

# Energy

Third Edition

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# Uzbekistan

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# Overview of the current energy mix, and the place in the market of different energy sources

#### General notes

Along with Kazakhstan and Turkmenistan, Uzbekistan is one of the few countries in Eurasia that is totally energy independent, self-sustaining and rich enough to subsidise domestic consumption and export energy resources. With abundant gas reserves and a growing gas production rate, Uzbekistan enjoys the role of third-largest natural gas producer in Eurasia, behind only Russia and Turkmenistan, and eighth in the world. At the same time, oil production has gone down consistently for the last decade as oil fields deplete, and this situation puts the pressure on the industry to focus mainly on thermal, hydropower and alternative power facilities and capacities.

The entire energy sector is still monopolised in the government's hands through state stock power company Uzbekenergo. In spite of efforts, it has never been privatised — unlike, for instance, the upstream petroleum industry which has seen many foreign investors engaged in exploration and development of mostly gas fields under production-sharing contracts with national holding company Uzbekneftegaz. Limited export capacities and obsolete energy infrastructure are major concerns of the Government which is now trying to coordinate and implement various programmes to diversify the use of hydrocarbons and their export routes, and encourage alternative energy projects and energy-saving programmes. Although Uzbekistan is the world's seventh-ranking uranium supplier and is expanding production, it has no nuclear power stations and, despite much speculation in the mass media, Uzbekistan has denied any plans to construct a nuclear power station in what is a seismically active area that also seems to be vulnerable to terrorism.

The energy composition of Uzbekistan rests upon hydrocarbon consumption currently, as hydroelectric power is limited by shrinking water resources, whose utilisation is a source of threatening tensions with Kyrgyzstan and Tajikistan. Hydrocarbons, mainly gas, comprise nearly 97% of the country's energy balance, with the remaining 3% coming in the form of hydro, coal and charcoal.¹ Other than hydro, renewable energy projects have no significant impact: the other kinds of renewable energy – solar, wind and biomass – are used at a microeconomic scale. Solid fuels, mainly coal and charcoal, are used for cooking and heating energy in domestic consumption mostly in rural areas, with 85% of coal used at thermal power stations. The electrification rate in Uzbekistan is nearly 95% but, due to outdated equipment, the electrical supply to rural areas is inconsistent. Renovating the power transmission networks owned and monopolised by the Government is one of the energy sector's priorities.

The installed capacity of Uzbekistan power plants exceeds 12.3 million kW, which represents more than half of all the generating capacity of the Interconnected Power System of Central Asia that includes the power systems of Turkmenistan, Tajikistan, Kyrgyzstan and southern Kazakhstan.

According to BP's 2014 Statistical Review, total primary energy consumption in Uzbekistan

was about 600 terawatt-hours in 2013. Natural gas consumption represented approximately 85%, while consumption of petroleum products and coal were about 7% and 3%, respectively. Hydroelectricity represented the remaining 5% of the share.

Natural gas and electricity are two of the largest export items of Uzbekistan and make up to 25% of all exports. The share of annual power consumption across the Republic is 1940kW/h per capita.<sup>2</sup>

#### Overview of the hydrocarbon industry

According to the Oil & Gas Journal, as of January 2014 Uzbekistan has 594 million barrels of proven crude oil reserves discovered in 211 oil and gas fields, more than 50 of which are currently active natural gas fields. In 2013, total crude oil and other liquids production was about 102,000 barrels per day (bbl/d), of which 30% came from natural gas plant liquids. It is estimated that nearly two thirds of all known oil and natural gas fields are located in the Bukhara-Khiva region in the south of Uzbekistan.<sup>3</sup>

According to the BP Statistical Review of World Energy 2014, Uzbekistan's proven reserves of natural gas are 1.6 trillion cubic metres (tcm), effectively making it the 20th largest proved reserves holder in the world.<sup>4</sup> Uzbekistan produces 55.2 billion cubic metres (bcm) of natural gas annually, with a steady growth rate. Since domestic consumption makes up only 45.2 bcm, the scale of production limits the growth of exports of natural gas to neighbouring countries (Kazakhstan, Kyrgyzstan, Tajikistan, Russia and Ukraine) and countries further afield. At present, Uzbekistan exports approximately 10 bcm of its produced natural gas annually. According to the National Oceanic and Atmospheric Administration, Uzbekistan flared 1.8 bcm of natural gas in 2011 and ranks among the world's top 20 gas-flaring countries, although flaring has been declining since 2006 as a result of the state programme on utilisation of the associated gas.<sup>5</sup>

