


UZBEKISTAN

On a new path

Uzbekistan has undertaken strategic reforms and is courting outside investors to lift performance in its oil and gas industry, but challenges remain, writes Joseph Murphy, Editor at NewsBase.

Uzbekistan turned a corner following the death of its former President Islam Karimov in September 2016. Under Karimov, a former Communist Party boss who had ruled the country since 1989, Tashkent pursued an isolationist foreign policy and maintained much of the Soviet-era control over the economy. Karimov's successor, Shavkat Mirziyoyev, has pursued a different path. He has sought to open the resource-rich country to foreign investment and, while his reforms are still a work in progress, he has already been credited with several key accomplishments since taking office.

He won praise in September 2017 for free floating the Uzbek currency, removing a major impediment to investment, and has implemented various other fiscal and tax reforms. He has also worked to improve diplomatic ties with Russia and China, as well as Uzbekistan's Central Asian neighbours, while also reaching out to investors from the West.

These policy shifts are beginning to yield results.

Production targets

By the end of Karimov's rule, Uzbekistan's upstream sector was in a state of stagnation, following years of limited investment and mismanagement. After peaking at more than 190,000 b/d in 1998, production of crude oil and NGLs (natural gas liquids) fell steadily for almost two decades, bottoming out

at 54,000 b/d in 2017. Meanwhile, gas production totalled 53.4bn cm in 2017, down from 60.9bn cm a decade earlier.

After taking office, Mirziyoyev announced a plan to ramp up gas production by 53.5bn cm and liquids output by 60,000 b/d. Tashkent hired international contractors, mainly from Russia, to drill new wells and upgrade field infrastructure. Liquids production rose last year to around 58,000 b/d, while gas extraction surged to 59.8bn cm. Yet these gains had little to do with improvements made under Mirziyoyev. Growth came from two projects approved years earlier. Russia's Lukoil launched gas and condensate production at the Southwest Gissar fields in 2017, followed by the Kandym fields last year. Between them, the fields flowed 13.4bn cm of gas in 2018, up from 3.76bn cm a year earlier, and are expected to produce 16.5bn cm in 2020.

Several new greenfield projects have sprung up over the past two years. A group of investors, led by Russia's Gazprom, began appraisal drilling in April 2018 at the 25 Years of Independence gas field in Uzbekistan's Surkhandarya Province. The consortium claims the field could hold more than 100bn cm of gas resources. Another Russian oil and gas company, Zarubezhneft, has set up a joint venture with Uzbekneftegaz to boost recovery at three mature fields in the Fergana Valley; while Epsilon Development, a US-registered company thought to be Russian owned, recently unveiled plans to invest \$2bn in the development of hard-to-recover gas reserves in Uzbekistan. Lukoil has also expressed interest in new exploration projects in the country, as have Azerbaijan's Socar and BP, according to Tashkent.

Alongside the handful of Chinese-owned exploration developments already underway, the new exploration projects could result in future output gains.

Gas trade

One of Uzbekistan's strategic goals is to expand exports of natural gas. As one of the former Soviet Union's biggest gas producers, the country enjoyed an 11.8bn cm/y supply surplus in 2017, most of which was sold to China and Russia. Recent focus has been on increasing shipments to the Chinese market.

Uzbekistan signed a framework agreement in 2010 to sell up to 10bn cm/y of gas to China, but deliveries have fallen far short of this goal, with deliveries reaching only 3.55bn cm in 2017. Growth at Lukoil's projects should help drive growth in 2019 and 2020, as the Russian firm intends to ship 80% of all gas it produces in Uzbekistan to China.

Uzbekistan has also positioned itself as a major transit route for China-bound gas supplies from Turkmenistan. The 55bn cm/y Central Asia-China Gas Pipeline (CACGP) consists of three parallel strings running from eastern Turkmenistan through Uzbekistan and Kazakhstan and terminating in China's north-western Xinjiang Province. Beijing expressed interest in 2014 in building a fourth 30bn cm/y string, known as Line D, which would follow a different path. From Turkmenistan, it would instead traverse Uzbekistan, Tajikistan and Kyrgyzstan before entering China.

All three transit states have expressed desire to move forward with construction of the pipeline. However, the Chinese government no longer seems to consider the project a priority. Gas demand growth in China has underwhelmed in recent years, and besides having spare import capacity at LNG terminals and a pipeline from Myanmar, the country is due to start receiving Russian pipeline gas for the first time this coming December. At full capacity, the new Power of Siberia pipeline will pump up to 38bn cm/y of gas from fields in Eastern Siberia to China's heavily populated western seaboard.

Beijing has long favoured diversifying its import options, as increasing shipments from Russia is preferable to expanding deliveries from Turkmenistan, which is already its biggest gas supplier. No tangible progress is expected to be made at Line D for several more years.

Lukoil brought Uzbekistan's Southwest Gissar fields onstream in 2017

Photo: Lukoil



Photo: Shutterstock

p14

Uzbekistan began gas supplies to neighbouring Tajikistan in April 2018. Supplies had been suspended in 2012 following a diplomatic row and relaunch is indicative of Mirziyoyev's pragmatic approach to regional diplomacy.

