



24th World Gas Conference
ARGENTINA | 2009
5-9 October

The Global Energy Challenge:
Reviewing the Strategies
for Natural Gas

NATURALGAS PASSAGE FROM EAST TO WEST IN TURKEY

Mehmet Akif ILHAN
IGDAS, Istanbul, TURKEY
mailhan@igdass.com.tr
mehmeta2000@yahoo.com



24th World Gas Conference
ARGENTINA | 2009
5-9 October

The Global Energy Challenge:
Reviewing the Strategies
for Natural Gas

Energy is one of the most necessities of humanity. Especially, in 20th century, As a result of economic developing, industrialization and globalization caused high energy consumption. So the energy is the most important sector to held meetings and agreements to force countries.



Turkey has an important function as an “Energy Bridge” between Caspian basin, Middle East and world markets which has rich natural resources. Turkey which is the biggest investor in the region and has socio-economic and cultural relationship with its neighbours has to support countries in the region both economical and social before its own commercial benefits in energy sector.



East-West Energy Corridor Project had been constituted to operate hydrocarbon reserves and to transport western markets which support developments of new established Caucasian and Middle Asian countries.



East-West Energy Corridor consists of these projects:

- Baku-Tbilisi-Ceyhan (BTC) Crude Oil Pipeline
- Baku-Tbilisi-Erzurum (BTE-Sah Deniz Project) South Caucasian Natural gas Pipeline
- Turkmenistan-Turkey-Europe (Caspian crossing) Natural Gas Pipeline



- Two big projects were done to transport natural gas to Europe in case of to realize Caspian crossing natural gas project.
 - 1-) Turkey-Greece-Italy Natural Gas Pipeline Project
 - 2-) Nabucco Project



Turkey was surrounded by Middle East, Caspian region and Russian Federation which have got reserves of 75 % of crude oil and 72 % natural gas.

Because of geo-strategic location, Turkey is a natural bridge between rich energy sources and European countries.



There are two projects of Turkey which is operated and called Baku-Tbilisi-Ceyhan (BTC) crude oil pipeline and Baku-Tbilisi-Erzurum (BTE) natural gas pipeline



An agreement was signed between Egypt-Turkey for natural gas pipeline projects in March 2004. Also, it is aimed to bring 10 bcm per year natural gas from Iraq to Turkey by rehabilitation of available present pipelines.



IMPORTANCE OF PROJECTS OF EAST-WEST ENERGY CORRIDOR AND SECURITY OF SUPPLY

1-) BTC OIL PIPELINE

This project is performed by some of the international oil companies.

Construction of BTC pipeline has started in spring of 2003 and the first tanker was loaded in 2005.



BTC is one of the longest pipeline on the world with its total 1776 km lengths. 1076 km distance of the pipeline crosses from Turkey. The capacity of the gas was 3,000 barrel in the first stage and then reached to full capacity in 2007.

Totally 21.000 people worked and 30.000 parcel land was expropriated in this project.



BTC supported world oil needs by carrying 50 million tons crude oil annually. BTC and Turkey became an energy corridor between the producer and the consumer countries.



Importance of the BTC project for Turkey

- Turkey has increased its geopolitical importance with BTC.
- Turkey decreases oil transporting traffic through Bosphorus and Dardanelles
- The pipeline named as “ **21st CENTURY SILK ROAD**” and became a very important milestone to complete “East-West Energy Corridor” successfully.
- TPAO is a share holder.
- Caspian crude oil will help EU countries with choosing source and route variations.
- Ceyhan has become an oil harbour.



2-) BTE NATURAL GAS LINE (SAHDENIZ PROJECT)

The agreements relating on pipeline which would carry Sahdeniz natural gas which is one of the important part of the East-West Energy Corridor and also important to supply natural gas to Georgia via Baku -Tbilisi –Erzurum pipeline were signed an agreement between Turkey and Azerbaijan on 12 March 2001



This project is important for not only gas transporting to Turkey but also as a part of East-West Energy Corridor. It will open the way to transport natural gas to European market through Turkey in the near future.



