TURKEY´S ENERGY STRATEGY: WHAT DIFFERENCE DOES IT MAKE TO BECOME AN ENERGY TRANSIT CORRDIOR, HUB OR CENTER?

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Abstract:
This article identifies the differences between being an energy corridor, hub or center, in the case of Turkey, with a particular focus on its foreign and domestic energy features. It elaborates the shift in Turkey's energy discourse from 1991 to nowadays in order to define the background which makes Turkey consider energy as a significant tool in foreign affairs and regional relations. The paper points to important consistencies and inconsistencies between Turkey's energy discourse, regional situation, foreign policy initiatives and domestic energy structure. Turkey's fuzzy energy discourse, as it was at the very beginning of this period, has gained a strategic vision during the last couple of years. Turkey implements energy as a strategic foreign policy tool, yet with a retroactive characteristic mainly arising from past discrepancies. This strategy, which is aimed at creating an energy transit corridor, can become proactive, making Turkey a hub or a center, and will be highly related to contractual terms of past and forthcoming energy agreements, changes in the energy mix and the successful use of massive investment.

Keywords: Turkey, energy policy, pipeline politics, energy investments.

Resumen:
Este artículo identifica las diferencias existentes entre ser un corredor energético, eje o centro, en lo que al caso de Turquía se refiere, y ello con especial énfasis en los aspectos de su política exterior y doméstica. Considera el cambio de discurso de energía de Turquía desde 1991 hasta hoy en día para definir los antecedentes que animan a Turquía a considerar la energía como un instrumento significativo en sus relaciones exteriores y a nivel regional. El artículo destaca numerosos aspectos tanto consistentes como inconsistentes entre el discurso turco en materia energética y la coyuntura regional, las iniciativas de política exterior y la estructura energética doméstica. El hasta ahora poco claro discurso turco en materia de política energética, tal y como aparecía al inicio de esta legislatura, adquirió una visión estratégica en el último par de años. Turquía utiliza la energía como una herramienta de política exterior estratégica, si bien con características heredadas de discrepancias pasadas. El que esta estrategia, destinada a crear un corredor energético, pueda adquirir características proactivas, transformando a Turquía en un centro o eje, estará profundamente relacionado con los términos de los contratos pasados y a venir, la corrección del mix energético y las exitosas implicaciones de inversiones masivas.

Palabras clave: *Turquía, política energética, políticas sobre gasoductos, inversiones en energía.*

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1. Introduction

Turkey can be regarded as an energy corridor mainly because it is a natural bridge between Western Europe, the Southern Mediterranean and hydrocarbon rich regions in North and North-East Eurasia, the North-East Caspian and the East and South-East Middle East[2]. In fact, 73% of world's proven oil and 72% of the world's proven gas reserves are located in Turkey's neighborhood, which includes the Russian Federation, the Caspian and the Middle Eastern countries as suppliers. As a result, Turkey has emerged as an energy transit country, yet with further aspirations to become an energy hub, and even an energy center.[3] There are of course some international and domestic restraints which limit Turkey's will to use energy as a foreign policy tool.[4] Turkey implements pipeline politics in order to overcome some of these restraints, which will be discussed in the next sections of this article.

Turkey's energy discourse mainly stems from the number, capacity and direction of existing and proposed pipelines. Although pipelines are a significant part of the energy policies, an analytical approach solely based on pipelines would fail to explain Turkey's restraints and risks in transforming transit features into strategic gains. Nor is there a clear definition of these terms to be transformed into thorough policy initiatives in the case of Turkey. This article, therefore, aims at setting down the differences between being an energy corridor, hub or center, particularly in the case of Turkey, regarding foreign and domestic features, both of which it is assumed will become very effective in due course. The article, within this assumption, suggests that:

Turkey as an energy transit corridor implies a variety of oil and gas pipelines, and other sorts of transportation, originating from Russia, the Caspian and the Middle East, not only for the Turkish market, but also for Europe and other markets via the Mediterranean. Turkey, in this scenario, receives certain transit fees; however, it fails to prioritise domestic needs, is satisfied with average transit terms and conditions, and can not re-export a considerable amount of the oil and gas passing through its lands.

Turkey as an energy hub stresses Turkey's extensive influence on a web of oil and gas pipelines as well as Liquefied Natural Gas (LNG) trade, not only in terms of its ability to influence transit terms and conditions, but also in re-exporting some of the hydrocarbons passing through this system. Compatibility between international agreements and the domestic energy mix is of utmost significance in avoiding a negative impact of one on the other and describes the level of success if Turkey becomes an energy hub.

Turkey as an energy center depicts a situation in which Turkey's energy hub features have been supported by massive investment, such as in nuclear power plants, a renewable energy program and a comprehensive infrastructure composed of additional refineries, natural gas storage facilities, LNG trains, vessels, marine terminals and ports. Turkey as an energy

[2] ***Akil, Hakkı: "Turkey's*** Role in European Security as the Epicenter of Regional ***Energy*** Routes", *Turkish Policy Quarterly*, vol. 3, no. 2 (2003), pp. 1-4. Babalı, Tuncay: "Turkey at the Energy Crossroads," *Middle East Quarterly*, vol. 16, no. 2 (Spring 2009), pp. 25-33.

[3] Bilgin, Mert: "The Emerging Caspian Energy Regime and Turkey's New Role", *The Turkish Yearbook of International Relations*, vol. 34 (2003), pp. 1-22. Pamir, Necdet: "Turkey a Case of a Transit State", in Luft, Gal and Korin, Anne (eds.) (2009): *Energy Security Challenges for the 21st Century*, Santa Barbara, Greenwood, pp. 250-260.

[4] Shaffer, Brenda: "Turkey's Energy Policies in a Tight Global Energy Market", *Insight Turkey*, vol. 8, no. 2 (April-June 2006), pp. 97-104. Winrow, Gareth M.: "Energy Security in the Black Sea Region: Economic Interdependence or Commercial and Political Rivalry," *Journal of Southeast European & Black Sea Studies*, vol. 2, no. 2 (May 2002), pp. 129-152.

center also requires the achievement of sufficient energy intensity and a sustainable energy mix.[5] Turkey in this case has a favorable balance between international agreements, pipelines, domestic energy structure and energy mix. This compatibility, in turn, conveys economic and strategic advantages, bolstering Turkey's regional influence.

