

Turkmenistan's gas hurdles: No end in sight

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Turkmenistan's energy sector is being hit by a wave of misfortune. The latest blow to Ashgabat came this March in the guise of indefinite postponement of Line D of the Central Asia – China pipeline (CACP). This pipeline is essential to Turkmenistan's ability to export more gas in order to receive more hard currency. Turkmenistan lost Russia as a customer one year ago, and has since provided gas only to China and Iran. However, Turkmenistan is not receiving cash for the entire China-supplied gas volumes, as part the two countries had previously closed a “debt for gas” deal. Furthermore, Ashgabat's relationship with Tehran has worsened, because of dispute over a gas debt. This has resulted in halted exports to Tehran, and to massive lay-offs in the Turkmen oil and gas sector.

The country's revenues suffered when oil prices went down. The Turkmen economy is heavily dependent on oil and gas revenue, so it started to crumble as the global oil prices plunged from \$115 per barrel in June 2014 to under \$35 at the end of February 2016. Turkmenistan's main revenue source is natural gas exports, estimated to make up 31% of GDP¹. Ranked 4th globally by total proved gas reserves after Russia, Iran and Qatar, Turkmenistan had 17.5 tcm² in reserves, and a gas output of 72.4 bcm in 2015, up

4.5% year-on-year. The country's total proved oil reserves as of 2015 are estimated at 600 million barrels.

Turkmenistan is a landlocked country, thus it is dependent on pipelines to export its gas on world markets. The three main export routes of Turkmenistan are: Central Asia – Center pipeline (CAC) to Russia; Central Asia – China pipeline (CACP) to China; and two pipelines to Iran: Korpedzhe-Kurt Kui (KKK) and Dauletabad-Sarakhs-Khangiran.

Because of the isolationist nature of the regime in Ashgabat, it is difficult to rely on the reported economic figures, particularly those regarding the gas industry. Nonetheless, it is certain that China is Turkmenistan's biggest customer, followed by Iran and Russia. Exports to China were about 40 bcm 2016³. However, Beijing only paid for half the quantity in cash, and took the other half as repayment of Turkmen debt. Ashgabat received an \$8bn loan from the China Development Bank, in 2009 and 2011, for the South Yolotan-Osman gas deposit (now Galknush gas field), and its gas transportation network. Although the gas volume shipped to China increased by 11% in the first 10 months of 2016, its price decreased, leading to a decrease in revenue by 29% to \$4.68 bn. According to the Chinese customs data, the price China pays for Turkmen gas decreased from

¹CIA World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/geos/tx.html>

²BP Statistical Review of World Energy 2016, <https://www.bp.com/content/dam/bp/pdf/energy->

[economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-full-report.pdf](https://www.elektormagazine.com/news/turkmen-istan-pressure-adapt-new-market-reality)

³<https://www.elektormagazine.com/news/turkmen-istan-pressure-adapt-new-market-reality>

around \$180/kcm in February 2015, to \$140-150/kcm in February 2016, and declined further to \$135-140/kcm in June 2016⁴.

Plummeting oil prices and fallen revenues triggered a chain reaction in Turkmenistan, which has a current account deficit of about \$6 bn⁵. Ashgabat devalued the currency by 19%. There have been reports of massive food shortages and unpaid wages.

Pressed by the need of hard currency, Ashgabat took a harder than usual stance in their negotiations with Iran and Russia, a gamble which resulted in further losses. Both Moscow and Teheran suspended their gas contracts with Turkmenistan.

Until 2010, the main buyer of Turkmen gas was Russia, whose purchases amounted to 40-42 bcm/year. Russia was the sole consumer of Turkmen gas, due to the main route of export, Central Asia-Center (CAC) pipeline system, a relic of the Soviet era. After the collapse of the Soviet Union the energy relationship between Ashgabat and Moscow was destabilized. Turkmenistan threatened multiple times along to cut supply to Russia when negotiating a higher gas price. The relationship worsened when Russia asked for a new gas price renegotiation in 2009. In the second half of 2008, Gazprom was paying \$150/kcm, but on account of lower gas prices and reduced demand from the European market in the aftermath of the financial crisis, they asked Turkmenistan to reduce exports. Turkmenistan declined, given that in 2008 Gazprom had agreed to pay European netback prices.

