dogalgaz-depolama-tesisi-acildi-haberi/> (accessed October 23, 2008).

Silivri Underground Gas Storage Facility project. However, it should be noted that even this will not be sufficient when Turkey's long-term goals are considered. Turkey should develop new energy policies to promote natural gas storage facilities. Although there is no diversification of supply problems for oil Turkey has similar storage problem for oil. According to international agreements, Turkey should perform to lay away a minimum a 90 day oil stock but there is, actually, no completed oil storage facility. There are some problems about establishing strategic oil stocks. First, although according to international agreements about minimum 90 days oil stock rules, the Petroleum Market Law requires only 20 day stockpiling. Also, there are some complicated items about holding stocks as crude oil or petroleum products.⁹⁰

G. CONCLUSION

Based on this chapter, it can be concluding that Turkey's efforts to become an energy hub are not a hegemonic endeavor. On the contrary, it is simply vital attempts to survive in the future's energy competition. Moreover, Turkey's efforts are not sufficient. Turkey still has to put in practice additional and more effective policies to improve its own energy efficiency. This seems to be too fundamental and significant to reduce energy consumption.

Amid its plans to develop international pipelines, Turkey is coming to grips with pressing domestic energy needs. Over the next decade Turkey's annual energy consumption is forecast to more than double, to the equivalent of 222 million tons of oil, according to the Turkish National Committee of the World Energy Council, an international energy consortium. At present, the bulk of Turkey's demand is met by natural gas, coal, and hydropower. Natural gas and coal combustion generate roughly half of the country's 40,000 megawatts of electricity; oil is another major energy source. Hydropower accounts for nearly one-third of the country's power generation. Turkish government estimates suggest additional

⁹⁰ Nilgun S. Acikalin, "Energy Corridor: Turkey," *International Energy Agency Roundtable on Caspian Oil & Gas Scenarios Presentation*, <http://etd.lib.metu.edu.tr/upload/12607216/index.pdf> (accessed September 21, 2008).

capacity could push hydroelectricity's contribution to 46 percent by 2020 through the construction of additional plants in Turkey's east and southeast.⁹¹

Becoming an energy hub could not guarantee Turkey's own energy security. To alleviate the rising trend toward dependency on imported energy sources and to satisfy increasing energy demand, Turkey should restructure its coal sector and encourage using clean coal technologies that will help improve the use of indigenous coal reserves. Only, in such a way, will the production of energy and consumption of energy gap be closed down. Otherwise, Turkey will live with serious energy security problems in case if it faces any shortage in oil or natural gas. Turkey's goal for storage capacity is ten percentage of annual consumption, yet 6% of the total consumption will be nearly 2.4 billion m³.

⁹¹ Greg Bruno, "Turkey's Energy Portfolio," http://www.cfr.org/publication/17821/turkey_at_an_energy_crossroads.html (accessed October 12, 2008).

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IV. ENERGY SECURITY, THE UNITED STATES AND TURKEY

"The U.S. is an old democracy in a new continent, and Turkey is a new democracy in an old continent."⁹²

A. INTRODUCTION

The fact that Turkey is an emerging energy hub can be evaluated as an opportunity for both United States and Turkey and should contribute to the energy security issue as well as regional and global peace.

Turkey and the U.S. share a sound and deep partnership. They have worked together regarding many international issues and problems such as the fight against terrorism, illicit trafficking of drugs/weapons/humans, poverty, and religious extremism. They share the same values of democracy, human rights, law, and liberal market economy. Emergence of new problems and ethnic conflicts after the collapse of the Soviet Union has brought these two countries even closer. Turkey and the U.S. have been closely cooperating over a wide geography, in the Gulf War, Somalia, Bosnia-Herzegovina, Kosovo and Iraq.⁹³

It cannot be assumed that U.S. officials have just recently realized the potential of the Turkish-U.S. energy security cooperation. Indeed, Marc Grossman, vice chairman of The Cohen Group in Washington, DC and former ambassador to Turkey 1994-1997, underlined in 2007 that the U.S. should add energy to America's relations with Turkey.

