An agenda to sustain Turkey's dynamics in global energy

By Mehmet Öğütçü, Chairman, Bosphorus Energy Club





s a major economic and geopolitical power, Turkey has to follow and try to influence the global energy dynamics as much as possible because its energy is plugged into the world system where decisions and choices in Riyadh, Beijing, Moscow, Brussels and Washington DC will bear direct consequences for Ankara.

Turkey has high ambitions for the future, aspiring to become one of the world's top 10 economies (currently 17th) by 2023. This is unlikely to occur in that timeframe, but the ambition remains and might be achieved later down the road. Regardless of the botched military/religious coup attempt and subsequent government purges, Turkey's energy demand, investment requirements, role as a major east-west corridor within the region, geopolitical position and long-term ambitions will remain as important as ever. Turkey's role is critical to the success of regional energy integration projects. In fact, Turkey is likely to use this development to consolidate its emergence as the key regional power.

Turkey has a young and increasingly better educated population; its middle-class is gaining in importance; it is able to realise large-scale infrastructure projects; and

Turkey's Energy Mix

Oil consumption, at 35 percent of the country's energy mix, accounts for the majority of Turkish energy consumption. This is followed by natural gas at 29 per cent, coal at 25 per cent, hydroelectric and renewable consumption at 11 per cent. Nuclear electric energy consumption is for the time being zero — two nuclear power plants are under consideration. The growth in oil consumption is expected to continue at a rate of about 2-3 per cent per year. Turkey's oil consumption, 78 million tonnes of oil equivalent (mtoe) in 1998 and 180 mtoe now, is expected to reach 319 mtoe by 2020. Turkey's natural gas consumption is expected to grow rapidly, quadrupling within the next 20 years, with 1,400 bcf gas consumption projected for 2020.

it is carrying out an urban transformation with incredible speed. All these have generated strong energy demand growth, much above the world average, and will continue to do so – provided that the country retains its political cohesion and national security.

Second only to China, Turkey is the country in the world where the demand for energy supplies has increased most during the last two decades. The Turkish government predicts that energy needs are set to increase 7 to 10 per cent each year for the next 20 years. Turkey is poorly blessed with domestic energy resources. Its own oil and gas reserves account for only a tiny fraction of its rapidly rising demand. The country's soft underbelly is its heavy dependence on imports: more than 60 per cent of all the energy it consumes – this ratio is 98 per cent in natural gas and 93 per cent in oil.

As a significant emitter of carbon dioxide and ideal territory for solar, wind, hydro, geothermal and nuclear energy, Turkey is set to become a major player in the world's increasingly important climate change and green energy transition.

On a conservative estimate, Turkey needs to invest a minimum of US\$12 billion each year over the next decade in energy and associated infrastructure, but its household savings and local capital are not enough to sustain such levels of investment. Fresh sources of capital (in the form of equity or debt) are desperately needed to ensure that long-term and low-cost finance is available to the energy sector, ranging from nuclear, to natural gas storage facilities, upgrading of power plants, pipelines and energy efficiency as well as in oil and gas exploration and production.

The ownership patterns in the energy sector have also undergone drastic transformation. Today Turkey's private sector represents 64 per cent of the energy economy and will likely control 75 per cent in the next decade (compared to 34 per cent 13 years ago) and the public share has shrunk to 36 per cent – a complete reversal of the roles. Turkish Petroleum, BOTAS and the Istanbul Gas Distribution Company are poised for some sort of privatisation and/or incorporation.

The outstanding debt of the Turkish energy sector exceeds US\$50 billion, some of which may need to be rescheduled if the more fragile companies are not to go bankrupt. The energy import bill has been as high as US\$50 bn, although thanks to lower energy prices it came



down to around US\$30bn in 2015.

Therefore, energy is not simply a commercial commodity for Turkey to fuel its ever-demanding machines of the economy but it represents a vital national security matter. Turkey strives to achieve this security by drawing on multiple fuels and sources, and by attracting significant international capital and technology into major energy and associated infrastructure projects.

Turkey is not only a significant energy consumer. It is also geographically close to 72 per cent of the world's proven oil and gas resources, and thus commands major chokepoints and transit routes for energy shipments between major energy producing areas in Russia, the Caspian Sea basin, and the Middle East, and European consumer markets. Turkey could thus become the 'Silk Road of the 21st century.'

Turkey's leadership is clearly acting increasingly in pursuit of its own perceived self-interest in foreign and security policy, rather than following the views, or even dictates of Washington, Moscow or Brussels. This is having a huge impact on its energy partnerships. This kind of posture – not so much neo-Ottoman as neo-non-aligned – could well be the most important new dimension of Turkish foreign policy over the next decade. It will shape the way the US deals with Turkey, and complicate Europe's relationship with Turkey as an EU candidate.

Turkey is Gazprom's second largest market after the EU, but this changed somewhat as a result of the recent tension between Ankara and Moscow. Now that both Erdogan and Putin have forged a new partnership in St Petersburg in August 2016, Russia will remain a critical energy partner. Turkey's first 4,800 megawatt nuclear power plant, Akkuyu, is due to be built by Russia with a budget of US\$25 billion.

Despite difficulties in sustainable supply, Turkey is the only market for Iranian gas exports to date. It is the major outlet for Azerbaijan oil via the BTC pipeline, and gas via the South Caucasus Pipeline and future TANAP pipeline. Iraq's (and its Kurdish region's) access to Mediterranean markets is through Turkey's Yumurtalik deep-sea port. After a six-year hiatus in relations, Tel Aviv and Ankara signed a reconciliation deal in June 2016. There is a strong possibility that east Mediterranean gas could possibly flow through Turkey to European markets, if the economics were to justify it.

Generally, Turks are becoming less content to be a simple

'bridge' over which energy flows. Rather, they aspire to become a regional 'hub,' extracting greater value for the oil, gas pipelines and power interconnections that crisscross their country, and to turn this role into economic, foreign or security policy gains.

Key messages

If Turkey is to execute successfully its energy strategy, I believe that business and government leaders should:

- View Turkey's energy policy as a sub-set of a wider government vision, incorporating environment, taxation, competition, investment, trading, commerce and foreign policy into the energy calculus;
- Take further steps to create competitive energy markets by restraining increases in energy prices, facilitating customer switching between electricity and gas suppliers, reforming electricity trading platforms, and introducing market mechanisms in pricing:
- Invest more in green energy technology and human capital, focus on exploiting domestic energy resources such as wind and geothermal in the Aegean region, photovoltaic power in the Mediterranean, central Anatolia and the south east, and small hydro and offshore wind in the Black Sea:
- Double efforts to improve energy efficiency and conservation through an all-encompassing demandside management policy;
- Let energy-intensive and polluting industries locate or re-locate to the energy-rich countries in the neighbourhood, and turn towards smart/intelligent technologies and sectors that bring higher added value and cleaner energy systems;
- Support the transformation of Turkey into a genuine regional energy hub by market and price liberalisation, building physical infrastructure, encouraging capital markets through conducive legal and institutional frameworks, and adopting a "soft power" approach in foreign policy so as to inspire trust among producer, transit and consumer countries;
- Build internationally competitive "energy champions" through the public-private and international partnerships, and not another series of state-owned or controlled enterprises;
- Create a Turkey Energy Fund to provide long-term and low-cost seed capital to energy projects and deals.