Refining focus

Uzbekistan has struggled for years with shortages of motor fuel, and under Karimov, these difficulties grew more acute.

Unlike neighbouring Kyrgyzstan and Tajikistan, Uzbekistan's problem is not insufficient refining capacity. The country operates three processing plants in Alty-Aryk, Bukhara and Fergana, with a total nameplate capacity of slightly over 220,000 b/d. The 110,000 b/d Fergana and nearby 63,000 b/d Alty-Arik refineries were built in the Soviet era, while the 50,000 b/d Bukhara facility came onstream in 1997. This is more than enough capacity to cover total demand for oil products in Uzbekistan, which are estimated to be about 70,000 b/d.

Uzbekistan suffers fuel shortages because it cannot obtain enough crude oil feedstock for its refineries. As a result, they only produced 1.15mn tonnes (26,600 b/d) of gasoline and 1.08mn tonnes (22,200 b/d) of diesel in 2018.

As mentioned earlier, the country has seen a steady slide in oil production over the past decade. Under Mirziyoyev, Uzbekistan has reached out to Kazakhstan, Russia and Turkmenistan to secure oil supply deals, but no binding agreements have been reached.

Uzbekistan and its partners are yet to find a way of making these supplies commercially feasible. Kazakhstan and Turkmenistan would sooner sell their oil at a higher price in Western markets or in China. Tashkent has made some progress with Moscow, with the two sides agreeing to launch

trial shipments of Russian crude in 2017. But they are yet to enter into a commercial contract.

Keen to demonstrate his commitment to tackling Uzbekistan's fuel problems, Mirziyoyev introduced plans in 2017 to build a 100,000 b/d, \$2.2bn refinery in the southern province of Jizzakh. The plant was expected to start up in 2021–2022 and produce up to 3.7mn tonnes of motor fuel, 700,000 tonnes of jet fuel and 500,000 tonnes of other products. Russia's Gazprom offered to help build and finance the plant, which was expected to run on Russian oil. Reports emerged that the Jizzakh venture had run into difficulties late last year, when local independent media cited sources as saying that the Uzbek government had been unable to find a means of obtaining necessary oil supplies. The company now plans to focus on upgrades at existing refineries in Bukhara and Fergana.

Uzbekistan already has the refining capacity in place to meet its fuel demand. As a result, the Jizzakh refinery could be seen as largely a political venture.

GTL solution

One project deserving of more attention is the construction of the country's first gas-to-liquids (GTL) plant in the southern Kashkadarya Province. The project is being developed by Uzbekneftegaz, in partnership with Malaysia's Petronas. South Korea's Hyundai and Russia's Enter Engineering are contractors, while South Africa's Sasol and Denmark's Haldor Topsoe are providing technologies.

Large-scale equipment arrived at the project site in February 2019. At full capacity, the plant will convert 3.6bn cm³/y of natural gas into 1.5mn tonnes of synthetic liquid fuel, including 743,000 tonnes of diesel. The plant is due online in 2020, several years behind schedule owing to earlier

difficulties obtaining financing. A group of international lenders stepped in to provide \$2.3bn in funding in December 2018.

The GTL facility should help alleviate Uzbekistan's fuel shortages, depending how much of its production is used locally rather than exported. However, the country will not achieve real fuel independence until it can find a viable means of importing crude oil and raising utilisation of its existing refining capacity.

In the meantime, Uzbekistan will continue to rely largely on Russian gasoline and diesel to cover the shortfall in supply. Shortages occur because Russian shipments sometimes become too costly to import, while domestic pricing controls exacerbated the problem. This has led to the emergence of a black market in Uzbekistan for fuel supplies smuggled in from neighbouring Kazakhstan and Turkmenistan. Many Uzbek motorists have also taken to converting their cars to run on LPG instead of gasoline as a solution.

Beyond GTL plants, Uzbekistan is advancing several petrochemical projects to convert natural gas into higher-value products that can be more readily exported. State-run Uzkimyosanoat is working with South Korea's Samsung and Japan's Mitsubishi Heavy Industries on new plants that use gas to produce ammonia and urea. Uzbekistan is also expanding the capacity of a polyethylene (PE) and polypropylene (PP) complex in Shurtan, and has plans for several methanol-to-olefins (MTO) plants.

What next?

Uzbekistan's production is set to fall far short of Mirziyoyev's ambitious targets, in spite of rising output at Lukoil's projects. But the rise in the number of E&P joint ventures over the past two years is cause for optimism.

While Uzbekistan faces stiff competition for the Chinese gas market from other producers in Central Asia and Russia, it has recognised GTL and petrochemicals as an alternative solution to gas monetisation. However, it will need to double-down on efforts to attract partners to advance more projects in this area.

Uzbekistan's fuel problems are set to persist, and while GTL could help, Tashkent needs to resolve the issue of crude supply and deregulate the market to stave off the risk of future crises. ●