Americans should pay close attention to the news from Turkey...The visit of Turkey's energy minister to Iran earlier in August to sign energy deals, including the establishment of a joint Turkish-Iranian company to carry up to 35 billion cubic meters of

⁹² Mustafa Kemal Atatürk, 1923.

⁹³ "Turkish-U.S. Political Relations," *Republic of Turkey Ministry of Foreign Affairs Country Report-the U.S.*, http://www.mfa.gov.tr/turkish-u_s_-political-relations.en.mfa (accessed September 10, 2008).

Iranian natural gas via Turkey to Europe, is a test of America's commitment to bring alternate sources of gas and oil to the world's energy markets.

One interpretation of Turkey's desire for closer energy connections to Iran is that Ankara no longer believes Washington, distracted by Iraq, actively supports what was once a major U.S. objective: creating an East-West energy corridor, the network of existing and proposed pipelines that bring oil and gas from the Caucasus to the West avoiding both Russia's monopolized pipeline system and the crowded sea lanes in the Bosphorus. America runs the risk of losing the East-West energy corridor to alternate visions pursued by Iran, Russia, and China.

Tehran has made concessions to Ankara on energy transit questions to win Turkey's cooperation. Russia is meanwhile trying to reduce the importance of Turkey as an energy hub by proposing that Turkmen gas skirt Turkey. Chinese President Hu Jintao signed agreements with Kazakhstan and Turkmenistan to move oil and gas east during his recent visit to the region. Leaders of Russia and China and four Central Asian states have just established an "energy club," which does not include the United States. The U.S. Administration has tried to stay in the game by financing a new feasibility study with Azerbaijan for the construction of two new trans-Caspian pipelines, but it will take political and economic muscle to make studies reality.

In 1995, to promote supply alternatives, the United States announced support for an oil pipeline that would bring Caspian crude from Baku, Azerbaijan to the southern Turkish port of Ceyhan. Although some commentators said that the pipeline would never be built, they were wrong. In 2006, oil first flowed through the pipeline, which now runs through Georgia. With strong U.S. backing, diversity of supply became a reality.

Other important pipelines in Turkey can further contribute to that diversity. The South Caucasus pipeline (Baku-Erzurum-Ceyhan) began to move gas in July. The Shah Deniz project taps Azeri gas fields in the Caspian Sea and then transports the gas across Georgia and Turkey. An onward connection will carry this natural gas to Greece and Italy. Other lines across Turkey are also possible, and perhaps one day, a Turkey-Israel oil or gas pipeline.

Strategic foresight requires considering potential military threats to this energy supply, since investors want to know that the facilities will be secure. While no one can predict the ultimate outcome of the U.S. invasion of Iraq, what is certain is that protecting Western interests in and around the Middle East will require the presence of U.S. forces in the region for years to come. Decisions the Administration takes today about force levels in Iraq or arms sales to the Gulf can either expand or constrain America's ability to promote these interests, including energy security. Saudi Arabia has reportedly begun setting up a 35,000-strong security force to protect oil infrastructure from potential attacks. The Turkish airbase at Incirlik is near Ceyhan, the end of the 1,760 kilometer BTC pipeline; it must be at the heart of any serious Turkish-Western thinking about how to be ready to protect the energy corridor.

Western leaders need to move quickly to renew energy security as a foundation for relations with Turkey. This requires more than friendly rhetoric and promises. The Turkish public will be skeptical of any proposal emanating from Washington, and U.S. policy choices about Turkey, including actions in Congress, should be made with Western energy security interests in mind. The U.S. Administration can gain traction on energy security by taking active measures against the PKK, the terrorist group committed to the dismemberment of Turkey that operates in Northern Iraq. The Administration should not permanently base U.S. forces in the Kurdish areas in the north of Iraq, which Turks will see as U.S. support for an independent Kurdish state. U.S. leaders must convince Turks that they won't prematurely withdraw from Iraq, creating a vacuum that will leave that country in even further distress. Europeans should leave the door open to Turkey's full European Union membership.⁹⁴