This project is formed in three sections that are;

- 1) Sahdeniz (Territory Search Development Production),
- 2) Southern Caucasus Natural Gas Pipeline (SCP South Caucasus Pipeline)
- 3) Georgian Border – Erzurum Natural Gas Pipeline.

The partner companies are BP (25, 5 %), STATOIL (25, 5 %), Az SD Ltd (10%), TOTALFINAELF (10%), LUKOIL (10%), NICO (10%) and TPAO (9%).



Southern Caucasus Natural Gas Pipeline Project; known as Baku-Tbilisi-Erzurum (BTE) was built to bring produced gas from Sahdeniz territory to Turkey - Georgia border.

The third step of the project which is 208 km long between Georgia border and Horasan, Erzurum also crosses through Turkey.



3-) NATURAL GAS PIPELINE THROUGH CASPIAN (TURKMENISTAN-TURKEY-EUROPE)

This mentioned project is third part and most important step of East-West Energy Corridor

Trans-Caspian Oil Pipeline is planned to connect with Odessa-Brody Oil Pipeline under surface of the Black Sea after crossing Georgia.



Two different pipeline projects are planned from Turkey to Europe. These are as follow;

- Turkey-Greece-Italy (Europe) Natural Gas Pipeline Project
- Turkey-Bulgaria-Romania-Hungary-Austria Natural Gas Pipeline Project (NABUCCO)



Turkey-Greece-Italy (Europe) Natural Gas Pipeline Project

The Pipeline Project will start from Karacabey town and cross the Dardanelle Straits under the Marmara Sea then it will reach through Ipsala border point to Gumulcine/Komotini in Greece. Total length is 296 km and its diameter is 36”

Crossing the sea is 17 km and 211 km of pipeline is in Turkey section, 85 km of pipeline will be located in Greece.



The importance of this project is to connect natural gas networks of two countries and also an important energy program of EU called INOGATE will constitute of first part of “Southern European Gas Loop”.



- **Turkey-Bulgaria-Romania-Hungary-Austria Natural Gas Pipeline Project (NABUCCO)**

This project is second important project to play a key role of Turkey to security of supply of natural gas to Europe.

BOTAS, Bulgargaz, Transgaz, MOL and OMV have a part in this project.



Nabucco pipeline project is aimed to supply natural gas to the countries which are on the same route. Such as Turkey, Bulgaria, Romania, and Austria. According to growing demand, Austria will be an important distributor country to Western European countries in following years. The pipeline's length is approximately 3282 km and its capacity is 25.5 – 31 bcm/year. Also, it is planned to be operated in 2013



As a result, we mentioned above together with two projects and some of these projects which will feed by natural gas sources of Turkmenistan, Iran, Azerbaijan, Egypt and Iraq to transport to Europe through Turkey. Turkey will be an important distributor and collector centre and will play key role of European natural gas in security of supply.



THE RELATIONSHIP OF EUROPE-TURKEY IN WEST-EAST ENERGY PASSAGE PROJECT

in order to supply of request, a lot of project are started. Turkey is performing some projects about current natural gas system renewing and developing, natural gas storage works, also carrying out some natural gas purchasing agreement with Azerbaijan, Turkmenistan, Egypt and Iraq.



EU countries are the biggest energy importer countries.

Natural gas consuming amount are; 386 billion m³ in 1999, 500 billion m³ in 2010, 600 billion m³ in 2020 in Europe.

European Natural Gas Market will meet to import request in the next 20 years.



24th World Gas Conference
ARGENTINA | 2009
5-9 October

The Global Energy Challenge:
Reviewing the Strategies
for Natural Gas

CONCLUSION

Turkey is located in strategic ellipse which has 72 % of world gas reserves. Therefore, Turkey becomes a natural bridge between Middle East, Caspian region and European countries. Turkey is a key country due to strategic location and also it provides continuity and security of supply for natural gas. Turkey is not only a consumer position but also Turkey is an actor because of important geopolitical location in natural gas sector.



24th World Gas Conference
ARGENTINA | 2009
5-9 October

The Global Energy Challenge:
Reviewing the Strategies
for Natural Gas

THANK YOU

Mehmet Akif İLHAN, Specialist
IGDAS Istanbul, TURKEY
mailhan@igdask.com.tr
mehmeta2000@yahoo.com