The turning point in the Russia-Turkmenistan gas relationship was the April 2009 pipeline incident in which CAC system's fourth line, Dowlatabat-Daryalik, carrying 92% of Turkmen gas to Russia across Uzbekistan and Kazakhstan, exploded. The Turkmen claimed that Gazprom was responsible for the explosion, as it unilaterally reduced gas intake, while the Russians claimed the aging pipeline and poor maintenance by Turkmenistan was the cause. Nonetheless, Russia took advantage of the halted exports while Turkmenistan suffered serious financial losses.

After 2010, Russian imports from Turkmenistan were only 10 bcm, and decreased to just 4 bcm in 2015. In January 2016 Moscow decided to suspend gas imports from Turkmenistan altogether until 2018, amid the international oil price slump. According to the Russian media, Gazprom suspended the contract because Turkmenistan demanded \$240/kcm, and Gazprom negotiated a deal with Kazakhstan and Uzbekistan for \$140/kcm⁶. Thus, Turkmenistan lost its most long-standing customer and significant revenue.

At the end of 2016, Ashgabat had only two gas buyers, China and Iran, and more recently it most likely lost Iran as a customer following a disagreement over price in December, 2016.

Turkmenistan has been Iran's largest gas supplier. Although Iran has considerable gas reserves (second largest after Russia), it needs Turkmen gas imports to supply its northern regions in winter, since its pipeline network is not developed enough

⁴<https://www.elektormagazine.com/news/turkmenistan-pressure-adapt-new-market-reality>

⁵<http://www.tradingeconomics.com/turkmenistan/current-account>

⁶https://life.ru/t/%D1%8D%Do%BA%Do%BE%Do%BD%Do%BE%Do%BC%Do%B8%Do%BA%Do%B0/968316/ghazovaia_diplomatiia_ghazprom_stavi_t_na_uzbiekistan_no_riskuiet_potieriat_ievropu

to link the Iranian gas fields in the south with the rest of the country.

On December 30, 2016, an Iranian delegation went to Ashgabat to negotiate a debt settlement after Turkmenistan threatened to cut off gas flows starting December 31. Turkmen authorities claim that Iran has an outstanding \$1.8 bn debt after the harsh winter of 2007-2008, during which Tehran increased imports from Turkmenistan to supply its 20 provinces during freezing temperatures.

At the time, Ashgabat raised the gas price nine-fold from \$40/kcm to \$360/kcm leading to the now disputed debt, a debt that the Iranian side considers to stand between \$600m to \$1.5 bn.

After tense meetings in which the Iranian delegation departed for the airport, and returned after persuasion, an 11th hour deal was reached. Initially, Turkmenistan agreed to continue gas shipments to Iran and signed a five year deal, with the debt issue to be settled in the following months. However, Turkmenistan reconsidered its position the next day and halted gas shipments to Iran's northern regions on January 1, 2017.

Ashgabat is now facing international arbitration, as Iran decided to take legal action against Turkmenistan at the International Court of Arbitration. Notwithstanding, this may be futile given that Turkmenistan does not recognize the authority of any international arbitration court. There are western companies still waiting to be compensated in the wake of international arbitration decisions against Turkmenistan.

Ashgabat not only lost a customer of more than twenty years, but their reputation as a reliable gas supplier has waned. A likely explanation of Turkmenistan's "illogical" behavior, characterized as such by Iran, is

in their dire need of revenue, as imports are growing in the country, as well as the funds needed for the fast approaching Asian Indoor and Martial Art Games. From March 15, 2015 to March 15, 2016 (the Persian year), Iran imported 9 bcm from Turkmenistan, yet Tehran usually pays in goods and services, not cash. Turkmenistan attempted several times to change this agreement but failed. Last year in June Turkmenistan agreed to a new ten-year contract according to which Ashgabat was to export gas worth \$30 bn in exchange for Iranian goods.