B. TURKISH-U.S. RELATIONS AND ENERGY SECURITY

The nature of the Turkish-American relations during the Cold War era was mostly based on defense and security cooperation. Military cooperation was

⁹⁴ "Add Energy to America's Relations with Turkey," *German Marshall Fund of the United States*, <http://blog.gmfus.org/2007/09/07/add-energy-to-america%E2%80%99s-relations-with-turkey/> (accessed October 22, 2008).

almost exclusively in the form of U.S. security assistance. Turkey found security in the Turkish-U.S. partnership and within NATO,⁹⁵ whereas the U.S. has found a reliable ally in the alliance.

“Although the threat of an all-out war between the superpowers in the post Cold War era has decreased dramatically, new and potentially much more explosive problems emerged. Among them was a flare-up in ethnic tensions with a tendency for violent irredentism which had swept through much of the Balkans and the Caucasus with potentially disastrous consequences for the entire region.”⁹⁶ Other asymmetric risks and threats in the form of terrorism, religious extremism, rapid population growth of the developing countries, pollution on a global scale, racism, xenophobia, and, of course energy security gained ground.

In line with this change in the nature of global and regional risks and challenges, the dynamics of Turkish-U.S. relations have also shifted. A new concept called "enhanced partnership" was introduced in 1991. This new concept aimed at diversifying and deepening the Turkish-American relationship, as well as developing it on a more substantial basis. On the other hand, since 1992, the financial value of the security assistance (military and economic) provided by the U.S. to Turkey has steadily decreased. Before the Iraq war broke out, Turkey, on the one hand, tried to contribute to the solution of the crisis on both bilateral and multilateral levels. On the other hand, Turkey entered into negotiations with the U.S. on the political, economic and military issues, to eliminate the possible negative impacts of a possible war. In accordance with Article 92 of the Turkish Constitution, the motion that would have allowed the opening of a northern front through Turkey was rejected by the Turkish Grand National Assembly (TGNA) on March 1, 2003.⁹⁷ However, the TGNA has adopted a decision for Turkey to

⁹⁵ Turkey has been the only Muslim-NATO member country since 1952.

⁹⁶ Turkish-U.S. Political Relations," *Republic of Turkey Ministry of Foreign Affairs Country Report-the U.S.*, http://www.mfa.gov.tr/turkish-u_s_-political-relations.en.mfa (accessed September 10, 2008).

⁹⁷ "The Government's Trial by Parliamentary Vote, *Turkish Daily News Archives*, <http://arama.hurriyet.com.tr/arsivnews.aspx?id=-587631> (accessed November 13, 2008).

contribute to the war effort as one of the main arteries funneling humanitarian aid to Iraq and the realization of the rotation activity of the U.S. troops in Iraq through Incirlik airbase.⁹⁸

Following the rejection of the motion, to establish a northern front, regular contacts and reciprocal high-level visits helped reconsolidate Turkish–U.S. friendship and provide the opportunity for both sides to better understand each other and the new dynamics guiding and defining the bilateral relationship. The two sides reiterated the mutual commitment to extend cooperation further. As a result of the efforts to rehabilitate and strengthen the relations, Secretary of State Dr. Condoleezza Rice and Minister of Foreign Affairs Gül agreed upon the “Shared Vision and Structured Dialogue to Advance the Strategic Partnership” in July 2006:

The relationship between Turkey and the United States is characterized by strong bonds of friendship, alliance, mutual trust, and a unity of vision. We share the same set of values and ideals in our regional and global objectives: the promotion of peace, democracy, freedom and prosperity. Thus, Turkey and the United States face common challenges and opportunities that demand our concerted efforts. These challenges and opportunities form the specific items of our common agenda for consultation and cooperation. We agree to translate our shared vision into common efforts through effective cooperation and structured dialogue. Turkey and the United States pledge themselves to work together on all issues of common concern, including promoting peace and stability in the broader Middle East through democracy; supporting international efforts towards a permanent settlement of the Arab-Israeli conflict, including international efforts to resolve the Israeli-Palestinian conflict on the basis of a two-state solution; fostering stability, democracy and prosperity in a unified Iraq; supporting diplomatic efforts regarding Iran’s nuclear program including the recent P5+1 initiative; contributing to stability, democracy and prosperity in the Black Sea region, the Caucasus, Central Asia and Afghanistan; supporting the achievement of a just and lasting, comprehensive and mutually acceptable settlement of the Cyprus