Uzbekistan was able to attract massive investments estimated at around US\$8bn in field developments and construction of gas treatment facilities from, most notably, Lukoil and Gazprom of Russia, the China National Petroleum Corporation, and Malaysian Petronas, under respective production sharing agreements. Two old pipelines, Bukhara-Ural and Central Asia-Center, still operate to channel natural gas produced in Uzbekistan by Lukoil, Gazprom and Uzbekneftegaz for export to Russia and further to Europe. Uzbekistan also serves as a transit country for natural gas flowing from Turkmenistan to China through a strategically important Central Asia-China Gas Pipeline. This pipeline is also expected to commence export of natural gas produced in Uzbekistan. In addition, two new natural gas pipelines, Gazli-Kagan and Gazli-Nukus, were built to connect the Ustyurt and Bukhara-Khiva regions with the existing system. The gas transportation system comprises over 14,000 km of pipelines and includes 24 compressor stations and more than 300 gas-distribution stations. The total amount of gas carried by the system annually is nearly 190 bcm, including a significant amount of transit Turkmen gas.

The Government is trying to diversify and create more added-value projects in natural resources, so, in addition to the generation of electricity, natural gas is also utilised as a raw material for petrochemical manufacturing facilities. At present these facilities include, for example, Mubarak Gas Refinery, Shurtan Gas Facility and Shurtan Petrochemical Facility. In addition, crude oil and gas condensate are used for refining into various petroleum products in three oil refineries located in Ferghana, Alty-Arik, and Bukhara, with a total annual refining capacity of 11.2 million tonnes of oil and gas condensate. These currently operate below their capacity because of the declining rate in oil production. There were discussions on building up a LNG facility, but this is thought to play a role in peak-shaving.

#### Overview of the coal industry

Stock Corporation "O'zbekko'mir" (Uzbekugol) is included in the structure of State Stock Company "O'zbekenergo", with its main focus on coal mining. Uzbekistan's proven coal reserves are estimated at 1.9 billion tonnes including brown coal of 1,853 million tonnes and black coal of 47 million tonnes. The annual production rate is three million tonnes. Four coal enterprises are engaged in open pit mining, underground mining and underground coal

gasification.<sup>8</sup> 85% of coal consumption goes to the power industry for thermal plants. The initial policy, to reduce coal mining and consumption due to environmental concerns, has now been revised. Since the adoption of the Modernization and Retooling Program for the Coal Industry in 2013, coal mining is expected to gradually increase in such a way as to replace natural gas and oil products for power industry. The target for the near future is that gas should remain a main fuel but the share of coal should increase up to 10-11% in the fuel balance by 2015.

#### Overview of the nuclear industry

Uzbekistan is a party to the Non-proliferation Treaty and ratified an Additional Protocol Agreement with the IAEA in 1998. It has also ratified the Central Asia Nuclear Weapon Free Zone treaty, and does not plan to build a nuclear power station. In February 2014, the State Committee for Geology and Mineral Resources of Uzbekistan reported uranium resources of 138,800 tU in sandstones and 47,000 tU in black shales. Navoi Mining & Metallurgy Combinat (NMMC), as part of the State Holding Company Kyzylkumredmetzoloto, undertakes all uranium mining in Uzbekistan. NMMC produces 2400 tU annually, with export mainly to the USA through Nukem Inc., South Korea; through Kepco, Japan; through Itochu Corp.; and now to China through CGN. In May 2014 CGN agreed to buy US\$800m of uranium through to 2021, and China customs was reported as saying that Uzbekistan was second only to Kazakhstan as a uranium supplier to the country. Completion of Alendy, Aulbek and North Kanimekh mines in 2013 was expected to increase the production rate of uranium. The industry remains largely un-privatised but still has international partners on the mining side, most notably Mitsui & Co, Japan Oil, Gas and Metals National Corporation (JOGMEC), and China Guangdong Nuclear Uranium Corp.