Whether Turkey's energy strategies fall into one of these conceptual divisions is a significant issue that deserves further elaboration. Restraints and risks are as real as opportunities, and may limit Turkey's position and strategic gains. This article concentrates on this matter, trying to provide answers as to whether Turkey has been emerging as an energy corridor, hub or center and, if so, at what costs and benefits. The article points to "retroactive" characteristics of Turkey's present energy strategy, which arise from extensive use of pipeline politics as a means to foster regional cooperation and strategic investment, despite some lingering structural problems in the energy sector.

After this introduction, the article proposes a conceptual-historical analysis and looks at how Turkey's energy discourse shifted from a regional interest with political concerns to a retroactive energy strategy responsive to regional and global dynamics with continued domestic flaws. This analysis tries to understand the shift in Turkey's energy discourse from corridor to hub and center. It later focuses on existing and proposed pipelines with a particular focus on domestic energy issues. The article finally designates the potential and restraints of Turkey if it becomes a strategic hub, or a center, and stresses the likelihood of failure under given circumstances.

2. Turkey´s Energy Discourse and Foreign Policy Implications

In general, and as accepted publicly, differences between being an energy corridor, a hub or a center are related to the number and capacity of the pipelines crossing to Europe and the Mediterranean via Turkey. According to this approach Turkey as a corridor refers to East-West pipelines. Turkey as an energy hub implies East-West and North-South pipelines. Turkey as an energy center defines multidimensional pipelines with extensive capacities as well as storage facilities to balance and regulate the flow of oil and gas from suppliers to markets. This categorization, which is extensively based on pipelines, skips the significant relationship between energy geopolitics, foreign policy initiatives and industry. For a long period of time, Turkey's energy discourse has been fixed on international pipelines but has lacked a strategic vision. It may be useful to categorize some periods which can explain the move from discourse to strategy.

Turkey's approach to energy politics is highly related to political shifts that have happened from the disintegration of the USSR in 1991 to nowadays. Turkey, from 1991 to 1994, expressed very few concerns about energy security, and approached the Caucasus, the Caspian Sea and Central Asia from a perspective of cultural and economic cooperation.[6] An "East-West energy corridor" discourse based on pipelines from the Caspian Sea to Europe and the Mediterranean became recurrent from 1994 on. One crucial reason was Azerbaijan's

[5] Bilgin, Mert: "Neopolitics (New energy order politics) of Fossil, Renewable and Nuclear Fuels: Turkey's Position and Alternative Futures", *Journal of International Relations*, vol. 5, no. 20 (2009a), pp. 57-88.
[6] Aydin, Mustafa: "Foucault's Pendulum: Turkey in Central Asia and the Caucasus 1", *Turkish Studies*, vol. 5, no. 2 (Summer 2004), pp. 1-22 at 14-16.

integration into the world oil markets via Turkey, an initiative supported by the US.[7] Following Turkey's natural gas agreements with the Russian Federation, Iran and Azerbaijan, a new discourse on an "East-West energy corridor from Eurasia and the Middle East to Europe" appeared as a policy priority[8]. It was supposed that this priority could back up Turkey's foreign policy initiatives for improving relations with the Middle Eastern countries, while using the energy card as a tool for integration into the EU[9]. A multidimensional discourse on an East-West and North-South energy transit hub became dominant in 2009 and onwards[10].

It is therefore useful to point out that Turkey's interest in becoming an energy transit corridor, hub or center passed through four phases:[11]

1. Early phase with political-cultural concerns: 1991-1994.
2. East-West energy corridor originating from Caspian: 1994-2005.
3. East-West energy corridor originating from Eurasia and the Middle East: 2005-2009.
4. East-West and North-South energy transit hub originating from Russia, the Caspian Sea and the Middle East: 2009 and onwards.

Each of these phases contains some characteristics shaped by the global situation, regional dynamics, foreign policy options and domestic priorities. Supply and demand side pressures have also been influential in shifts from one phase to another.

2.1. Early Phase (1991-1994)

During the early phase, Turkey expressed very little interest in energy issues. The only transborder oil pipeline was Kirkuk-Ceyhan from Iraq to Turkey, which had started functioning in 1977 with a capacity of 35 million tons per year.[12] Turkey increased the capacity of this pipeline, reaching 46.5 million tons in 1984 and 70.9 million tons per year in 1987. The cold war conditions (1945-1991), the Iran-Iraq war (1980-1988) and Turkey's fragile economy throughout the 1970s and 1980s did not allow a foreign policy based on energy strategy. Turkey, as a close ally of the USA and The ***North Atlantic Treaty Organization***, had limited political and economic relations with the USSR for obvious

[7] Bilgin, Mert: "The Emerging Caspian Energy Regime and Turkey's New Role", *The Turkish Yearbook of International Relations*, vol. 34 (2003), pp. 1-22.
[8] See ***Akil,* op. cit.,** pp. 1-4.
[9] Jensen, Donald N.: "Turkey's Energy Ambitions Clash with Russian Succession Politics", *Turkish Policy Quarterly*, vol. 2, no. 6 (2007), pp. 35-44. Ker-Lindsay, James: "Turkey and A Black Sea Strategy for EU Enlargement", *Turkish Policy Quarterly*, vol. 7, no. 2 (2008), pp. 49-58. Larrabee, F. Stephen: "Obama's Foreign Policy: Opportunities and Challenges", *Insight Turkey***,** vol. 11, no. 1 (2009), pp. 1-11. Noureddine, Mohammed: "Arab-Turkish Cooperation in the New Era", *Insight Turkey*, vol. 11, no. 1 (2009), pp. 43-51.
[10] Bilgin, Mert: "New Prospects in Political Economy of Inner-Caspian Hydrocarbons & Western Energy Corridor through Turkey", *Energy Policy*, vol. 35, no. 12 (2007), pp. 6383-6394; 6387-6390.
[11] There may be deviations and cross features as these eras are meant to give an idea of the changes in the discourse rather than strictly categorizing policies within time intervals.
[12] See, Baram, Amazia: "Ideology and Power Politics in Syrian-Iraqi Relations 1968-1984", in Moshe Maoz and Avner Yaniv (eds.) (1986): *Syria under Assad*, Kent, Croom Helm, pp. 129.