⁹⁸ Stephen J. Flanagan, “Turkey And The West: At A Strategic Crossroads?” *Center for Strategic and International Studies*, October 31, 2008, http://www.csis.org/index.php?option=com_csis_pubs&task=view&id=4142 (accessed November 10, 2008).

question under the auspices of the UN and in this context ending the isolation of the Turkish Cypriots; enhancing energy security, through diversification of routes and sources including from the Caspian basin; strengthening transatlantic relations and the transformation of NATO; countering terrorism, including the fight against the PKK and its affiliates; preventing WMD proliferation; combating illegal trafficking of persons, drugs and weapons; increasing understanding, respect and tolerance between and among religions and cultures; and promoting together effective multilateral action to find solutions to international challenges and crises of common concern. The United States strongly supports Turkey's accession to the European Union and the accession process now underway. Our consultation and cooperation will also include enhanced bilateral relations with particular emphasis on economic and commercial relations and investments; defense/military cooperation; science and technology and public diplomacy efforts and exchanges. Turkey and the United States make use of several consultation channels at various levels. It is now time to develop a more structured framework to make our strategic partnership more effective and results-oriented.⁹⁹

This document emphasizes the areas of cooperation on issues of common interest that allow structured consultations on those issues. The "Shared Vision Document" also calls on the parties to diversify their relations to include cooperation in economic, scientific and technological fields, and underlines the importance of vital cooperation in energy security issues. After the declaration of this document, Turkish-U.S. relations resumed being guided by a road map defining the direction and the scope of the bilateral cooperation.¹⁰⁰ "In accordance with the objectives set in the "Shared Vision" Document, an 'Action Plan' was adopted following the Turkish-American Economic Partnership

⁹⁹ "Shared Vision and Structured Dialogue to Advance the Turkish-American Strategic Partnership," *Republic of Turkey Ministry of Foreign Affairs Country Report-the U.S.*, http://www.mfa.gov.tr/turkish-u_s_-political-relations.en.mfa (accessed September 13, 2008).

¹⁰⁰ "The Government's Trial by Parliamentary Vote," *Turkish Daily News Archives*, <http://arama.hurriyet.com.tr/arsivnews.aspx?id=-587631> (accessed November 13, 2008).

Commission's Third Meeting, which was held in Turkey on February 8-9, 2007. This Action Plan was reviewed and updated during the Commission's Fourth meeting April 16 – 17, 2008 in Washington D.C.”¹⁰¹

Especially after the recent skyrocketing of crude oil prices, the U.S. further continued to improve the basis of the Turkish-U.S. energy security alliance. In this context, Rebecca Neff, the First Secretary in the Economic Section of the U.S. Embassy in Ankara gave a speech during a meeting on April 22, 2008, hosted by STEAM (Strategic, Technical, and Economic Research Center). She strongly underlined the mutual importance of the cooperation between Turkey and the U.S. concerning energy security issues:

Perhaps, U.S. Energy Secretary Samuel Bodman best captured America's interest in energy security when he said, “the U.S. desire to foster global economic growth means the world needs more energy.” The International Energy Agency estimates primary world energy needs will grow by 55% by 2030. And, because that will make the global energy market just that much more competitive, America has an energy policy that centers on the idea that we need to diversify our energy sources our energy suppliers and our energy supply routes.