#### Overview of the power industry

With the gigantic power-generation facilities of the Soviet era and ample supply of natural gas, Uzbekistan has become the second-largest electricity producer in Central Asia. Twelve thermal power plants and 31 hydro power plants operate under the auspices of Uzbekenergo, Ministry of Agriculture & Water Resources, Almalyk Mining & Metallurgy Combinat and Chemical Industry Association, annually generating up to 48 billion kW/h of electrical power and more than 10 million Gcal of thermal power, of which 88.5% is provided by the natural gas-powered thermal plants and 11.5% by hydropower plants. Thermal power plants (TPPs) account for total capacity of 10.6 million kW; among them the biggest are Talimardjan, Syr-darya, Novo-Angren and Tashkent TPPs, generating over 85% of electric power. For power generation at TPPs, the gas share is 90.8%; mazut is 5.3% and coal is 3.9%.

All hydro power plants are integrated into cascades of HPPs. The largest HPPs are located in the upper Chirchik river (Charvak HPP, Khodjikent HPP, Gazalkent HPP) and have water storage basins allowing them to operate in regulation capacity mode.

The electricity is transmitted and distributed through power transmission lines whose voltage ranges between 0.4 and 500 kV and whose total length now exceeds 243,000 km.

The country's electricity capacity is expected to increase by way of modernisation of old facilities. Uzbekenergo currently implements 28 large-scale investment projects, including the installation of an additional 130-150 MW capacity at Angren TPP, with the financing of China Exim Bank, the modernisation of Central Asia's largest TPP at Talimardjan, whose total capacity of 3.2 GW will be enhanced by another Combined Cycle Gas Turbine of 450 MW, and construction of an additional Combined Cycle Gas Turbine of 370 MW at the Tashkent TPP. In August 2014, Uzbekenergo also announced the pre-qualification for the construction on a turn-key basis of one unit of 450 MW nominal capacity combined cycle cogeneration plant at the Navoi TPP, with a project cost of US\$520m to be funded by Japan International Cooperation Agency (US\$360m), the Fund for Reconstruction and Development of Uzbekistan (US\$100m), and Uzbekenergo's own resources. The reconstruction of two power units, No 7 and No 8 at the Syr-Darya TPP (300 MW each), was also implemented with the funding of EBRD.

Uzbekistan has also been using the Mechanism of Clean Development (CDM) of the Kyoto Protocol for the realisation of projects on the installation of gas expansion machine generators at

the Talimardjan and Syr-Darya TPPs and for the Construction of HPP Kamolot with a capacity of 8 MW on Chirchik-Bozsuyskiy channel. Uzbekistan has in fact initiated 79 CDM project proposals, and 59 of them have been approved.<sup>12</sup>

Uzbekenergo is further implementing the construction of a high-voltage transmission line of 500 kV from Syr-Darya TPP to substation Sogdiana with partial financing out of an IDB loan, and also constructing a number of facilities of 110-220kV, including indoor substations and cable lines of 110 kV for power supply reliability improvement in Tashkent. Uzbekenergo envisages the construction of nearly 800 km of main transmission lines and the introduction of 2.4 million kWA of transformer capacities at system substations of 220-500 kV.<sup>13</sup>

The development of the power industry for the period until 2015 was determined by the Presidential Decree dated 15 December 2010 No 1442, which highlighted 48 investment projects including 15 TPP modernisation plans, with the development of an additional 2,329 MW capacity and nine hydropower projects with an additional 63.8 MW capacity in small HPPs. During the last decade hydropower energy production has been steadily increasing. It is expected to grow mainly by virtue of the development of mini-hydropower plants with capacity of 420-440 MW and modernisation of existing HPPs, as shrinking water resources are insufficient for a massive hydropower project. The Program for the Development of Small Hydropower Plans run by the Ministry of Agriculture & Water Recourses envisages the construction of 15 small HPPs with a combined capacity of 420 MW which are estimated to add another 1.3 billion kWh of electric energy production.<sup>14</sup>