Ultimately, Ashgabat only hastened the inevitable. Iran post-sanctions is a competitor with the Turkmen gas industry and has been working to extend its pipeline system to connect the entire country to its southern gas resources. As such, in a few years Tehran most likely will not need Turkmen gas at all and will compete with the Turkmens in the Asian and European markets.

In this context, CACP was Ashgabat's last unyielding project, as prospects for TAPI and Southern Gas Corridor are unknown.

The Central Asia – China Pipeline, built by CNPC, was designed as part of a network of pipelines with four strands supplying China with Central Asian gas, mostly from Turkmenistan. The already completed lines A, B and C have a total capacity of 55 bcm/year. They start in Turkmenistan and cross Uzbekistan and Kazakhstan before reaching China. Line A and B can carry up to 30 bcm from Turkmenistan's Bagtyyarlyk gas field, which is run on a Product Sharing Agreement with China. Line C can carry up to 10 bcm of gas/year from Turkmenistan and Uzbekistan each, and 5 bcm from Kazakhstan.

CACP's Line D, was to increase Turkmenistan's export capacity to China by another 30 bcm/year. The 1,000-km

long pipeline estimated to cost about \$3.2 bn was designed to start in Turkmenistan, run across Uzbekistan, Tajikistan and Kyrgyzstan and end in western China. Although a shorter route, Line D's construction is far more diplomatically and geopolitically challenging than the previous three strands. Negotiations with Uzbekistan, Tajikistan and Kyrgyzstan proved to be troublesome for Beijing with issues ranging from difficulties in establishing joint ventures, route disagreements and project costs adding to regional rivalries. While Uzbekistan, Tajikistan and Kyrgyzstan were not to receive or supply gas to this pipeline, they charged considerable transit fees, with Kyrgyzstan reportedly getting \$1 bn/year.

Although postponement does not equate cancellation, on March 2, the China National Petroleum Corporation (CNPC) and Uzbekneftegaz, the state owned O&G company, halted the pipeline construction on the Uzbek territory for the second time. Initially, work on the 200 km-long Uzbek pipe segment, worth about \$800m of Line D was to begin in May 2016, but it was rescheduled for December 2016. Taking into consideration China's economic slowdown, Line D's completion prospects are dismal, and thus Turkmenistan's hopes of increased export capacity to China are shattered, and with it the prospect of increased revenue.

Turkmenistan has anxiously started to look for alternative consumers in the European and Asian markets, yet the prospects are not hopeful. Discussions on the Turkmenistan-Afghanistan-Pakistan-India (TAPI) have been ongoing for the past 20 years. While there have been recent developments, TAPI faces major financing and security challenges. TAPI's costs are estimated at \$10 bn, and it should carry 33 bcm from Turkmenistan

to India. Although Turkmenistan received a \$700m loan from the Islamic Development Bank and is said to have started the construction, the loan is not sufficient and Ashgabat is working to attract investors such as Qatar. But even with financing secured, the route itself is a major obstacle as it crosses Taliban controlled areas in Afghanistan.

Alongside TAPI, Turkmenistan showed interest in supplying the Southern Gas Corridor as a conduit to the EU market. Nonetheless, in order for this to be possible, the Trans-Caspian Pipeline (TCP) would first need to be built – an underwater pipeline crossing the Caspian Sea from Turkmenbashi port in Turkmenistan to Baku, Azerbaijan. This project faces multiple challenges: Russian and Iranian opposition; issues regarding the legal status of the Caspian Sea which have prevented a clear delimitation of territorial waters; a dispute between Azerbaijan and Turkmenistan over the Serdar/Kyapaz field in the Caspian; and financing as the EU, Azerbaijan and Turkmenistan are not likely by themselves to provide the required capital.

A bitter irony is that only a few years ago, Turkmenistan succeeded to secure export routes to the north, south and east. Currently, Turkmenistan finds its gas trapped inside the country with only one customer and no realistic prospects to develop alternative exports.

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