In the Eurasian region, stretching from Brussels to Baghdad to Bishkek, the United States seeks open, transparent, market-driven development and distribution of energy resources and technologies. We have economic and national security reasons for doing so. The United States and the European Union share the largest economic relationship in the world. Together, we account for over half of the world's GDP. Our economies are inextricably linked, making Europe's energy supply very important to the United States' economy.

As President Bush said “energy security and climate change are two of the important challenges of our time.” We take these challenges seriously.

In the United States, we are working to promote cleaner, alternative and renewable sources of energy encourage nuclear power

¹⁰¹ “The Government's Trial by Parliamentary Vote,” *Turkish Daily News Archives*, <http://arama.hurriyet.com.tr/arsivnews.aspx?id=-587631> (accessed November 13, 2008).

expansion invest in science and technology and improve the efficiency of our electric power infrastructure. We are also engaging with others to bolster the diversity of supply and demand that will accelerate the investments needed for the world's energy security future.

One of our strongest partners in this endeavor is Turkey. For over a decade, we have shared with Turkey a strategic vision to open new energy corridors, to bring new resources market. One of our great success stories is the Baku-Tbilisi-Ceyhan pipeline. BTC added to global energy supplies fostered regional cooperation and bolstered the freedom and independence of countries in the region, especially the former Soviet states. Investors made BTC succeed, but it happened because governments wanted it to. Key leaders, including former President of the Turkish Republic Suleyman Demirel and the late President of Azerbaijan Haydar Aliyev, had a vision, and it was not the top-down monopolist way of doing business that might otherwise have carried the day – and that some still promote. These forward-looking leaders joined us and others in recognizing the value of a market-oriented, transparent and open commercial energy architecture.

Today we are facing new challenges as we work to apply these same market principles to develop natural gas from the Caspian and Central Asia and bring it to market. We have made progress. In 2007, the South Caucasus gas corridor transported more than 2.5 billion cubic meters of Azeri gas across Georgia to Turkey. Some of this gas transits on to Greece via the inter-connector pipeline inaugurated in November of last year by Prime Ministers Erdogan and Karamanlis, with the personal support of U.S. Energy Secretary Bodman.

The role of Turkey as a gas consumer, a transit partner and possibly as a gas hub, in this era of fast-rising gas demand, is an issue for Turkey to decide. Some of the key elements that would create an efficient gas market – such as a legal and regulatory structure that facilitates predictable and transparent delivery of gas; or a physical infrastructure that provides large storage capacity to weather any disruptions in supply – are also part of the infrastructure that would be needed to develop a gas hub.

And, of course, another important element is sufficient gas supply.

Just over the horizon, the most likely near-term addition to regional supplies is Phase II development of the Shah Deniz gas field which should raise this project's output to over 20 billion cubic meters by 2014. Development of these supplies and markets is the impetus for Nabucco, Turkey-Greece-Italy and other pipeline ideas now on the table.

Turning these ideas into reality requires linking suppliers buyers financiers and a regime for transport to market. In this context, clarifying the gas transit arrangements between Turkey and Azerbaijan could accelerate Shah Deniz Phase II and other much needed gas development.

Turkmenistan and Kazakhstan are key, additional sources of gas. President Berdymukhamedov is wisely auditing his country's energy potential as Turkmenistan charts its way forward. Involving major international firms as investors will bring welcome funds, expertise and diversity of partners. Of course, it will also be highly desirable for Turkmenistan to have alternative export possibilities. The most viable route to market is through Turkey. Turkmenistan and Turkey can also be important partners as Kazakhstan looks to diversify its export routes for gas.

Iraq also has significant gas resources, according to the U.S. Energy Information Agency probable gas reserves in Iraq amount to over 8 trillion cubic meters. Energy is an obvious area of common interest between Turkey and Iraq and there have already been a series of productive talks between the two countries. The United States is facilitating Turkey-Iraq cooperation through a trilateral natural gas working group. Once the legal status of Iraq's hydrocarbon development becomes clear, we expect to see a significant jump in Iraqi-Turkish energy cooperation.