#### Prospects for renewable energy

With limited water resources and a dry and sunny climate, Uzbekistan has very good potential for solar energy. There are more than 250 sunny days per year and the technically feasible potential of solar energy is estimated at 2 million GWh annually, which is much more than the national annual consumption. Under the Presidential Edict dated 1 March 2013 No 4512, the Government is undertaking to install and operate solar energy facilities of a capacity of 100 MW at Samarkand Solar Power Project, 15 with the US\$110m funding coming from the Asian Development Bank 16 and another US\$200m coming from Uzbekistan Fund for Reconstruction and Development. 17 In recent years, the Government has also tried to establish photovoltaic systems at Foton Electronic Plant in Tashkent 18 and to promote the construction of a solar panel plant by Solar Turbines in Navoi Free Industrial Zone, and solar water-heating collectors with Chinese Suntech Power Co. in Dzhizzak Free Industrial Zone. The Government has also authorised the establishment of the International Solar Energy Institute in Tashkent with the participation of the Asian Development Bank. 19

Biomass energy generation has a high potential in Uzbekistan too, as it is the fourth-largest producer of cotton in the world with four million tonnes of cotton manufactured annually, thereby generating over 7-10 million tonnes of cotton cellulose waste products which can be used further to produce bioethanol. In addition, waste materials from poultry and pig farms in Uzbekistan can be a source for the potential production of biogas, with a total technical potential of up to 4.43 bcm. The total technical potential for biogas production from livestock-breeding wastes is estimated at 8.9 bcm. Researchers highlight that the estimated biogas potential could secure more than 10% of the country's annual energy consumption.<sup>20</sup>

Uzbekenergo has also piloted a wind power project to test its potential in Uzbekistan, although the landscape is not characterised by strong winds, except for a few areas. The wind energy potential of Uzbekistan is fair, with a potential generating capacity of around 100 MW. The most promising sites are the Aral Sea region, Karakalpakiya, and the Central region of the country, with wind velocities around 9 m/s.<sup>21</sup> Uzbekenergo contracted Xi'an Electric Engineering, a Chinese firm in Shanxi Province, to construct the 750 kw wind farm in the Tashkent region. The construction of the first experimental wind energy farm in Central Asia with a capacity of 750 kilowatts worth US\$3m is expected to produce about 1.28 million kilowatts of energy.<sup>22</sup>

# Changes in the energy situation in the last 12 months which are likely to have an impact on future direction or policy

A major event in the energy situation during the last 12-month period is the withdrawal of Malaysian Petronas Carigali from all existing petroleum upstream projects in Uzbekistan, including its withdrawal from Baisun Production Sharing Agreement, Surkhanski Production Sharing Agreement, and Urga Production Sharing Agreement<sup>23</sup>. The company also opted out from the investors' consortium operating under the Aral Sea Production Sharing Agreement. It is also reported that Korea National Oil Corporation relinquished one exploration area, while Daewoo Energy and Tethys Petroleum abandoned their exploration and production enhancement contracts respectively.<sup>24</sup>

Another development is that the Government has promoted the construction and financing of petrochemical facilities in an effort to diversify the economy and shift the focus of exports from exporting raw materials to exporting added-value products. In 2013, Uzbekneftegaz, KOGAZ and Honam Petrochemical finalised the financing of the construction and operation of a petrochemicals joint venture that will extract US\$4.5bn of natural gas from onshore Surgil fields, sell methane gas locally and process ethane and condensate for petrochemical production, high-density polyethylene and polypropylene, to be sold on local and export markets.

