Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

Geneva
November 19, 2008
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

- Significant ramp up of oil and gas production expected in coming years in Azerbaijan
- Completion of BTC and SCP transportation systems marks new stage in the diversification of energy supplies and transportation channels and reduction of US and European dependence on traditional supplies
- Growing European Oil and Gas demand allows peaceful coexistence of a diversified grid of transportation routes
- Azerbaijan acquires status of the key regional exporting and transit country and aspires to ambitious but realistic mission of contributing to European energy security
- Geographical expansion of SOCAR’s operations is underway
- Physical security is one of the core issues to be addressed
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

Global and European Energy Security – Key facts and Challenges

• World oil demand is expected to increase from current 82 mln bbl/d to 116 mln bbl/d by 2030 (IEA)

• EU total oil consumption is around 15 mln bbl/d

• World gas demand will increase from 2,8 TCM in 2006 to 3,2 TCM in 2010 and 3,6 TCM in 2020

• Sharp reduction of European energy production amid growing import dependence

• EU Gas Demand: 2007 – 546 BCM vs. 694 BCM in 2030
  ➢ Import dependence: 58% in 2005 vs. 62% in 2010 vs. 80% in 2030
  ➢ Role of Russian gas: 26% in 2007 vs. 29% in 2020 vs. 32% in 2030
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

History

- First industrial oil production in Azerbaijan started in 1847, 11 years prior to oil discovery in Pennsylvania, USA
- Since that time Azerbaijan has produced around 1,65 billion tons of oil

- During the first year of the 20th century, in 1901 Azerbaijan produced half of the world production of oil.
- Hundred years later, in 2001 Azerbaijan’s share was 0,44% vs. 1,1% in 2008 and expected 1,3% in 2009 vs. Iran-5,4%, US–8%, Russia–12,6%, Saudi Arabia–12,6% (BP SR 2008)
- During the World War II, Azerbaijan contributed to Allies victory by producing most of the Soviet Union’s oil
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

Exploring Oil Export Opportunities

- Baku – Novorossiysk: successfully working since 1997, operated by SOCAR since February 1, 2008
- Baku – Tbilisi – Ceyhan: in operation since 2006
- Baku – Supsa: in operation since 1998
- BST Kulevi terminal – new step in Azerbaijan’s oil transportation strategy
  - Operated since May 16, 2008
  - Storage capacity – 320 000 m³
  - Transshipment capacity - 10 mln. tons of crude and products
  - Tankers of 100 000 t deadweight

- Trans Caspian oil and gas pipelines feasibility studies sponsored by USTDA expected to be finished in 2009.
- Agreement on basic principles of Trans Caspian Project implementation was signed between SOCAR & KazMunayGas on 14.11.2008 in Baku. This project envisages the establishment by SOCAR & KazMunayGas of long term transportation from Kazakhstan to Azerbaijan across the Caspian Sea up to 60 mln. tones of crude for its further export to international markets.
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

BTC shut down August 6 – 20

- August 6 - The BTC pipeline shut down following an explosion and fire reported by Botas International Limited (BIL), the operator of the Turkish section of BTC, at the Block Valve 30 Station near Erzincan
  - Oil spill response plan activated and response teams deployed at several containment sites
  - Mitigation measures were successful, no oil released downstream the first containment site
- August 11 – Fire extinguished by 11 am
  - Cooling down, security checks, mechanical assessment, technical inspection, disposal of saturated oil, site excavation & repair works
- August 20 – Restart
  - Dynamic integrity testing
  - Full operation rates achieved
- August 26 – Ceyhan lifting resumed
- August 6-26 – Contingency Lifting Plan
  - NREP, WREP, Railroad, SWAP with Iran
  - ACG and SD Production rump down
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

Trans Caspian Transportation Options

- **Atyrau – Aktau (Kuryk)** (pipeline & terminal)
- **Trans Caspian shipping:** Shipping Offshore terminals
- **BTC**
  - Largest p/l in the region
  - Expansions studies ongoing
- **SCP**
- **Baku landing** w/ BTC & SCP Connection

Map highlights:
- Baku landing
- Atyrau – Aktau (Kuryk)
- Trans Caspian shipping
- BTC
- SCP
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

Euro-Asian Oil Transportation Corridor – Kiev, May 2008

- Establish a new reliable transit corridor for Caspian producers
- Establish a new crude oil corridor to facilitate the supply of Caspian oil to Europe
- High Quality oil for Europe
- Competitive with alternative routes
The 4-th Energy Summit was held on 14.11.2008. The Leaders of 6 countries and Representatives of 9 countries governments and EuroComission participating at the Summit expressed their support to diversification of oil & gas transportation routes, with purpose to connect huge reserves of the Caspian basin with European and World markets. Support was given to projects such as Odessa-Brody-Plotck-Gdansk, ITGI, Nabucco and others.
EAOTC will include transportation via pipeline and shipment via sea using existing infrastructure where possible
In 2007 Azerbaijan achieved three significant goals which mark its new capabilities and opportunities to play a greater role in the European gas supply:

- For the first time since the collapse of the Soviet Union Azerbaijan has become a self-sufficient gas country managing to meet all domestic demands in natural gas;

- For the first time since restoring its independence Azerbaijan has become a gas exporting country;

- For the first time in more than 150 years old history of the industrial hydrocarbon development in the country Azerbaijani gas has reached EU through the South Caucasus Pipeline and Turkey-Greece Interconnector.
Oil and Gas Strategy of Azerbaijan:  
Paving the Way to New Solutions  
Exploring Gas Export Opportunities

- Delivery of the gas originated in Azerbaijan and in the Caspian to Europe – important factor contributing to the stability of the European gas market
- The South Caucasus Pipeline (SCP), running from the Sangachal terminal near Baku to the Georgian-Turkish border, is a key element in the gas exports system from the Caspian, which should be accompanied by the development of transportation systems through neighboring countries to the EU markets.
  - ITGI Project (2011, 210 km Poseidon subsea section, 8-11 bcm/a)
  - Nabucco Natural Gas Pipeline Project (2012-13, 3400 km, 25-31 bcm/a)
  - Transadriatic Pipeline – TAP (2011, 520 km, 10-20 bcm/a)
  - Trans-Black-Sea pipelines, e.g. GUEU Gas Pipeline Project–White Stream (1150 km, 850 subsea, 8-32 bcm)
- Russian, Iranian and Israeli companies have very recently indicated their keen interest in obtaining large volumes of Azerbaijani gas.
- The opening of a new gas supply corridor to Europe will contribute to enhanced competition in the EU internal gas market and promote the EU Commissions energy policies and objectives.
- Azerbaijan and its partners are prepared to commence commercial talks with potential buyers, transportation systems operators and transit countries on prices, terms and tariffs for the gas export to Europe.

*Basic factors for the decision-making are commercial terms of Azerbaijan’s participation in the projects and the tariff strategy of the transiting countries*
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

Gas Export Routes
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

Security of Energy Infrastructure and Transport Corridors – Part I

• **Strategic Role:**
  – Part of National Security Concept and Crisis Management Policy
  – Essential for Economic Development
  – Attractiveness for terrorist and hostile actions driven by its criticality for National Stability

• **Revised concept** – Protection of the energy infrastructure along the entire supply chain: exploration, production, processing, transportation, distribution

• **Key Energy Infrastructure:**
  – Offshore installations: exploration rigs & production platforms
  – Pipelines and Above Ground Installations
  – Terminals, refineries, power plants, tankers, etc

• **Risks:**
  – Military Activities
  – Terrorism
  – Sabotage
  – Criminality – Hot Tapping
  – Technical failures & National disasters
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

Security of Energy Infrastructure and Transport Corridors – Part II

• Basic Principles of Security Philosophy:
  – There is no safe havens across the planet
  – Security of Energy Infrastructure is the matter of all stakeholders
  – Security trespassed national borders and transformed into a cross-country and trans-continental issue

• Azerbaijan’s experience and specifics:
  – Suffered from terrorist attacks on civilian facilities – needs to be vigilant in the field of energy infrastructure protection
  – Regional context – Caucasus & Caspian is not the most secure place in the world
  – Member of anti-terror coalition
  – Western business presence in-country significant

• Priority Areas
  – Interagency Cooperation and Coordination in the field of Oil & Gas Infrastructure Protection
    • Pipeline Security Commission and Interagency Working Group
  – Protection of Offshore Energy Infrastructure – important element of national efforts to improve capabilities of the Navy and State Border Service
    • SOCAR established communication protocols with key stakeholders
    • SOCAR contributed to the full-scale offshore security drills
  – Regional cooperation in the Framework of East-West Energy Transport Corridor
    • Host Governments responsible for pipeline security on its territory
    • Exchange of intelligence, sharing of expertise and consultations within multilateral and bilateral formats
Oil and Gas Strategy of Azerbaijan: Paving the Way to New Solutions

Gas Export Strategy and Principles

- It is obvious that the multiplicity of potential deals for the Azerbaijani gas would require variety of transportation destinations both for EU and non-EU markets in different geographical locations
- Decision has to be based on the principle of commercial profitability and best transportation and transit terms
- Added interest of new potential buyers urges potential transit countries to speed up their commercial proposals for the buyers and sellers of gas
- Commitment to ensure transparent, reliable, unimpeded, and secure access for Azerbaijan and potentially for the other Caspian oil&gas producers to transportation routes to Europe on long-term transparent market-based and politics-free tariffs
- Development of as many transportation options and directions as possible to meet growing world oil&gas demand
- Diversification of gas transportation options without blocking transit of a competing flow of hydrocarbons
- Direct link between producer country and end consumer markets
- Freedom of transit and non-discrimination
- Regional partnership and alignment of all Caspian States in the implementation of the Caspian transportation systems
STATE OIL COMPANY OF AZERBAIJAN

Thank You!