The one country I have not mentioned yet is Iran. It has the world's second largest natural gas reserves, after Russia. That would normally make Iran a tempting partner for an energy hungry world. But this is not the time for "business as usual" with Iran. Iran presents a profound national security threat to the United States and all our allies in the region through its pursuit of nuclear weapons-related technology and capabilities its defiance of UN Security Council obligations and the destabilizing role it plays in the region. The goal of the UN Security Council and the wider international community, including my government, is to convince Iran to abandon its nuclear weapons ambitions and urge Tehran to

become a better neighbor in the region. We are committed to a diplomatic solution, and we fully support the UNSC's efforts to apply increasing diplomatic and economic pressure to persuade Tehran to decide between confrontation and isolation, or cooperation and reward.

We do not seek Iran's isolation. On the contrary, since June 2006, the five permanent members of the UN Security Council – Russia, China, France, the United Kingdom, and the United States – as well as Germany, the so-called P5+1, with full support of the European Union, have extended to the Iranian government a generous incentives package and we urge Iran to accept it.

While Iran ponders its options, energy development in the region should continue without it. We should focus our resources and investment in those countries that are ready to move forward now on the basis of open, market-oriented principles.

This is an historic time. The world's rising demand for energy is the positive reflection of economic development and prosperity around the globe. But its speed and size are straining supplies, infrastructure and markets, and there are other problems, such as global warming, that directly affect all our energy policies. We know markets over time will provide the necessary resources. But governments have a critical role to play in facilitating development in promoting technologies in making necessary international arrangements and in protecting the environment.¹⁰²

The United States will continue to work with Turkey, the Caspian, Central Asia, the Caucasus, Iraq and other partners in the world to ensure we have the energy resources to continue this growth for decades to come.¹⁰³

Just before this speech, the Turkey-United States Economic Partnership Commission (EPC) met for the fourth time on 16-17 April 2008 in Washington. Once again, the closing remarks emphasize the vital Turkish-U.S. energy security cooperation, and encouraged further developments, as well. A

¹⁰² "Remarks by Rebecca Neff for STEAM 8th International Energy Arena," *The U.S. Embassy in Ankara*, http://turkey.usembassy.gov/statement_053008.html (accessed October 22, 2008).

¹⁰³ John Roberts, "The Turkish Gate: Energy Transit and Security Issues," *Turkish Policy Quarterly*, http://www.esiweb.org/pdf/esi_turkey_tpq_id_13.pdf (accessed August 21, 2008).

substantial portion of the EPC dialogue was committed to energy security, highlighting the valued energy relationship and addressing shared interests in a Southern Corridor and expanded regional cooperation on oil and gas, including the Nabucco and Turkey-Greece-Italy pipelines. Turkish and U.S. delegations decided to deepen their cooperation and work together to ensure supply security for Turkey, as well as the commercially viable transit of gas. Expanding energy supply, as well as diversifying sources and routes, is key to helping Turkey and Europe satisfy their energy needs. Both delegations agreed on the need for enhanced cooperation on nuclear energy, as well. In order to address energy security in the most comprehensive manner, the Turkish co-chair suggested establishment of a bilateral consultative mechanism on energy.¹⁰⁴

Last, but probably most important, the U.S. Department of Energy published a fact sheet on U.S.-Turkey Cooperation in Global Energy Security. After all the declarations and speeches mentioned above, this document officially indicates an entirely new and effective U.S. course of action regarding the bilateral cooperation initiative between Turkey and the U.S. the on energy security issue. Because it is a kind of constitution of new mutual implementation plan, it should be given here as a whole.

According to the U.S. Department of Energy (DOE), the U.S. is committed to assisting Turkey with its energy security, as Turkey is a key component of a larger regional strategy for increased energy production and diversification of oil and gas transit routes.

The U.S. is collaborating with Turkish partners on the energy projects they identify as a priority - for the development, financing and insurance of energy projects such as pipelines, power plants and electricity distribution systems.

¹⁰⁴ "Joint Communiqué: Turkey-United States Economic Partnership Commission," *U.S. Department of State*, May 2, 2008, <http://www.state.gov/r/pa/prs/ps/2008/may/104321.htm> (accessed September 19, 2008).