On the other hand, in order to address growing oil consumption, Uzbekistan plans to gradually reduce its oil imports by converting natural gas into other hydrocarbon products such as diesel, kerosene and LPG. In 2009-2014, Sasol, Petronas and Uzbekneftegaz signed an agreement to establish a joint venture for developing the GTL (gas-to-liquid) project on the basis of Shurtan Gas chemical facility, which is expected to convert 3.5bcm of natural gas and condensates into about 1,743,000 t/y of hydrocarbon products. The US\$5bn facility is expected to be commissioned by 2017.<sup>25</sup>

Reduction of oil consumption is also prioritised by implementing various projects that aim to replace gasoline with gas for vehicles. One of them is the construction of NGV refill stations by Kolon Group of South Korea worth US\$83m, and retooling locally produced vehicles.<sup>26</sup>

#### Developments in government policy/strategy/approach

The Government has identified the following policies in the energy sector:

- Renewables: With the completion of the 100 MW Samarkand Solar Power Project by 2019
  and induction of other initiatives on renewable energy, the Government of Uzbekistan is
  aiming to generate about 21% of all its energy needs from renewable sources, including
  solar, by 2031. The Government therefore is contemplating developing a strategy for use
  of alternative sources for energy, along with the very intensive construction of small HPPs
  in the near future.
- Energy efficiency: There are a number of campaigns that are being carried out to install modern meters for consumers of natural gas, hot water and electrical power for households. With the implementation of electronic electricity meters, the Government plans to introduce an automated system to the commercial record-keeping of electric power (ASC AEP). The Government anticipates decreasing the energy intensity of GDP to competitive levels, as energy use per unit of GDP is still 2.6 times higher than the average for Europe and Central Asia.<sup>27</sup> Efficiency of the electricity transmission and distribution is one of the Government's priorities due to significant losses estimated at 20% of net generation, with the cost of excess losses estimated at US\$340m.<sup>28</sup>
- Added-value: The Government is also shifting the focus to diversifying the economy by building and operating petrochemical facilities that use natural gas as a raw material to produce petroleum products instead of exporting natural gas. Aside from the recently inducted Surgil Gas Chemical Plant, the Government also plans to promote Moubarak Gas Chemical Plant.
- Substitution: As highlighted above, Uzbekistan GTL facility is expected to convert gas

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into liquid hydrocarbons and decrease the import of crude oil. Consumer vehicles are also expected to convert from use of gasoline to use of gas-powered engines.

- <u>Modernisation</u>: The Government undertakes to modernise and retool existing low efficiency outdated gas-fired plants, whose efficiency is 40% lower than that of modern thermal plants as the country loses approximately US\$1.2bn in potential gas export revenues.
- <u>Utilisation</u>: As discussed above, Uzbekistan is one the world's top 20 gas-flaring countries
  with 1.8 bcm flared annually. This is being addressed through the programme on utilisation
  of the associated gas that was developed by Uzbekneftegaz for its subsidiaries and is also
  followed by foreign investors operating under Production Sharing Agreements.
- <u>Gas exports</u>: To increase and diversify gas export, the Government plans to increase gas production by attracting foreign investors for the exploration and development of hard-to-recover fields and committing additional volumes for the Central Asia-China Gas Pipeline.<sup>29</sup> In an effort to increase gas exports, the Government also plans to use more coal and alternative energy for TPP and domestic consumption.
- <u>Increase of production</u>: The Government plans to significantly increase production of oil and gas condensate to keep the country's economy independent of oil imports that normally come from Kazakhstan. As Kazakhstan becomes a member of the Russia-led Customs Union with its specific charges on oil for non-members, Uzbekistan is seeking alternative ways to import oil and to utilise its oil refineries from Iran.<sup>30</sup> The Government is also looking to improve the rate of oil recovery, conversion and gas processing efficiency to raise product quality to world standards, and to increase the acreage for the hydrocarbon resource base, primarily liquids, through new discoveries.

#### Developments in legislation or regulation

From June 2014, a new Regulation on the use of petroleum products No. 164 has been in force. This Regulation sets general rules of delivery and acceptance of petroleum products, storage conditions, and transportation rules. It also specifies environmental and safety requirements.

Additionally, to monitor reserves of mineral resources, companies engaged in the oil industry shall submit annual reports regarding resources reserves used in the past year. Resolution of the Cabinet of Ministers of Uzbekistan No. 206 dated 29 July 2016 also sets forth reporting requirements, terms and procedure for submission of the relevant report.