reasons[13]. Consequently Turkey, which suffered from energy shortages from the 1970s to the late 1980s, did not benefit from the rich energy resources of the USSR. This was in contradiction to its needs and awkward in the sense that energy relations between the USSR and European countries had started to increase in the 1960s, especially in the case of natural gas. Turkey's increasing energy demand and the risks coming from electricity shortages implied the consideration of natural gas as a solution, although this approach was a little bit late if I make a comparison between Turkey and its European counterparts. Turkey signed natural gas and LNG import agreements with Algeria (via marine transportation) and Russia (via the existing Russia-Turkey West Pipeline coming to Turkey from Bulgaria) respectively on 14 February 1986 and 14 February 1988. Since then natural gas consumption has started to increase drastically, not only for domestic and industrial uses but also for electricity generation[14]. Actually, natural gas is the most used fuel type for electricity generation followed by coal, hydro and oil.[15] This is surprising when I make a comparison between Turkey and other European countries such as Germany, who imported high volumes of gas from Russia, but benefited from renewables and nuclear energy as much as possible in order to avoid extravagant electricity production from natural gas.

The disintegration of the USSR in 1991 had a twofold effect on Turkey's energy policies. First, it allowed a rapid increase in energy relations with Russia, keen to sell more gas to Turkey. Second, and somehow at odds with the first one, Turkey found itself in a position to politically fill the space left in Central Asia by Soviet Russia. It was involved in a sort of political expansion in the Caucasus and Central Asia by using cultural and linguistic ties, mainly with Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan and Kyrgyzstan. This initiative failed and was not fully achieved not only because Turkey could not launch the economic projects which were supposed to balance the negative consequences of USSR disintegration in the region after 69 years of inclusion in the USSR (1922-1991), but also because of the warfare between Azerbaijan and Armenia (1988-1994). To this the strong cultural and institutional ties of Kazakhstan, Turkmenistan, Uzbekistan and Kyrgyzstan with Russia have to be added. And finally, Russia really needs Turkmen, Kazakh and Uzbek gas to avoid the risks of decay in mature fields and sustain a strong market position in Europe by re-exporting gas from these countries. In the meantime, Turkey's energy relations with Russia entered a boom era which limited Turkey's aim to include Central Asian countries in a web of pipelines going to Europe and the Mediterranean[16]. Turkey, however, managed to strengthen ties with Azerbaijan not only by the virtue of its cultural-linguistic affiliation, but also due to developments in energy relations with Baku. This success has to be related to global dynamics and regional circumstances [17].

The first Azeri president Ebulfez Elchibey, who held the office from 16 June 1992 until his overthrow by a coup d'état in June 1993, followed a pro-Turkic line to obtain political support during the war with Armenia, which was backed by Russia. Interestingly

[13] For some perspectives, this era (1991-1994) describes a collegiate bureaucratic approach of Turkish foreign policy, see, Robins, Philip (2003): *Suits and uniforms: Turkish foreign policy since the Cold War*, London, C. Hurst & Co. Publishers, pp. 61-64.

[14] Ozturk, Harun Kemal; Yilanci, Ahmet and Atalay, Oner: "Past, present and future status of electricity in Turkey and the share of energy sources", *Renewable and Sustainable Energy Reviews*, vol. 11, no. 2 (February 2007), pp. 183-209.

[15] See: "Electricity Generation by Fuel, Turkey" *International Energy Agency (IEA), IEA Energy Statistics* (2009), at http://www.iea.org/stats/pdf_graphs/TRELEC.pdf.

[16] For bilateral relations between Turkey and Russia, see, Panin, Victor and Paniev, Henry: "Turkey and Russia", in Bal, İdris (ed.) (2004): *Turkish Foreign Policy in Post Cold War Era*, Florida, Brown Walker, pp. 253-268.

[17] For the role of the oil industry in Azerbaijan's regional status see, Shankleman, Jill (2006): *Oil, profits, and peace: does business have a role in peacemaking?*, Washington, US Institute of Peace Press, pp. 75-92.

energy relations between Azerbaijan and Turkey were not developed in this era, proving how energy politics have their own agenda, going beyond the expansion of cultural relations. An insecure investment environment because of warfare with Armenia and Elchibey's ultra nationalist approach, not allowing concessions to multinational companies, postponed oil and gas development projects which would be promptly carried out during the post-Elchibey era under the auspices of the US, Turkey and multinational companies.[18] This would change in 1994 and led to a new era in Turkey's energy discourse based on pipeline politics. It is therefore possible to find a correlation between the political initiatives assumed by Haidar Aliyev (1993-2003) and his son Ilham Aliyev (2003 and onwards) and Turkey's approach to the South Caucasus from an energy perspective up to 2009. This consistency broke down in October 2009, when Turkey agreed with Armenia on a protocol to normalize frozen conflicts and open borders which had remained closed because of Armenia's insistence on not withdrawing from the occupied Azeri rayons. This protocol, which was an outcome of Turkey's so called zero problem neighborhood policy, came along with a new discourse on energy in which Azerbaijan seemed to be considered as one of many suppliers, including Russia, Turkmenistan, Iran, Iraq, Qatar and Egypt. This shift was highly related to developments in gas supplies to Europe via Turkey, the success of Russia in boosting energy relations with Turkey, as well as to the government's priority in developing relations with Middle Eastern countries based on a neighborhood strategy which conceived Azerbaijan as an ordinary country rather than a strategic partner.

2.2. East-West Energy Corridor from Caspian Phase (1994-2005)

This phase was characterized by a variety of oil and gas pipeline projects which would bringCaspian hydrocarbons to Turkey[19]. The US supported the so-called Western route with two main goals. First, there was the hope of downgrading Russia's influence in Central Asia and the Caucasus. Second, there was the expectation of affecting China's commitment to importing energy from the Caspian Sea. Turkey, with the support from the US, took initiatives to get energy agreements and build oil and gas pipelines from the Caspian Sea. This plan would confront Russia's organic ties with Central Asia and China's growing energy demand[20]. Regional and domestic dynamics created a split in the Caspian energy system between Azerbaijan, which would develop relations with Turkey, and Turkmenistan, Kazakhstan and Uzbekistan that would rely on relations with Russia despite sporadic problems in price mechanism and transit duties. As an example, Turkey and Turkmenistan signed an intergovernmental agreement on 29 October 1998 and a sales and purchase agreement on 21 May 1999. Nevertheless these agreements would confront Russia's political influence, based on Gazprom's energy network from Central Asia to Europe and other CIS countries. The Caspian's unresolved legal status and the pitfalls of Iran's nuclear energy program limited chances to extend Turkmen pipelines to Turkey. Consequently Kazakhstan, Uzbekistan and Turkmenistan had to use the Russian transportation system. They also looked for alternative routes to cooperate with China, India and Iran.

