The Kazakh-Uzbek Export Conundrum: Implications for the Southern Gas Corridor

Invoking the fundamental concept of the fourth/southern gas entry route, as propounded by the former NG3 coordinator, Jozias van Aartsen, in his 2009 activity report, the strategic objective of all potentially qualified lines (Nabucco, ITGI, TAP, White Stream) would entail the connection of the EU to new gas sources in the Middle East and the Caspian. Nearly a decade later, 6BCM/a of natural gas are on the verge of flowing to Turkey and another 10BCM/a to Europe via a three-segment pipeline system (SCP, TANAP, TAP), stretching from Azerbaijan's Shah Deniz 2 all the way to southern Italy, but intended to carry twice that amount. Accordingly, the question arises as to which additional suppliers could fill this extra capacity of the 3,500km chain, in order for the Commission's diversification rhetoric to be put into effect and for a gas trading hub to evolve in SE Europe, moreover assisted by imports of US LNG, the East Med gas finds and the Russian-devised southern supply artery via Turkey and the Balkans.

The so-called next wave of Azeri gas (Absheron, Umid/Babek structures), Iran, either with indigenously produced gas pumped into TANAP or under further gas swap transactions with Turkmenistan, and Iraq, by means of a 30BCM link from Kurdistan region pondered by Rosneft, would serve as plausible responses. However, the primary answer lies in the eastward protraction of the Southern Gas Corridor pipe network, namely the Trans Caspian Gas Pipeline (TCGP), an idea intensively pursued by Europe and the US since the nineties, yet stuck due to Russian-Iranian objections, stemming from the still unsettled legal status of the Caspian Sea, and the Azerbaijani-Turkmen quarrel over the disputed Serdar/Kyapaz field. Following inauguration of the East-West Gas Pipeline, back in 2015, Turkmenistan emerges as the most obvious outlet for the implementation of van Aaartsen's notion. But the holder of the world's fourth largest gas reserves is not the sole regional player concerned by TCGP.

Kazakhstan - Current State of Play

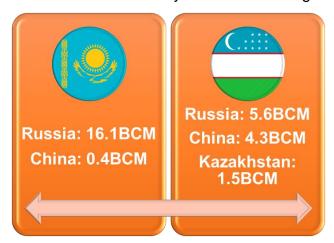
In the aftermath of the 2006 Russia-Ukraine gas spat, the Kazakh Energy Minister Baktykozha Izmukhambetov had expressed his support in favor of TCGP, during a meeting with Commissioner Andris Piebalgs, as well as his intention to submit a proposal for a feasibility study. In one of its versions, TCGP may also include a 600km-long onshore line from the Chevron-led Tengiz project, one of Kazakhstan's two largest natural gas deposits along with Karachaganak, up to Turkmenbashi seaport. In 2017, Chevron's share of Tengiz's net daily output averaged 272kbbl of crude, 401MCF of natural gas and 21kbbl of natural gas liquids. Under an ongoing expansion, recovery of oil and gas resources is planned to maximize. Overall, Kazakhstan is said to have some 85TCF of proven gas reserves, most of which can be found in its crude oil and condensate-rich fields. But is it actually capable of joining the Southern Gas Corridor?

For one thing, the typical OPEC laggard has been on the hunt for foreign investments in its unexploited offshore sections, the potential of whose is going to be revealed within 5-10 years' time (Zambil, Isatay, Zhemchuzhina,

Satpayev, sedimentary basins in the Caspian Depression). That's why it is taking steps to improve the traditionally high-risk national business environment for IOCs. The amended Subsoil Code serves as a notable example. Nonetheless, until the waiting list of its to-be-explored areas dwindles, Kazakhstan is not believed to be holding enough gas for SGC.

Prospects of Joining the SGC

Firstly, Kazakhstan shall seek to meet its own demand, risen by 65% between 2014 and 2017. Prolongation of the Gazprom-Karachaganak Petroleum Operating (KPO) sales and purchase agreement, providing for exports of 9BCM/a from the homonymous field to Russia's Orenburg gas processing plant, up to 2038 will enhance the coverage of Kazakhstan's internal gas consumption, including through swaps. Meanwhile, LNG (currently shipped from Russia by motor transport) always remains an option, depending on affordability of gas tariffs. Although sparsely populated, the country's coaldependent capital and central and northern parts are in desperate need of gasification, which is to be achieved by realization of the prospective Sarvarka pipeline from Kyzylorda region to Petropavlovsk with a capacity scalable up to 3BCM/a, helped by two compressors in Zhezkazgan and Temirtau. As stressed out by the Vice Minister of Energy Magzum Mirzagaliyev, response to domestic demand constitutes a priority with regard to Kazakhstan's natural gas balance. In terms of exports, in 2017, Kazakhstan exported a total of 13.7BCM (Karachaganak: 49%, Tengiz: 31%, Kashagan: 14%). Being an integral part of China's ambitions for a new-age Silk Road, Kazakhstan is set to revise this number upwards as a result of KazMunaiGas' deal with CNPC to raise gas deliveries towards Horgos up to 10BCM/a, once capacity of Lines A and B of the Central Asia-China gas pipeline goes up. It is plain as day that, despite maintaining a rudimentary energy dialogue with the EU, boosted by an EPCA recently approved by MEPs, Astana's European gas interconnection appears rather remote because of its ardent eastward export orientation that ensures income stability for the state budget.



