

IAEE Baku Conference Summary

Editor's note: We're pleased to have British journalist and energy analyst, John Roberts, do the summary of the Baku conference for us.

How do you cover the plethora of energy issues that link China to the European Union and Russia to the Middle East and OPEC? In a sense, that was the scope of the first Eurasian Conference of the International Association for Energy Economics held in Baku from 28-30 August 2016. But it was not so much the geographical range of the conference organizers' ambitions so much as the universal approach adopted by so many of the 60-odd speakers and panel chairmen as they tackled climate change, emissions reduction and the role of renewables alongside such well trodden paths as revenue management, market regulation, energy security and oil price volatility.

Time and again the presenters would use examples from their own countries or regions to make far broader points. And time and again participants from the host country, Azerbaijan, would bring the subject back to the key energy issue facing the country: the development of its gas sector and its plans to secure a major stake in European markets.

Yet Azerbaijani officials took great pains to stress their country's role in both regional and global energy issues. "Azerbaijan should benefit from the real opportunity that energy resources should bring to many countries and play a role as a crucial bridge between Europe and Asia," said Deputy Minister of Energy Natiq Abbasov in his keynote address.

What's more, while Abbasov is a minister in a government largely dependent on income from hydrocarbon exports, he also had some very pertinent things to say about other energy issues, notably the need to promote energy efficiency. "Many countries see energy efficiency as a priority. It's quite feasible and effective way to rebrand the economy." However, in Azerbaijan, "unfortunately, the abundance of energy resources has overshadowed issue of efficiency. Efficiency should be increased."

Naturally Abbasov focused on his country's role in providing the core resource for the massive \$40 bn string of projects known as the Southern Gas Corridor (SGC) which from 2018 will carry 6 bcm/y of Azerbaijani gas to Turkey and from 2020 onwards a further 10 bcm/y to the European Union via Greece, Albania and Italy. In particular, he saw the construction of one of the SGC's most important elements, the 1,850-km Trans-Anatolian pipeline (TANAP), as the development of a key piece of infrastructure that might some day enable Iranian and Iraqi gas to access European markets.

Naturally the SGC, for which Azerbaijan's own state oil company is responsible for raising roughly more than a quarter of total costs, was the subject of several presentations. Azerbaijan's most eminent geologist, the veteran First SOCAR First Vice President Khoshbakht Yusifzade, focused on the array of fields that Azerbaijan was in a position to develop in order to contribute a second wave of gas for inputting into an expanded SGC, not least through the early development of the offshore Absheron field by France's Total, for which a development programme is currently being prepared. And while Yusifzade tempered his enthusiastic approach by noting that there was a problem with the availability of rigs for both exploration and production, his natural ebullience came to the fore as he indicated that Turkmen gas might also enter the system via a linkup with Azerbaijan's own infrastructure. "We have pipelines stretching to the middle of the Caspian Sea which are at a small distance from Turkmenistan," Yusifzade said.

A somewhat more cautious approach came from the noted Azerbaijani energy scholar, Gulmira Rzayeva, a research fellow at the Oxford Institute for Energy Studies. In a panel on Unlocking Caspian Energy Potential, Ms Rzayeva considered that the current low price environment meant one should be careful about anticipating just when some of the next wave of Azerbaijani fields might actually come on line. From a broader perspective, British energy analyst John Roberts, in a presentation on the limits of economics, noted the political obstacles that had to be overcome if other countries were to be able to join Azerbaijan in fuelling the SGC. These ranged from Turkmenistan's dependence on China to boundary disputes in the Eastern Mediterranean and Russia's plans for its Turkish Stream pipeline and the question of whether it might seek to pre-empt some of the available capacity in the SGC to the possibility that internal discord in Turkey could cause major problems for transit pipelines and thus for European energy security. Addressing the question of just what constituted Europe's optimal energy

p.8



infrastructure, Philipp Hauser of Dresden Technical University, asked: "Is Turkey a reliable partner? Or will we be dependent in Europe on Turkish politics or on Russian politics?"

If the interaction of gas and politics was recurrently stressed, so too were the connections between gas and the environment.

It was scarcely surprising that Dr Mohammad Hossein Adeli, Secretary General of the Gas Exporting Countries Forum, should have promoted gas, but perhaps what was less expected was that he should have adopted an approach that focussed both on market dynamics and on social needs. "Pollution is becoming serious. There are political dimensions, social dimensions" Dr Adeli said. According to the World Health Organisation, he added, "eight million people (a year) pass away prematurely because of pollution; indoor pollution as well as outdoor pollution. This presents an opportunity for gas: the more gas produced; the less CO₂ emission." Nonetheless, there were "doubts and uncertainties as no-one knows what is going to happen," he cautioned; adding: "Are the main polluters -- the US, China, Russia, India -- going to commit themselves to reduce the CO₂ emission" as targeted at last year's United Nations Climate Change Conference in Paris.