Turkey, in the meantime, managed and developed energy relations with Azerbaijan, where Elchibey was replaced by Haidar Aliyev as the new president who would remain in power from June 1993 to October 2003 (two months before his death), when his son Ilham

[18] See, Lewis, David G. (1999): "The Politics of Energy in the Caspian Region", in *Regional Surveys of the World: Eastern Europe and the Commonwealth of Independent States*, London, Routledge, pp. 92-96.
[19] See, Bilgin, "The Emerging Caspian…", *op. cit.*
[20] For the significance of Central Asia, see, Dorian, James P.: "Central Asia: A major emerging energy player in the 21st century", *Energy Policy*, vol. 34, no. 5 (March 2006), pp. 544-555.

Aliyev succeeded as the new president[21]. The BP led Azerbaijan International Operating Company (AIOC) was formed in February 1995 to develop the giant Azeri, Chirag and Guneshli oil field. In 2002 the Baku-Tbilisi-Ceyhan Pipeline Company was founded to construct a pipeline from Azerbaijan to Turkey via Georgia with the goal of transporting the oil produced by the AIOC. The BTC pipeline became operational in 2005.

Transportation of Azeri gas from a similar route was also a significant concern for Azerbaijan, Turkey and Georgia, which were supported politically by the US who were searching to balance Russia's extensive influence in the Caspian Sea. On 7 July 2000, the EU Commission, Turkey and Greece signed a concluding statement on natural gas deliveries from Russia, Azerbaijan and other prospective suppliers to Greece. Following the discovery of additional natural gas fields in Shah Deniz, Turkey and Azerbaijan signed an inter-governmental agreement on 12 March 2001. A sales and purchase agreement between the states was also signed on 12 March 2001. On 28 March 2002, BOTAŞ from Turkey and DEPA from Greece signed a memorandum of understanding (MoU) concerning the South European Gas Ring, which was followed by an intergovernmental agreement between Turkey and Greece, signed on 23 February 2003. Having established contacts with potential buyers in Europe, Turkey furthered attempts to include Kazakhstan and Turkmenistan within the East-West energy corridor, which would definitely damage Russia's economic interests in Europe and limit its political influence in Central Asia and the Caucasus.[22] Kazakhstan and Uzbekistan got involved in additional ties with Russia when leading foreign companies in the Caspian Sea, such as ExxonMobil and Chevron, chose to transport the oil and gas they produced from fields such as Tengiz, Kashagan and Karachaganak through the Russian transportation system.[23] In the meantime, Turkmenistan's security of demand was challenged by severe problems with Russia on trade terms and transit fees. Turkmenistan, at this stage, could not find a way to commercialize its natural gas other than through working with Russia. The Trans-Caspian pipeline was outdated by disputes between Azerbaijan and Turkmenistan on transit fees, on certain fields in the Caspian Sea and the capacity to be attributed to Turkmen gas. Companies exploiting Kazakh fields benefited from the Russian transportation system and started their exports soon after their investment, whereas Turkmenistan and Uzbekistan continued their dependence on Russia because the conflict on the Caspian's legal status among the littoral states (Russia, Iran, Azerbaijan, Kazakhstan and Turkmenistan) was doomed to a deadlock.[24] International law needed either to go to arbitration after full consensus or to achieve a multilateral agreement, which also required full consensus. This picture increased the significance of the relations between Turkmenistan and Iran. To curb extreme dependence on Russia, Turkmenistan had already launched a 190 km gas pipeline from Korpedje (Turkmenistan) to Kurtkui (Iran) in January 1998.[25] This route would give Turkey an opportunity to export gas from Turkmenistan and Iran through a pipeline between Tabriz and Erzurum. Turkey and Iran had already signed an agreement to trade 10 billion m^3/year (BcM) of gas on 8 August 1996, followed by an intergovernmental agreement signed

[21] Kalyuzhnova, Yelena (2008): *Economics of the Caspian Oil and Gas Wealth: Companies, Governments, Policies*, New York, Palgrave Macmillan, p. 38.
[22] Cutler, Robert M.: "Turkey and the Geopolitics of Turkmenistan's Natural Gas", *Review of International Affairs*, vol. 1, no. 2 (Winter 2001), pp. 20-33.
[23] For existing and alternative routes see, Guliyev, Farid and Akhrarkhodjaeva, Nozima: "The Trans-Caspian energy route: Cronyism, competition and cooperation in Kazakh oil export", *Energy Policy*, vol. 37, no. 8 (August 2009), pp. 3171-3182.
[24] Amineh, Mehdi P. (1999): *Towards the control of oil resources in the Caspian Region*, New York, Palgrave Macmillan, pp. 143-207.
[25] Askari, Hossein and Taghavi, Roshanak: "Iran's Caspian Oil and Gas Dilemma", in Mojtahed-Zadeh, Pirouz (ed.) (2007): *Boundary Politics and International Boundaries of Iran*, Florida, Universal-Publishers, pp. 91-92.

on 30 August 1996 to construct a gas pipeline between Tabriz and Erzurum. This pipeline, which started functioning in 2001, would enable Turkey to import gas from Turkmenistan along with Iran.