In collaboration with Turkish counterparts, the U.S. can work to deploy renewable energy and clean coal technologies, increase the reliability and efficiency of electricity generation and delivery, and decrease Turkey's energy intensity.

The U.S. is committed to the free flow of Caspian energy resources, particularly to western markets. DOE recognizes that Turkey can play a key role as a transit corridor between Eurasia and Europe.

The U.S. is ready to provide support for Turkey's energy sector, including facilitating investment in generation, transmission, renewable energy, nuclear energy and energy efficiency.

Turkey is in the unique position to enhance its role as an energy gateway to Europe. Efficiency gains and a diversified fuel mix for electricity generation allow Turkey to maximize the gains due to its middle position between demand in Europe and supply in the Caspian and central Asia.

Turkey is an integral part of the DOE southern corridor strategy. However, terms and conditions for transit must meet the needs of all participants. This is best achieved by establishing standards for the entire corridor that will facilitate energy trade and transit, said DOE.

The U.S. wants to establish more efficient and productive financing mechanisms to support Turkish energy projects.¹⁰⁵

Moreover, on May 13, 2008, the U.S. House of Representatives submitted an important resolution promoting global energy supply security through increased cooperation among the United States, Turkey, Azerbaijan, and Georgia, by diversifying sources of energy, and implementing certain oil and natural gas pipeline projects for the safe and secure transportation of Eurasian hydrocarbon resources to world markets. According this resolution,

The U.S. House of Representatives:

¹⁰⁵ "DOE Fact Sheet: U.S.-Turkey Cooperation in Global Energy Security," November 11, 2008, <http://energy.ihs.com/News/security/2008/doe-fact-sheet-turkey-111108.htm> (accessed November 22, 2008).

(1) commends Turkey, Azerbaijan, Georgia, and Kazakhstan for their positive contributions to the East-West Energy Corridor and energy security in the region;

(2) encourages the Administration to continue to engage with the countries in the region and provide political and economic support for the projects;

(3) suggests the Administration should be involved in the facilitation of the energy security of transit countries based on usage of the East-West Energy Corridor;

(4) calls on the Administration to use more secretary or high-level delegations to increase diplomatic ties with the region;

(5) supports the newly-appointed Special Envoy for Eurasian Energy, and encourages his full engagement with the countries in the region, notably Azerbaijan, Turkmenistan, Turkey, and Kazakhstan;

(6) calls on the Administration to actively engage with European allies and encourage the European Union to develop a unified stance on the Nabucco project and become more involved;

(7) notes that economic and commercial projects offer greater promise than political, military, and institutional structures in promoting integration and development in the region; and

(8) urges the Administration to actively engage in the region in its efforts to secure the necessary guarantees for the realization of the projects under development, including the Samsun-Ceyhan oil pipeline, the Turkmenistan-Trans Caspian-Turkey-Europe Gas Pipeline Project, Nabucco, and Turkey-Iraq natural gas pipelines, and in this framework, intensify demarches related to Azerbaijan, Kazakhstan, Turkmenistan, and Iraq.¹⁰⁶

¹⁰⁶ "H. Res. 1187: Promoting Global Energy Supply Security through Increased Cooperation among the United States, Turkey, Azerbaijan, and Georgia, by Diversifying Sources of Energy, and Implementing Certain Oil and Natural Gas Pipeline Projects for the Safe and Secure Transportation of Eurasian Hydrocarbon Resources to World Markets," <http://www.govtrack.us/congress/bill.xpd?bill=hr110-1187> (accessed December 3, 2008).

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V. CONCLUSION

It is estimated that the global demand for energy may increase as much as 50 percent by 2025, with the demand for electricity rising more than 75 percent. More than half of this growth is projected to come from the world's emerging economies. In spite of the current economic crisis, the world is experiencing positive economic growth even with high oil prices. In order for that to continue all nations, need access to safe, affordable, and dependable supplies of energy. Because of the robust economic growth around the world especially in places like China and India the global demand for energy is expected to increase dramatically and at a rapid pace over the next 25 years.