On 14 August 2014 the Uzbek Cabinet of Ministers approved a Regulation forming the exploration programme of the Uzbekneftegaz National Holding Company No.230. The long-term exploration programme determines the main directions of development of the geological sector. The annual exploration programme includes geological exploration to search for oil and gas reserves given the target parameters (direction, stage, types and exploration volume, expected outcomes, the amount of the planned appropriations by indicating the sources of their funding) for each project, as well as the expected timing of their implementation. The long-term and medium-term exploration programmes are approved by the Uzbek Cabinet of Ministers; the annual programmes are approved by Uzbekneftegaz in coordination with the Ministry of Economy and Ministry of Finance, and the Uzbek State Committee on Geology and Mineral Resources.

#### Judicial decisions, court judgments, results of public enquiries

Judicial practice is not publicly available in Uzbekistan, and we are not aware of cases where Uzbek courts have interpreted matters related to the energy sector. However, we need to note that electricity tariffs have been escalating during the last decade, raising concern on the part of investors over the increase of production costs. Some of the foreign investors whose disputes with the Government have been logged with different arbitration forums intend to bring claims on damages in relation to the unilateral increase of electricity tariffs.

#### Major events or developments

In 2014, there were a number of significant events in the oil and gas sectors in Uzbekistan. The key events were:

The national holding company Uzbekneftegaz decided to invest some US\$200m in geological prospecting to find heavy oil in the south and east of Uzbekistan. Uzbekneftegaz has already started to look for heavy oil and bitumen in the Korsagly-Dasmamagin area and the Besharcha block in the Surkhandarya district, as well as in the Fergana area in the east of the country. Uzbekneftegaz believes that it will be possible to produce at least 100,000 more tonnes of oil per annum in those areas after the works' completion.

The Chinese National Petroleum Corporation and Uzbekneftegaz decided to establish a subsidiary to develop oil and gas fields, focusing on geological exploration at five investment blocks in Uzbekistan, located in three oil and gas fields. An agreement on this was signed between the national holding company Uzbekneftegaz and CNPC in June 2006.

National holding company Uzbekneftegaz opened two fields with hydrocarbon reserves of about 20 million tonnes of conditional fuel in the first quarter of 2014. According to the holding, recoverable hydrocarbon reserves in Uzbekistan make up over 2.5 billion tonnes of conditional fuel as of 1 January 2014, of which 65% pertains to share gas reserves.

In June 2014 it was announced that the Asian Development Bank (ADB) had decided to expand its portfolio in Uzbekistan and allocate a loan worth US\$300m to upgrade Uzbekistan's Takhiatash Thermal Power Plant (TPP). The project envisages the construction of two new energy-efficient combined-cycle gas turbines of up to 280 megawatts each, while decommissioning three existing steam turbine units, with two others to be kept as backup. Another component will be staff training and other support for the state-owned power utility Uzbekenergo to improve tariff-setting and to make the utility more commercially bankable.

Uzbekenergo intends to build two combined-cycle gas turbines (CCGTs) at Syr-Darya thermal power plant, the largest thermal power plant in Central Asia, with total capacity of 900 megawatts. At present, Uzbekenergo specialists are working on the preparation of a preliminary feasibility study of the project on the modernisation of the Syr-Darya TPP, envisaging construction of two CCGTs with capacity of 450 megawatts each. It is assumed that the new CCGTs will be built to replace retiring-from-service NN 3, 4 and 5 units. Their total capacity is now the same 900 MW.

The final cost of the project will be known after the completion of the pre-feasibility study, but according to preliminary calculations, it will be about US\$1bn.

Moreover, Uzbekenergo intends to begin construction on the second CCGT at the Navoi TPP with a capacity of 450 megawatts in early 2015. The project cost is US\$547.2m.

This year, Uzbekenergo has completed the modernisation of the first unit at Uzbekistan's Charvak hydropower plant (HPP). Charvak HPP is the largest hydropower plant in the Chirchik-Bozsu cascade of hydropower plants.

The Russian company 'Power Machines' will proceed with modernisation of three hydrogenerators of the power plant, which has a capacity of 155 megawatts. The company will replace the stator's winding on the hydro-generators and install new feed systems on them. For the first, second and fourth hydraulic units, the Power Machines will produce three hydroturbine impulse wheels.