Iran's political isolation and inadequate domestic infrastructure at the time did not allow Turkey to develop additional pipelines from Turkmenistan and Iran to Turkey.[26] Turkey, in response, looked for other suppliers in the Middle East and started preparations for a massive project following the unofficial agreement between the Turkish BOTAS and Austrian OMV companies in February 2002. In June 2004, BOTAŞ (Turkey), Bulgargaz (Bulgaria), Transgaz (Romania), OMV (Austria) and MOL (Hungary) founded the Nabucco International Company with the aim of supplying gas from the Caspian and Middle East to European markets by a proposed 3300 km pipeline from Turkey's border (to Georgia and/or to Iran) to Baumgarten in Austria.[27]

2.3. East-West Energy Corridor Originating from Eurasia and the Middle East (2005-2009)

Pipelines from Azerbaijan, Turkmenistan and Iran, with possible extensions from Iraq and Qatar, to Turkey were a matter of concern to Russia, affecting its strong market position in Europe. Russia, along with Nord Stream crossing the Baltic Sea, proposed the South Stream pipeline project.[28] Italian ENI and Gazprom signed a MoU for the construction of South Stream on 23 June 2007, to pass through the Black Sea, reach Bulgaria and distribute natural gas to several European countries (Bulgaria, Serbia, Hungary, Italy and Austria) that were also targeted by Nabucco as potential markets.

The Nabucco project faced the difficulty of convincing European counterparts to buy natural gas from an emerging pipeline with no supply guarantee, as opposed to Russia which has been supplying natural gas to Europe for the last 40 years with no interruption[29]. On 5 February 2008, RWE from Germany became the sixth member of the Nabucco consortium, every member maintaining an equal share of 16.67%. This made sense as RWE was a significant distribution company in countries which were considered to be important markets of the consortium. On 13 July 2009, Austria, Hungary, Romania, Bulgaria and Turkey signed The Inter-Governmental Agreement (IGA) as transit countries to allow construction of the pipeline in their territory[30]. Natural gas pipelines from Turkmenistan to Iran, from Iran to Turkey, from Azerbaijan to Turkey via Georgia and the possibility of extensions from Iraq and Egypt (via the Arab gas pipeline) helped Turkey implement pipeline politics as leverage in regional relations: with the EU and EU members (mainly Greece and Italy) on the demand side; Russia, Azerbaijan, Kazakhstan, Turkmenistan, Iran, Iraq, Egypt and Qatar on the supply side; Georgia, Syria, Austria, Hungary, Romania, Bulgaria, Greece and Italy as transit countries.

[26] Kinnander, Elin: "The Turkish-Iranian Gas Relationship: Politically Successful, Commercially Problematic", Oxford, *OIES Paper*, No. 38 (2010).
[27] "Markets for Nabucco", *Nabucco Consortium*, at http://www.nabucco-pipeline.com/company/markets-sources-for-nabucco/markets-sources-for-nabucco.html.
[28] For Russia's monopolistic strategy see, Umbach, Frank: "Global energy security and the implications for the EU", *Energy Policy*, vol. 38, no. 3 (2010), pp. 1237-1238.
[29] Bilgin, Mert: "Geopolitics of European natural gas demand: Supplies from Russia, Caspian and the Middle East", *Energy Policy*, vol. 37, no. 11 (2009b), pp. 4482-4491.
[30] "Inter-Governmental Agreement (IGA) guarantees stable legal framework for gas transit", Press Release, *Nabucco Consortium*, Ankara, (13 July 2009), at http://www.nabucco-pipeline.com/press-public-news/press-releases/press-release-20090713.html.

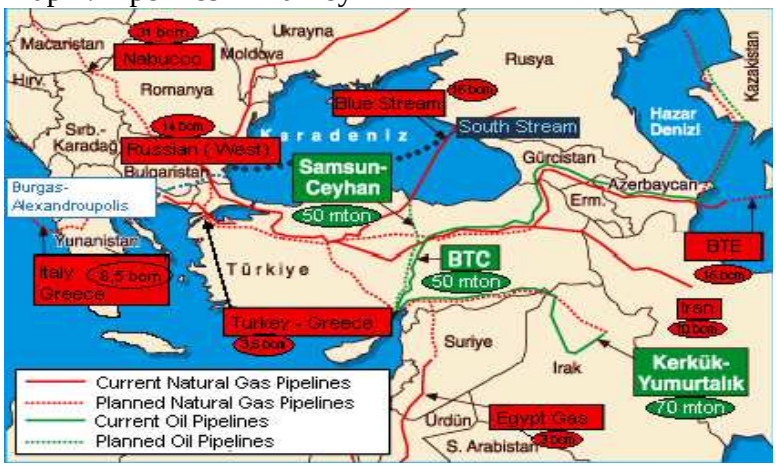
3. Turkey´s Energy View: From Discourse to Strategy after 2010?

3.1. Pipelines as the Leitmotif of Turkey´s Energy Strategy

Concerns of global actors, regional dynamics and Turkey's increasing efforts to implement energy as a means of foreign policy led to some oil and gas pipelines as well as some feasible projects. What actual pipelines and pipeline projects derive from Turkey's motivation to use energy as a tool to bolster regional relations?

As indicated by Map 1, Turkey has already been surrounded by oil and gas pipelines.[31]

Map 1. Pipelines in Turkey



Source: Erkin, 2008

With regard to oil, two parallel pipelines from Iraq to Turkey reach a total capacity of 71 million tons annually (Mta). The pipelines, however, function under capacity and are frequently disrupted by terrorist attacks. Baku-Tbilisi-Ceyhan from Azerbaijan currently functions almost at full capacity reaching 50 Mta.

Table 1. Oil Pipelines to Turkey

	Diameter	Length	Capacity	Status	Supplier
Kirkuk-Ceyhan Crude Oil Parallel Pipelines I & II	40"-46"	641-656	71 mta	Active	Iraq
Baku Tbilisi Ceyhan Crude Oil Pipeline	30"-42"-46"	1076	50 mta	Active	Azerbaijan
Samsun-Ceyhan			50 mta	Proposal	Russia-Kazakhstan

Source: Adopted by author from: Bilgin 2003, 2007, 2009a, 2009b; BOTAS, 2010; EIA, 2010; IEA, 2010; MENR, 2010

Turkey and Russia have been considering the construction of another oil pipeline from Samsun (Turkey's Black Sea coast) to Ceyhan (Turkey's Mediterranean coast). The Samsun-

[31] Erkin, Tuğrul: "Speech on Turkey's Role in Energy Security", presented at *EU & Turkish Perspectives on Black Sea Regional Cooperation Conference*, Berlin (29 May 2008).