At the same time, the world is experiencing very tight energy markets, with too much of our energy supplies coming from politically troubled parts of the world. Therefore, every nation must come to grips with the need to increase its own energy security. And when they do, they will begin to see that the need to increase energy security is not an individual problem that calls more than an individual solution.

To ensure energy security, countries must mitigate the effects of energy supply disruptions, expand energy infrastructure, promote a transparent and stable investment climate that attracts foreign investors, and advance clean energy technologies including renewable energy, clean coal, and emissions free nuclear power.

Turkey plays an important role in helping meet the growing energy demands in the region and around the world. The cooperation between the U.S. and Turkey furthers that goal. Actually, both sides have offered to collaborate more closely on energy security issues. Turkey is poised to be a leader by further establishing itself as a gateway between producers and consumers. However in order to expand it's leadership role Turkey must take a more proactive role in establishing a market oriented approach that will encourage investment,

competition, market pricing, energy efficiency, as well as transparency, stability, and reliability. The U.S. government sees Turkey as a strategic ally, a key player in the East-West energy corridor, and a lynchpin in getting Russian and Caspian energy assets to world markets. Turkey can be a major play in assuring regional energy security. However, they must continue to move forward on privatization, rule-of-law, transparency, and related issues that must be worked to make that a reality. The U.S. also seems to will continue to work with Turkey and encourage sustained momentum as they move forward in their development as a secure, reliable, transparent and market-oriented transportation hub and a key player in the world's energy markets. The U.S. officials often underline this fact. In this context, Secretary of Energy Samuel Bodman emphasizes that "Turkey is an important energy gateway between the East and the West. Fostering an environment that promotes investment opportunities as well as diversity of energy supply and suppliers through the global market, in a fair and transparent manner, is essential as our two nations work to grow our economies and increase energy security. We look forward to our continued cooperation with Turkey, particularly as we exchange ideas and technologies that will help meet the world's growing energy needs in an environmentally responsible way."¹⁰⁷

It is undeniable that Turkey is evolving into a vital energy transit hub. Turkey is an important energy gateway between the East and the West. The United States is, throughout the region, as well as in Turkey, working to enhance energy security, increase energy supplies, and diversify energy transportation routes. And the U.S. supports Turkey, which is a strong and dependable ally, in its role as a major oil and gas transit route in a market governed by fair and transparent rules.

Turkey has energy needs of its own. Turkey's efforts to become an energy hub are not a hegemonic endeavor. On the contrary, it is simply vital

¹⁰⁷ "Joint Press Conference with U.S. Energy Secretary Sam Bodman and Turkish Minister of Energy and Natural Resources Hilmi Guler," http://istanbul.usconsulate.gov/bodman_prconf_111607.html (accessed November 11, 2008).

attempts to survive in the future's energy competition. Moreover, Turkey's efforts are not sufficient. Turkey still has to put in practice additional and more effective policies to improve its own energy efficiency. This seems to be too fundamental and significant to reduce energy consumption.

In a world of increasing interdependence, energy security will depend much on how countries manage their relations with one another, whether bilaterally or within multilateral frameworks. That is why energy security will be one of the main challenges for U.S. foreign policy in the years ahead. The new competition environment requires looking not only around the corner, but also beyond the difficulties of cycles to both the reality of an ever more complex and integrated global energy system and the relations among the countries that participate in it.

...Yes, to a certain extent the new 'great game' has already begun. Access to energy is today not only a purely economic but also political problem. As long as resources are limited and demand is still increasing, consumerist countries should come to an agreement before the competition leads to serious tensions.¹⁰⁸

¹⁰⁸ "Der Spiegel Interview with Henry Kissinger on Europe's Falling Out with Washington," *Spiegelonline International*, October 10, 2005, <http://www.spiegel.de/international/spiegel/0,1518,379165,00.html> (accessed May 28, 2008).

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