Aside from that, the hydro-mechanical part of the regulators and oil pressure units will be modernised on all four hydraulic units. The system of automatic control of hydraulic units will be reconstructed by means of creating a visual control and management system. The project will increase the capacity of each hydraulic unit from 155 megawatts to 175 megawatts, which will give an opportunity to generate an additional 120 million kilowatt hours of electricity annually. It is expected that the project, worth US\$53.79m, will be completed in the second half of 2015.

#### Proposals for changes in laws or regulations

As proposals for regulatory reforms are not widely discussed in public, we are not aware of any reforms in this sector. We may however expect new legislation in the area of renewable energy, particularly solar and wind energy. It is unlikely that Uzbekistan will be in a position to develop public-private partnership laws or laws in relation to Independent Power Producers in the short term. There is a proposal to develop the draft of a law on alternative sources of energy for Parliament to adopt, but this initiative has not materialised yet.

\* \* \*

#### **Endnotes**

- 1. <a href="https://energypedia.info/wiki/Uzbekistan\_Energy\_Situation">https://energypedia.info/wiki/Uzbekistan\_Energy\_Situation</a>.
- 2. <a href="http://www.uzbekenergo.uz/en/activities/energy/">http://www.uzbekenergo.uz/en/activities/energy/</a>.
- 3. <a href="http://www.eia.gov/countries/country-data.cfm?fips=uz">http://www.eia.gov/countries/country-data.cfm?fips=uz</a>.
- 4. <a href="http://www.bp.com/content/dam/bp/pdf/Energy-economics/statistical-review-2014/BP-statistical-review-of-world-energy-2014-full-report.pdf">http://www.bp.com/content/dam/bp/pdf/Energy-economics/statistical-review-2014/BP-statistical-review-of-world-energy-2014-full-report.pdf</a>.
- 5. <a href="http://www.eia.gov/countries/country-data.cfm?fips=uz">http://www.eia.gov/countries/country-data.cfm?fips=uz</a>.
- 6. <a href="http://www.uzbekcoal.uz/about.htm">http://www.uzbekcoal.uz/about.htm</a>.
- 7. http://www.gov.uz/en/helpinfo/energy/10004.
- 8. <a href="http://www.lincenergy.com/clean\_energy\_uzbekistan.php">http://www.lincenergy.com/clean\_energy\_uzbekistan.php</a>.
- 9. <a href="http://www.world-nuclear.org/info/country-profiles/countries-t-z/uzbekistan/">http://www.world-nuclear.org/info/country-profiles/countries-t-z/uzbekistan/</a>.
- 10. <a href="http://www.uzbekenergo.uz/ru/news/archive/ob-investitsionnoy-deyatelnosti-gak-uzbekenergo/">http://www.uzbekenergo.uz/ru/news/archive/ob-investitsionnoy-deyatelnosti-gak-uzbekenergo/</a>.
- 11. http://www.uzdaily.com/articles-id-28778.htm.
- 12. <a href="https://energypedia.info/wiki/Uzbekistan\_Energy\_Situation">https://energypedia.info/wiki/Uzbekistan\_Energy\_Situation</a>.
- 13. <a href="http://www.uzbekenergo.uz/en/activities/energy/">http://www.uzbekenergo.uz/en/activities/energy/</a>.
- 14. http://www.gov.uz/ru/helpinfo/energy/239.
- 15. <a href="http://www.uzbekenergo.uz/ru/news/archive/ob-investitsionnoy-deyatelnosti-gak-uzbekenergo/">http://www.uzbekenergo.uz/ru/news/archive/ob-investitsionnoy-deyatelnosti-gak-uzbekenergo/</a>.
- 16. <a href="http://www.adb.org/news/adb-help-uzbekistan-build-central-asias-first-solar-power-plant">http://www.adb.org/news/adb-help-uzbekistan-build-central-asias-first-solar-power-plant</a>.
- 17. http://www.pv-tech.org/news/uzbekistan to gain first solar power plant.
- 18. http://carnegieendowment.org/files/Panel4RenewableEnergyDevelopmentinUzbekistan.pdf.
- 19. http://sustainabledevelopment.un.org/content/documents/869energyuzbek.pdf.
- 20. <a href="http://carnegieendowment.org/files/Panel4RenewableEnergyDevelopmentinUzbekistan.pdf">http://carnegieendowment.org/files/Panel4RenewableEnergyDevelopmentinUzbekistan.pdf</a>.
- 21. <a href="http://en.openei.org/wiki/Uzbekistan">http://en.openei.org/wiki/Uzbekistan</a>.
- 22. <a href="http://www.evwind.es/2012/10/09/wind-energy-in-uzbekistan-uzbekenergo-to-build-biggest-wind-farm-in-central-asia/24499">http://www.evwind.es/2012/10/09/wind-energy-in-uzbekistan-uzbekenergo-to-build-biggest-wind-farm-in-central-asia/24499</a>.
- 23. http://www.azernews.az/oil\_and\_gas/54364.html.
- 24. <a href="http://www.jamestown.org/single/?tx\_ttnews%5Btt\_news%5D=41908&no\_cache=1#.U\_y5xvm1Y3Y">http://www.jamestown.org/single/?tx\_ttnews%5Btt\_news%5D=41908&no\_cache=1#.U\_y5xvm1Y3Y</a>.
- 25. <a href="http://www.colibrilaw.com/sites/default/files/getting\_the\_deal\_through\_oil\_regulation\_in\_uzbekistan\_2013\_0.pdf">http://www.colibrilaw.com/sites/default/files/getting\_the\_deal\_through\_oil\_regulation\_in\_uzbekistan\_2013\_0.pdf</a>.
- 26. <a href="http://www.uzdaily.uz/articles-id-5475.htm">http://www.uzdaily.uz/articles-id-5475.htm</a>.
- 27. http://www.worldbank.org/en/results/2013/04/30/uzbekistan-the-economics-of-efficiency.
- 28. http://www.dhinfrastructure.com/tl\_files/denzel/pdfs/Uzbekistan%20Energy%20 Sector%20Issues%20Note\_final\_eng.pdf.
- 29. http://thediplomat.com/2014/07/central-asias-energy-rush/.
- 30. http://silkroadnews.org/en/news/detail.php?ID=293307.