Ceyhan pipeline will not only allow Turkey to decrease the number of oil tankers passing through Istanbul Strait, but is also expected to contribute to Turkey's aim of becoming an energy hub. Oil transport to Ceyhan will be increased up to 171 Mta (4.5% of world oil refining capacity) if these pipelines function at full capacity. It will become more feasible to build refineries, ports and petrochemical units in Ceyhan which will facilitate the construction of the proposed Ceyhan Energy Industry Region (CEIR). Construction of the Samsun-Ceyhan oil pipeline will definitely increase the interest of Russia and Russian firms in building refineries in CEIR.

Natural Gas

Turkey's natural gas agreements with Russia, Azerbaijan, Turkmenistan and Iran reached an amount of 62.5 BcM; a huge amount far exceeding Turkey's consumption of 36 BcM in 2008 and 32 BcM in 2009.[32] Turkey's agreement with Turkmenistan remained idle, whereas the supplies from Azerbaijan and Iran remained below full capacity.[33] In addition, Turkey has LNG agreements with Algeria (4 BcM) and Nigeria (1.2 BcM).

Table 2. Turkey's Natural Gas Agreements

Agreement	Volume BCMA (Plateau Period)	Date Of Signature	Duration (Years)	Status
Russian Fed. (West)	6	14 February 1986	25	In operation
Russian Fed. (Black Sea)	16	15 December 1997	25	In operation
Russian Fed. (West)	8	18 February 1998	23	In operation
Iran	10	8 August 1996	25	In operation
Turkmenistan	16	21 May 1999	30	-
Azerbaijan	6.6	12 March 2001	15	In operation

Source: Botas, 2010

Russia apparently is the main gas supplier to Turkey with agreements reaching 30 BcM. Azerbaijan emerged as an alternative supplier to Turkey and may supply up to 15 BcM of gas after the discoveries in Shah Deniz. Supplies from Azerbaijan to Turkey depend on the price negotiations, Russia offered higher prices to the Azeri government, which has already become highly sensitive to developments between Turkey and Armenia. Regarding Central Asia, Turkey and Turkmenistan could not activate the 30 BcM of natural gas agreement due to the lack of pipelines linking the two countries. As mentioned earlier, Turkmenistan has become able to sell only small volumes of natural gas to Turkey via Iran. Iran until recently, suffered from undeveloped domestic infrastructure and was far behind the necessary level to secure supplies to Turkey while meeting domestic demand. Iran's investments in IGAT programs and two pipeline extensions from Turkmenistan to Iran increased the significance of these two countries, which can nowadays supply about 20 BcM of gas annually.

In sum, pipelines from Russia, Azerbaijan and Iran allow Turkey to receive 60 BcM of gas annually. In 2008, Turkey imported 23 BcM from Russia (13.2 from the West pipeline,

[32] BOTAS: Petroleum Pipeline Corporation, Oil and Gas Pipelines 2010, at http://www.botas.gov.tr/index.asp, (accessed on 27 January 2010).
[33] Bilgin, Mert: "New Prospects in Political Economy of Inner-Caspian Hydrocarbons & Western Energy Corridor through Turkey", *Energy Policy*, vol. 35, no. 12 (2007), pp. 6383-6394.

9.8 from Blue Stream), 4.5 BcM from Azerbaijan and 4.1 BcM from Iran and reached a total import of 31.6 BcM with 72 percent of dependence on Russia.

Table 3. Natural Gas Pipelines to Turkey

Project / Features	Diameter	Length	Capacity	Status	Supplier	Imports in 2008
Russian Gas West	46"-42"-34"	845	14 BcM	Active since 1987	Russia	13.2 BcM
Blue Stream	56"-24"-48"	501	16 BcM	Active since 2003	Russia	9.8 BcM
Baku-Tbilisi-Erzurum	42"	915	16-20 BcM	Active since 2007	Azerbaijan	4.5 BcM
Tabriz-Erzurum-Ankara	16"-48"	1494	10 BcM	Active since 2001	Iran - Turkmenistan	4.1 BcM

Source: Adopted by author from: Bilgin 2003, 2007, 2009a, 2009b; BOTAS, 2010; EIA, 2010; IEA, 2010; MENR, 2010

As regards the demand side, Turkey's transit role in relation to Europe stems from the Turkey-Greece-Italy (TGI) pipeline and the Nabucco pipeline project. Turkey-Greece-Italy pipeline interconnection is the result of a joint project arranged by Edison from Italy, and DESFA from Greece.

Turkey-Greece interconnections, which have been established since 2007, will be extended to Italy after the construction of the Greece-Italy pipeline in 2013. Accordingly, the interconnections will lead to a sort of new pipeline from Turkey to Greece to Italy with a capacity of 12 BCM.

Table 4. Natural Gas Pipelines to Europe via Turkey

Project / Features	Diameter	Length	Capacity	Status	Supplier
Turkey-Greece-Italy	36"	808	3.5 BcM to Greece. It can be increased to 12 BcM	Turkey Greece Interconnection active since 2007. Greece-Italy is under construction, to function in 2013	Azerbaijan
Nabucco	42"-56"	3300	31 BcM	Intergovernmental Agreement Signed in 2009 to start operation in 2014	Azerbaijan agreed; Turkmenistan, Iran, Iraq, Egypt, Qatar under consideration

Source: Adopted by author from: Bilgin 2003, 2007, 2009a, 2009b; BOTAS, 2010; EIA, 2010; IEA, 2010; MENR, 2010

The Nabucco pipeline is planned to start functioning in 2014 with a capacity of 10 BcM, to be increased up to 31 BcM. Turkey will have the capacity to transport 43 BcM of gas to Europe if TGI and Nabucco functions at full capacity. Additional pipelines may allow a growing transit role. Turkey, however, has three main discrepancies resulting from current natural gas agreements which limit its strategic gains. First of all, natural gas agreements impose "take or pay" terms which make Turkey pay the amount of contracted gas even if it does not take it. Secondly, Turkey does not have the right to re-export the gas under any circumstances. A third factor, which limits Turkey's role in regional energy relations, emerges from the lack of adequate gas storage capacity in Turkey. Turkey's actual gas storage capacity is limited to the Silivri facility of 2 BcM (maximum, depending on the density) which is far behind the level necessary to become a gas hub. The LNG storage facility, which belongs to Egegaz, a private company, with 5.5 BcM capacity in Izmir, makes some sense for domestic energy security. Yet it remains inadequate for strategic regional implications. This is why Turkey's plan to achieve additional storage capacity of 5 BcM by wells to be built in Tuz Golu (Salt Lake) is of vital importance for supporting its role in regional energy relations.