Kazakhstan-Uzbekistan 2016 Gas Pipeline Exports

Source: BP Statistical Review of World Energy June 2017

Uzbekistan -Current State of Play

In addition to its Kazakh extension. TCGP could inch farther onto Central Asia, as the European Commission's VP for Energy Union stated in an international oil and aas conference in Turkmenistan, in November 2017. In this case, Uzbekistan is the first candidate that comes to mind, given that Tajikistan and Kyrgyzstan can only point to their plentiful, and conflict-prone, water resources.

Characterized by a historically poor record of receptiveness to Western IOCs, highlighted by the 2005 collapse of a PSA with the British Trinity Energy, and under the late Islam Karimov's longtime autocratic regime, that attempted to

strike a balance among China, Russia and the US, Tashkent has often found itself at the epicenter of Europe's targeted lobbying efforts to get Central Asian gas shipped via the SGC. Throughout Shavkat Mirziyoyev's 1.5-year transitional tenure, a lot seems to have changed. In particular, the country tries to get unleashed from the stereotype of a mere transit corridor for Turkmen gas supplies to Russia through the Gazprom-controlled Central Asia-Center gas pipeline system. In April 2018, it restored gas ties with Tajikistan after a six-year interval, agreeing to deliver 126MCM in 2018 via the Muzrabad-Dushanbe main gas pipeline, at an advantageous price of \$120/1,000CM, which will meet 30% of the TALCO aluminum plant demands. The long-lasting blockade was imposed by reason of Dushanbe's Rogun hydropower project, which Uzbekistan feared could disrupt downstream flow of irrigation waters. Still, Tashkent has a long way to go prior to gaining the status of a major gas exporter owing to the high domestic consumption rate, estimated at 51.4BCM in 2016 (including 30BCM for consumer consumption). Uzbekneftgaz plans to increase production up to 66BCM in 2018 from last year's 56.5BCM.

Lukoil, Gazprom and CNPC continue to be numbered among the principal investors in Uzbekistan's oil and gas sector. Apart from its involvement in a series of significant ventures (discovery of Jel gas field, restoration of gas production at the Shakhpakhty field, extraction and utilization of associated gas within the Kashkadarya contract area), Gazprom has teamed up with Uzbekneftgaz for the two-stage development of the geologically challenging 25 Years of Independence field, Uzbekistan's largest hydrocarbon field, whose gas reserves are estimated at over 100BCM, under a 2017 PSA. Overall investment could become the biggest in Uzbekistan's modern history, reaching \$5.8bn. For its part, Lukoil is working on a plant at Kandym field cluster, in order to up gas exports to China. Tashkent wants to export up to 10BCM/a to Beijing by the end of 2020 under a long-term contract with PetroChina. Interestingly enough, CNPC's most crucial infrastructure project in the region, Line D of the Central Asia-China gas pipeline for the transport of 30BCM of Turkmen gas via Uzbekistan and Tajikistan, has been facing obstacles from Uzbekneftgaz. Construction of the link's Uzbek portion was decided to be suspended in March 2017 under the cloak of technical hurdles, so that China is pressured to further invest in the region. Instead, Uzbekistan has now gotten embroiled in discussions to undertake either a technical or financer's role in Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline, aiming to diversify Ashgabat's eastward export routes.

Simultaneously, active attraction of international investors by Mirziyoyev's government has also been expanded to its West. In September 2017, it concluded preliminary agreements on cooperation with ExxonMobil in national oil and gas projects. A month later, EIB launched operations in Uzbekistan, in support of public and private sector energy and infrastructure projects. Finally, UK Export Finance lately inked an MoU with Uzbekistan Reconstruction and Development Fund, under which \$1.775bn will head to the Uzbek oil and gas business.

Prospects of Joining the SGC

So, can this doubly-landlocked CIS republic, with the yet underexplored acreage, contribute to the SGC? The fact that most of the Uzbek gas contains high levels of sulfur and, therefore, necessitates supplementary costs for processing, usually at the Muborak processing plant, could act as a deterrent for large-scale exports to Europe. In respect of politics, ambivalent relations with the US under the late Islam Karimov, that ranged from the post 9/11 golden era to the US troops' forced departure in the wake of Washington's criticism over the 2005 bloodshed incidents in the Ferghana Valley, have ruled Uzbekistan out of a western-directed export route. It is now up to President Mirziyoyev to either strengthen economic bonds with the Trump leadership and, consequently, with Europe, or to carve out a foreign policy that concentrates on its immediate vicinity (China, Russia and Central Asian fellows).

Conclusions

Owing to their geographical situation at the very heart of Eurasia, both Kazakhstan and Uzbekistan are entangled in an intricate export conundrum touching Russia, China and Europe. At the moment, their chances of actively engaging in the SGC are low from a technical and political perspective. This limits Europe's Caspian expectations on the SGC to Turkmenistan, on condition that TCGP overcomes legal and financial impediments, and Iran, provided that the new wave of US sanctions does not make the country turn to energy-thirsty destinations in its East (India, Pakistan, China). Looking into the future, we may witness deepening geopolitical antagonism between Central Asian producers and Russia over their shares in the energy-thirsty Chinese market under the weight of the OBOR initiative. Such a scenario would give China important leverage to foist its preferred terms in forthcoming contracts and would enfeeble a comprehensive energy partnership with the EU, preventing the Bloc from fulfilling its initial diversification vision by virtue of easterly branches of the SGC. Leaving aside the above considerations, Kazakhstan and Uzbekistan could benefit from a parallel export focus on the European market, since this alternative would fortify their bargaining position as for impending oil and gas linkages in their nearby neighborhood.