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Umid Aripdjanov has more than 15 years of legal experience in five jurisdictions. As a partner, he co-heads the firm's Energy & Subsoil Group and works particularly with inbound foreign investors and multilateral institutions by providing them with integrated legal, tax and business services in Central Asia.

Umid has more than 15 years of legal experience specifically in the subsoil sector, advising on multi-billion investment and project finance transactions related to upstream, midstream and downstream petroleum operations, mining, cement and petrochemical industries in Uzbekistan, Kazakhstan, Kyrgyzstan, Turkmenistan and Tajikistan. Umid has also been advising foreign investors on large-scale automotive, textile and medical/pharmaceutical projects. Recently he has also been seen advising foreign clients on investor-state arbitrations.

Umid is recognised as the "top-ranked" or "leading" lawyer by Chambers Global 2006-2014, Legal 500, Who's Who Legal, PLC: WhichLawyer, and BestLawyers directories in the area of Energy and Petroleum Laws.



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Ravshan joined the Tashkent office of Colibri Law Firm in 2010 and is currently the head of the firm's regional Contracts & Trade Practice. His practice incorporates both transactional and regulatory expertise to provide support on a variety of transactions, including corporate and debt investment type. His transactional experience includes negotiating and drafting of multi-billion investment agreements, construction contracts, development and supply agreements.

Prior to joining Colibri, Ravshan worked as an attorney for a major international London-based law firm. He has considerable experience in the petroleum and subsoil sector, advising on a wide range of issues related to upstream, midstream and downstream operations, petrochemical, textile, pharmaceutical and automotive projects. In addition to serving clients in Uzbekistan, Ravshan has been actively involved in projects arising in neighbouring CA jurisdictions (Kazakhstan, Turkmenistan, Tajikistan and Kyrgyzstan).

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