3.2. The Link between Pipeline Politics and Domestic Energy Issues

Turkey's energy discourse is related to regional dynamics, concerning Russia, Azerbaijan, Iran and Iraq as actual suppliers, and priorities of the US and the EU, which prove to be highly effective respectively in the cases of the BTC and BTE pipelines and the Nabucco pipeline project.[34] The Nabucco natural gas pipeline project has so far been supported by the EU Commission despite the unwilling position of certain EU member states. Regional dynamics, in the meantime, have played a significant role in making Azerbaijan more interested in pipelines through Turkey rather than to Russia, until very recently. The Blue Stream gas pipeline emerged not only because Turkey was in urgent need of energy at the time, but also due to Russia's successful lobbying activities[35]. Turkey had taken some initiatives to build oil and gas pipelines that gave priority to mutual interests with suppliers rather to the interests of third parties. Oil pipelines from Kirkuk and a natural gas pipeline from Iran are good examples in this regard. It is therefore possible to conclude that Turkey's changing energy discourse has been shaped by external powers (the US, the EU and Russia) and regional dynamics in Central Asia, the Caucasus and the Middle East whether it be related to supply, demand or transit routes.

Consequently, Turkey's energy discourse turned into a "retroactive energy strategy" arising from the interaction of Turkey with concerned countries:

1-with the US, especially with oil and gas pipelines from the Caspian Sea, which led to the BTC oil and BTE gas pipelines;

2- with the EU as well as Greece and Italy with natural gas pipelines as in the cases of Turkey-Greece-Italy interconnections and the Nabucco project;

3-with Russia with the Russia West and Blue Stream gas pipelines as well as the proposed Samsun-Ceyhan oil pipeline project;

[34] See, "Turkey" Country Analysis Briefs, *US Energy Information Administration (EIA)* (April 2009), at http://www.eia.doe.gov/cabs/Turkey/pdf.pdf.

[35] For energy relations between Russia and Turkey, see, Kiniklioğlu, Suat: "Turkey and Russia: Partnership by Exclusion?", *Turkish Policy Quarterly*, vol. 2, no. 5 (2006), pp. 31-47.

4-with Azerbaijan and Georgia, with oil and gas transportation from the Caspian Sea to Turkey;

5-with Iran with the Tabriz-Erzurum-Ankara gas pipeline on the one hand and further extension projects from Turkmenistan to Turkey via Iran on the other;

6- with Iraq not only with the Kirkuk-Yumurtalik oil pipeline but also with the possibility of including Iraqi gas within the Nabucco pipeline;

7- with Iraq, Syria and Egypt with the extension of the Arab Gas pipeline to Turkey, and possibly to Europe via Nabucco;

8- with Qatar, with the possibility of a gas pipeline extension to Turkey and more LNG trade via Turkey;

9- with Israel with the possibility of extending pipelines from Ceyhan to Haifa.

It is therefore possible to talk about Turkey's retroactive energy strategy which stems from certain foreign policy implications and regional developments.[36] Turkey, under these conditions, emerges as an energy corridor with certain geopolitical advantages. Can Turkey move on from being an energy transit country to an energy hub, or even a center, with strategic advantages? This may be possible, yet it is constrained by certain discrepancies and it is highly related to several contingencies. First of all, Turkey will need, and in fact is in search of, the construction of additional oil and gas pipelines under good contractual terms from suppliers such as Turkmenistan and Iran. Secondly, Turkey suffers not only from "take or pay" and "no re-export" obligations in its international gas agreements, but also from inconsistency in its domestic energy structures.[37] These domestic flaws are significant obstacles to achieving the above goals.

There are in particular four issues which appear to be vital not only for Turkey's future capacity but also in its aim to become an energy hub[38]:

> **1**- Turkey's installed energy supply capacity is 40,000 MW and is dominated by hydro, natural gas and coal resources. The share of public and private enterprises in this production is 58% and 18% respectively. According to the 2020 projections, the capacity needs to be increased by 50,000 MW, which requires a $4 billion to $5 billion annual investment.
>
> **2**- More than 40% ($12.5 billion as of 2006) of total mineral oils and fuels imports of Turkey come from the Russian Federation, $6 billion for oil/oil products and $5.5 billion for natural gas.

[36] "The Great Turkish Energy Race", *Foreign Affairs*, vol. 88, no. 1 (Jan/Feb2009), pp.13-14.
[37] For current statistics on Turkey's energy consumption, see, "Relations with Member Countries-Turkey", *International Energy Agency (IEA)* (2010), at http://www.iea.org/country/m_country.asp?COUNTRY_CODE=TR.
[38] "Turkey's Energy Industry", Industry Report, *Istanbul Chamber of Commerce* (*ITO)* (2008), at http://www.us-istanbul.com/pdfs/reports/turkey/turkey_energy.pdf.

3- Projections indicate that the gross electricity demand is expected to rise to 499 billion kWh in 2020. In order to supply these amounts of electricity, the installed capacity will have to increase to 96,000 MW by 2020.

4- To meet Turkey's need for electricity in the near future, the projections indicate that it will be necessary to employ nuclear power [up to 10000 MW] for electricity production.[39]

Challenges, therefore, arise from rapid increase in consumption, high dependence on Russia and extensive use of natural gas for electricity generation.[40] The international and domestic aspects have become highly interrelated with each other, mostly because of Turkey's strategy to implement pipeline politics as a means of regional cooperation not only with the EU and some European countries in need of energy, but also with Russia, Azerbaijan, Georgia, Turkmenistan, Iran, Iraq, Egypt and Qatar on the supply side. Turkey's need for additional investment (such as in refineries, natural gas storage facilities, ports, LNG terminals, power plants and nuclear energy) make the interaction between international and domestic aspects even more complicated[41].

