Azerbaijan and the Challenge of Energy Security: The Geopolitics of Energy Exports from the Caspian Region

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Outlines:

• Indispensable geographic position of Azerbaijan in the region
• Energy security policy of Azerbaijan
• European dimension of Azerbaijani gas
• The Southern Gas Corridor (Nabucco, ITGI, TAP)
• The Transcaspian Gas Pipeline
• The AGRI LNG Project
• Implications of Middle East and North African revolution for the European energy security
• Conclusion
Azerbaijan has indispensable geographic position in the region

- For Russia the Caucasus is the region separating it from Turkey, the Middle East and Iran
- For the US after the collapse of the USSR Azerbaijan and Georgia became important for energy
- Exportable energy resources of Azerbaijan can play a significant role in realizing Turkey’s strategic aim to become an energy hub.
- Iran has sought to align itself diplomatically and economically with Armenia and Russia to counter Azerbaijan’s new pro-western policies and rising economic power
Baku-Tbilisi-Ceyhan oil Pipeline

- **BTC**
  - Length: 1,758km
  - Diameter: 42"/46"
  - Capacity: 1,000mbd
  - Capex: $2.8bn

- 8 pump stations
- 4 metering stations
- Marine terminal with:
  - pressure reduction facilities
  - storage tanks
  - offshore loading facilities

**Map:**
- Countries: Azerbaijan, Georgia, Turkey, Italy
- Key locations: Baku, Tbilisi, Ceyhan, Istanbul, Erzurum, Ankara, Istanbul, Naxcivan, ACG
- Sea bodies: Black Sea, Caspian
- Straits: Turkish Straits
- Adjacent countries: Russia, Kazakstan, Turkmenistan, Iran, Iraq, Syria, Cyprus
Baku-Tbilisi-Ceyhan oil Pipeline

• The Economic Benefits of the Pipeline
  – Azerbaijani export revenues
  – Transit fees for Turkey and Georgia
  – Consumers in the Mediterranean

• The Political Benefits of the Pipeline
  – US policy
  – Turkish policy

• Geopolitical Drawbacks?
  – Anti-Russian Policy?
  – Anti-Armenian Pipeline?
Energy security is defined as the “reliable and adequate supply of energy at reasonable prices” or as “securing adequate energy supplies at reasonable and stable prices in order to sustain economic performance and growth”.
Elements for Energy Security

Energy security is essentially summarised in the following 3 elements —

Availability: Availability on demand, when a country wants energy, it should be available

Accessibility: The nation should be able to access energy sources globally to ensure uninterrupted growth

Affordability: Affordability of the energy being procured to ensure that the growth engine is not impacted by the price impact
Energy security policy of Azerbaijan

• To diversify energy markets, routes and transit states
• To have an access to multiple pipelines, buyers and transit routes and delivery points
• To consider interests of all the regional powers
• To become one of the main player in the European gas market after 2017
The Southern Gas Corridor

NABUCCO

Facts

• Distance: 4,000 km
• Investment: EUR ~7.9 bn
• Transport capacity: Up to 31 bcm/a
• Supply: Extensive negotiations with Azerbaijan, Iraq and Turkmenistan
The Southern Gas Corridor

ITGI&TAP

• Connects to existing networks in Greece and Italy
• Designed to expand from 10 to 20 bcm per year
• Gas storage option in Albania and physical reverse flow supports Energy Security for SEE region
• Privately financed project - does not rely on public grants
• Azerbaijan / Turkey signed a transit deal in June 2010 that matured the value chain substantially
• TAP has the potential to expand
• its capacity from 10 to 20 bcm at marginal incremental cost
Conditions Baku has put in front of the Nabucco Consortium are:

- Azerbaijan demands from the consortium access to the nearby markets as well, not limiting the country’s opportunities to the participating countries only
- Azerbaijan has to choose the most valuable commercial offer amongst all the alternatives
- Baku will pay transport costs for only 10 bcm as if the pipeline is full. Therefore the second source of supply is crucial for Azerbaijan
- The EU has to work more actively in finding and committing the second and third source for the project as Azerbaijan will not join the project and provide promised 10 bcm until the pipeline is full
Caspian gas is key to secure and diversify the European gas supply