Dr Adeli, naturally, made a strong pitch for the world to look to gas. Gas, he argued, was abundant, accessible, and economically advantageous; it was good for transforming energy to power, and had a competitive cost structure. It was particularly good at enhancing access to energy for communities that lack such access, and thus improved human welfare.

Gas, he said, was "environmentally friendly, affordable; so it doesn't need subsidies in producing or consuming."

When Dr Adeli then added "we have to reduce the subsidies actually" he certainly struck a chord -- not least since the GECF Secretary-General is a former Iranian diplomat, and Iran has had tremendous difficulties reforming its extensive energy subsidies. Asked about this, he replied:

- "One. It's an economic and social problem. This needs a good political and social environment. In an environment which is conflicting you cannot implement subsidy plans because it would end in disaster, an uprising.
- "Two. Subsidy (reform) should be gradually implemented. The reduction of subsidy should not be shock therapy as prescribed by some international organisations such as the IMF. Shock therapy has not worked; it should be gradually done.
- "Three: Any subsidy reduction should be accompanied by a package that would put the country into much more internationalisation of the economy, then it can create more jobs, more opportunities and compensate for the problems that face ordinary people and SMEs (small and medium-sized enterprises).

"This is why it is a complicated issue which needs a sophisticated package for implementation."

Ambassador Halil Ibrahim Akca, Secretary General of the Tehran-based Economic Cooperation Organisation, said there were two priorities for the ECO region, which extends from Turkey, Iran and Pakistan to include a cluster of Caspian and Central Asian states. "First, most of our member states need to pay attention to energy efficiency. This is vital for every country but more vital for ECO region. There is a lack of energy efficiency in our region. Second, we need to focus on renewables." However, Akca said, it was not his remit to advise countries as to what specific measures they should take. ECO's role was to bring countries together so they could work out a consensus on what they should do, and then implement such measures on their own.

Secondly, he said, they have to focus on renewables. However, he acknowledged later, "it is hard to give recommendations to governments to change policies. But there is a problem in adapting to changing conditions."

Akca's fellow countryman, Alpay Ünal, the CEO of Turkey's Yatirim Holdings, highlighted Turkey's potential to harness renewables, not least by indicating how much had yet to be used. Turkey, he said, could still harness 70% of its hydropower and 78% of its geothermal resources. Overall, he considered, his country could generate a further 100 to 130 GW from hydropower; 91 GW from solar; 4 GW from geothermal and 0.4 GW apiece from wind and biomass.

That renewables could have a massive impact is demonstrated by Germany. Dr Georg Erdmann of the Berlin University of Technology began by observing that the increase in renewable electricity had reduced German wholesale power prices and was challenging the economics of gas-fired power generation. Indeed, Erdmann put forward a thesis that there is no real future for natural gas in Europe because German pricing mechanisms will ensure that it makes little sense to build new gas-fired powered stations in Germany itself while German electricity exports will have a similar impact on its neighbours. Germany, Erdmann noted, is now a net exporter of electricity, increase to more than 8%

of national generation.

This challenges the economics of gas fired power stations throughout Europe, as Europe becomes increasingly interconnected, Erdmann argued. Germany, he considered, was now caught in its own subsidy trap. "I see in the next 10 years a standstill in German energy policy because of this," he said. The German government faces the dilemma in that once subsidies are introduced, they cannot be halted, and yet there is constantly a need to replace existing subsidies with new subsidies for alternative innovations. With Germany looking to rely on renewables for no less than 80% of its primary energy supply by 2050, and with its development of renewables based on subsidies, it was far from clear just how German energy policy would evolve. However, Erdmann added, largely because of the commitment to renewables, "there is a chance that in Germany there will be no large scale investment in the gas-fired power, despite growing demand for electricity."

No energy conference would ever be complete without some consideration of those perennial interlinked favourites: the role of OPEC and the volatility of international oil prices. James Smith, of Southern Methodist University in Texas, addressed both issues. Until 2014, he argued, Opec had been "dancing along with a regime of compromise that united their members." Since then, however, the Saudis considered they were carrying an unfair burden under that compromise and were not going to bear the burden any more. "The Saudi agreement to bear that burden is now history," Smith declared. The Saudis, Smith argued, have seen how high prices help Opec only in the short term, but in the long run they bring far more competitors to market, notably shale oil. As for the oil price issue, Smith simply commented that for the Saudis price reduction "is a process of trial and error."

There were, as one would hope, some great aphorisms, with the GECF's Adeli producing the finest: "Oil is dating and gas is getting married. You can produce oil and sell it on the spot market, but when you produce gas you need a long-term commitment. You don't produce it until you get it sold."



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