The level of success that might be got from this strategy will be highly related to Turkey's bargaining capacity as much as to regional and global dynamics. To become a strategic energy hub Turkey, as a minimum, needs to: build the CEIR; increase its natural gas storage capacity up to 10 BcM; improve its energy mix to achieve more affordable and sustainable sources, especially for electricity generation; and obtain favorable terms on natural gas (such as the right to re-export with no "take or pay" obligation) and nuclear energy (such as electricity prices at affordable levels) deals. [42]. Pipelines would make Turkey an energy transit country and may imply some strategic gains depending on the contractual terms and regional dynamics. However pipelines on their own, and even with best possible terms, will not allow Turkey to become a strategic energy hub or center without these amendments.

Apparently Turkey uses pipeline politics as leverage in negotiations with counterparts on investment in the energy sector. This is why, and how, each negotiation on pipeline projects leads to an energy package which includes a myriad of issues mainly involving Russia. Russia, at this time, appears as a keen partner for every project supposed to contribute to Turkey's role in regional energy relations. If restraints embedded in the relations with Russia (dependence on gas supplies from Russia, extreme use of gas for electricity generation, "take or pay" and "no re-export" obligations) are to be balanced with additional agreements with Russia (mainly on the Akkuyu nuclear power plant, the natural gas storage facilities in Tuz Lake, the Samsun-Ceyhan oil pipeline, refineries in CEIR, shares to Russian companies for domestic gas distribution), then this will require a new conceptualization regarding

[39] *Ibid*.
[40] See, Balat, Havva: "Contribution of green energy sources to electrical power production of Turkey: A review", *Renewable and Sustainable Energy Reviews*, vol. 12, no. 6 (August 2008), pp. 1652-1666. Çetin, Tamer and Oguz, Fuat: "The reform in the Turkish natural gas market: A critical evaluation", *Energy Policy*, vol. 35, no. 7, (July 2007), pp. 3856-3867. Kiliç, Fatma Çanka and Kaya, Durmuş: "Energy production, consumption, policies, and recent developments in Turkey", *Renewable and Sustainable Energy Reviews*, vol. 11, no. 6 (August 2007), pp. 1312-1320. Tunç, Murat; Çamdali, Ünal; Liman, Tunc and Değer, Anil: "Electrical energy consumption and production of Turkey versus world", *Energy Policy*, vol. 34, no. 17 (November 2006), pp. 3284-3292.
[41] See: *Ministry of Energy and Natural Resources* (MENR) (2010), at http://www.enerji.gov.tr/index.php.
[42] See, Yıldız, Taner: "The Budget for 2010", *Ministry of Energy and Natural Resources* (18 December 2009), at http://www.enerji.gov.tr/yayinlar_raporlar/2010_Genel_Kurul_Konusmasi.pdf.

Turkey's position. In this case, Turkey's transit, hub or center role in energy will make less sense when compared to its strategic rapprochement with Russia. In short, Turkey's role in regional and global energy politics as a transit corridor, hub or center will be highly related to the success or failure of the contractual terms it gets from international agreements, management of the energy mix and the promotion and facilitation of investment.

4. Conclusion

This article has focused on the political and regional backgrounds interrelated with Turkey's changing approach to energy politics from 1991 to nowadays. The analysis indicated differences among the given periods. Each comprised a change in Turkey's energy discourse from oil corridor to oil and gas transit country, and then to energy hub and even an energy center. The shift from one phase to another is found to be highly related to regional and global dynamics rather than to a foreign policy input strategically chosen by policy makers. This partially explains the reasons why Turkey has originally skipped launching a comprehensive energy strategy in conformity with foreign policy options and domestic structures.

Turkey, currently, fails to exert influence over the transit terms and conditions and cannot re-export considerable amounts of oil and gas. It also suffers from certain domestic discrepancies, such as the lack of natural gas storage facilities and has a problematic energy mix. Massive investment projects have to be carried out in order to overcome these flaws in energy security. Turkey, therefore, appears as an energy transit country, still with the chance to become an energy hub depending on the contractual terms of oil and gas pipelines as well as on the degree of success in carrying out massive investment.

It is in this context that I can talk about a recent transformation of Turkey's "energy discourse" into a "retroactive energy strategy" composed of two pillars:

1- Internationally. Turkey is attempting to incorporate additional oil and natural gas pipelines, coming from Russia, the Caspian and the Middle East, and going to Europe and the Mediterranean, with the expectation of bolstering regional relations with suppliers, transit and demand countries. This policy is supposed to be in conformity with its foreign policy based on the new regionalism and the use of pipeline politics as leverage in opening the energy chapter *vis-à-vis* the EU in its accession process.

2- Domestically. Turkey is trying to improve contractual terms with counterparts concerning natural gas agreements (take or pay obligations and no-export rules with Russia and Iran), build the proposed nuclear power plants (Mersin Akkuyu 5000 MW and Sinop 3000-5000 MW), activate massive investment projects, such as CEIR and natural gas storage facilities in Salt Lake, and increase the share of renewables to at least 20% by 2023.[43]

These pillars stem from a retroactive characteristic, rather than a proactive one, because Turkey needs to recover from past disagreements while carrying out new investment that is

[43] Yıldız, Taner: "Energy Minister Underscores Necessity of Signing A Deal on Nuclear Power Plant", *Journal of Turkish Weekly*, 8 February 2010, p. 14.

highly related to the current situation rather than to the future. In a worst case scenario, past disagreements may not allow Turkey to implement a thorough energy strategy. Under normal conditions, Turkey's retroactive energy strategy is expected to transform energy transit features into an energy hub, or at best, into a center. This retroactive strategy may be useful as the policies are aimed at overcoming domestic discrepancies while increasing regional significance through pipeline politics. However, it increases its vulnerability because Turkey subjugates important domestic structures (contractual terms on natural gas and possibly on nuclear energy; a problematic energy mix which is extremely dependent on natural gas for electricity generation; investment in CEIR and natural gas storage facilities) to oil and gas transportation to Europe and the Mediterranean. Given the complex web of interactions between the actors concerned (especially Russia's growing influence in Turkey's energy policies and Iran's international position), it is justified to wonder in what measure Turkey has to subordinate the priorities of the energy sector to more and more pipelines when domestic disagreements need prompt, urgent and peer decisions. This is why the geopolitical consequences of Turkey's retroactive energy strategy will be drastically affected by domestic energy policies along with pipeline politics.