- Europe needs fresh gas and therefore opening the Southern Corridor
- is of utmost importance
- The EU priority project Nabucco Gas Pipeline will establish a longterm sustainable solution for gas producers and shippers
- infrastructure and long-term partnerships
Oversupply situation of gas in Europe will not continue in the long run: additional supplies needed after 2015

- 2009: due to economic downturn decrease of -6.7%
- Growth of demand slowed down in the short-term
- Make up gas will have an impact in the mid-term
- Long-term demand forecasts indicate stable growth of gas demand
- Growing demand mainly driven by power sector
- Import dependency of Europe will increase
- Indigenous production will decrease by 9% until 2015 with additional downside potential due to lack of investment

Source: Cera, Eurogas
Transcaspian Pipeline
Transcaspian Gas Pipeline

• Building infrastructure to new markets is critical
  — So far, others have been willing to fund new pipelines
  — Are the current three routes enough?
• The supply/demand balance in the market is key
  — During conditions of oversupply, Turkmenistan (as a relatively distant supplier) tends to suffer
• Reliability of counterparties is a major issue
  — And it has been a major problem for Turkmenistan
Northern Alternatives for Turkmenistan (Russia)

- **Infrastructure**
  - CAC pipeline system in place but in dire need of major refurbishment
- **Supply/demand**
  - Russia does not need substantial volumes of Turkmen gas today in order to meet its requirements for domestic supply and export
  - Will it ever?
- **Reliability**
  - “Boom!”
The southern alternative (Iran)

- **Infrastructure**
  - Theoretical capacity of 14 Bcma in place, with agreement for expansion to 20 Bcma

- **Supply/demand**
  - Subject to other developments in Iran on supply and demand side

- **Reliability**
  - Previous disputes on pricing resolved—for now
  - Political risks and complications
The eastern alternative (China)

- **Infrastructure**
  - 30 Bcma pipeline in place, financed by China and implemented in record time
  - Discussions on a second parallel line
- **Supply/demand**
  - Ultimate Chinese demand for Turkmen gas depends on a host of factors
  - Rate of gasification of Chinese power sector
  - Fate of Russian-Chinese negotiations on gas supply
  - Prospects for shale gas and coal-bed methane in China
- **Reliability**
  - So far, so good, apparently
  - China deeply involved in Turkmen upstream, as producer, contractor and financier
The western alternative (to Europe)

- **Infrastructure**
  - Trans-Caspian pipeline or large-scale CNG solution needed
  - Transit through Azerbaijan and Georgia: SCP or a second pipeline?
  - Onward from Turkish-Georgian border to Europe
  - Caspian Development Corporation concept to

- **Supply/demand**
  - Turkish market poised for steady long-term growth
  - Signals from Europe suggest the European market can accommodate material Turkmen volumes
European Market for Southern Corridor Gas, 2025

Totals show incremental gas demand plus indigenous supply decline from 2010 to 2025. Blue area shows share of total estimated to be supplied from the Southern Corridor.
European market

- 70% of European energy consumption will be derived from foreign sources by 2020

- By 2030, 85% of European gas consumption will be imported
The AGRI LNG Project

- Will transport Azerbaijani gas to a Black Sea port in Georgia by pipeline, liquefy it there, and transporting to the Romanian Black sea port of Constanta via tanker.
- The project envisages the construction of a liquefaction plant for LNG export in the Azerbaijani-owned oil export terminal of Kulevi in Georgia, as well as construction of a terminal for importing liquefied gas to a re-gasification plant in Romania.
- The project may handle 7 to 20 bcm annually.
- Will allow to transport Azeri gas to long distant markets such as Asian, including Indian and Chinese
Middle East Unrest: Implications for the European Energy Security

• Up to 40% of European energy comes from Algeria, Egypt, Libya
• Up to 3% of Italian energy comes from Middle East and Northern Africa
• The unrest might affect the pricing negotiation between SOCAR and European buyers.
Conclusion

• Azerbaijan would clearly be wise to adopt an energy policy that leaves alternatives to choose from
• Churchill had neither gas, nor LNG, nor even the former Soviet Union, in mind when he said “Safety and certainty in oil lie in diversity and diversity alone”. While he was thinking about the British Navy of the day, these words are good guidance for Azerbaijan as it makes decisions about gas which will impact its economy and people for many years to come
THANK YOU FOR YOUR ATTENTION