The Energy Regulation and Markets Review

Eleventh Edition

Editor
David L Schwartz

The Law Reviews

The Energy Regulation and Markets Review

Eleventh Edition

Reproduced with permission from Law Business Research Ltd
This article was first published in May 2022
For further information please contact Nick.Barette@thelawreviews.co.uk

Editor
David L Schwartz

The Law Reviews

PUBLISHER
Clare Bolton

HEAD OF BUSINESS DEVELOPMENT
Nick Barette

TEAM LEADER
Katie Hodgetts

SENIOR BUSINESS DEVELOPMENT MANAGER
Rebecca Mogridge

BUSINESS DEVELOPMENT MANAGERS
Joey Kwok and Juan Hincapie

BUSINESS DEVELOPMENT ASSOCIATE
Archie McEwan

RESEARCH LEAD
Kieran Hansen

EDITORIAL COORDINATOR
Leke Williams

PRODUCTION AND OPERATIONS DIRECTOR
Adam Myers

PRODUCTION EDITOR
Robbie Kelly

SUBEDITOR
Janina Godowska

CHIEF EXECUTIVE OFFICER
Nick Brailey

Published in the United Kingdom
by Law Business Research Ltd, London
Meridian House, 34–35 Farringdon Street, London, EC4A 4HL, UK

www.TheLawReviews.co.uk

ISBN 978-1-80449-080-8

Printed in Great Britain by
Encompass Print Solutions, Derbyshire
Tel: 0844 2480 112

ACKNOWLEDGEMENTS

The publisher acknowledges and thanks the following for their assistance throughout the preparation of this book:

ABOU JAOUDE & ASSOCIATES LAW FIRM

AFRIDI & ANGELL

CMS

DENTONS TAIWAN

DLA PIPER INTERNATIONAL

ENR ADVISORY

GILBERT + TOBIN

GRATA INTERNATIONAL

HERBERT SMITH FREEHILLS LLP

KARATZAS & PARTNERS

LATHAM & WATKINS

OSBORNE CLARKE

PINHEIRO NETO ADVOGADOS

QUORUM STUDIO LEGALE E TRIBUTARIO ASSOCIATO

SKRINE

TELLES ADVOGADOS

CONTENTS

PREFACE

In our 11th year of writing and publishing *The Energy Regulation and Markets Review*, the most pressing global concerns are inflation, supply chain concerns, the Ukraine war and continuing effects from the covid-19 pandemic. Accordingly, many of our contributing authors have emphasised concerns associated with the effects of these crises on infrastructure development, commodity purchases and energy demand. We have also seen industry and regional specific changes that have added uncertainties to global energy policies. For example, oil and gas prices have spiked sharply (offering a dramatic contrast to historically low prices just two years before). While pricing changes may be a boon for sellers and their exporting countries, that has created uncertainty for countries that are highly dependent upon oil and gas consumption and imports, particularly imports from Russia, which is now subject to certain embargoes following the initiation of trade sanctions earlier this year arising from Russia's invasion of Ukraine. Additionally, the United Kingdom continues to experience uncertainties resulting from its transition out of the European Union (a process known as Brexit), particularly regarding the future of its energy policies to reduce greenhouse gases and its coordination and cooperation with the European Union. The Biden administration has continued to reassure US allies and historical trading partners that it remains committed to the 2015 Paris Agreement, notwithstanding the Trump administration's previous withdrawal. And the memory of the 2011 Fukushima nuclear incident continues to affect energy policy in many countries. Finally, there are continued efforts to liberalise the energy sector globally.

I CLIMATE CHANGE DEVELOPMENTS

We continue to see significant carbon reduction efforts globally, including increased use of renewable resources and measures to improve energy efficiency and reduce demand.

In the United States, the Biden administration has continued to commit to the fight against climate change, despite the previous administration's support for fossil fuels. While coal and other aged fossil fuel plants continue to retire at an unprecedented rate (primarily because of the economics of those facilities), the Texas winter storm in February 2021 and recent dramatic increases in oil and gas prices have raised questions about whether renewable resources alone will be sufficient for long-term reliability. The US Federal Energy Regulatory Commission issued a report recommending reliability improvements to prevent rolling blackouts resulting from severe storms. Many states have continued to award procurements of thousands of megawatts of new offshore wind development projects on the east coast and, in May 2021, the US Bureau of Ocean Energy Management granted its first approval for the Vineyard Wind offshore project. The Federal Energy Regulatory Commission has continued

to struggle with whether and how to impose regulatory restrictions on the ability of states to subsidise renewable energy projects in light of their adverse impacts on competitive market prices.

Despite Brexit, the United Kingdom's renewable energy targets have continued to meet or exceed those of the European Union. France is seeking to double its wind and solar capacity and President Macron has announced a goal to close the remaining coal plants by 2022. France has recently updated its national policy priorities with respect to climate change to include low-carbon hydrogen resources as well as power plants equipped with pumped storage, and provided a new certification process for biogas. Italy had previously targeted a 28 per cent reliance on renewable energy by 2030 but is now working to reach the 32 per cent target adopted by the European Union, and has recently created a new Ministry of Ecological Transition to assist with the fight against climate change. To reduce reliance on Russian oil and gas, Belgium seeks to triple its offshore wind capacity to 5.8GW by 2030. Portugal is retiring coal generation and replacing it with renewable and hydrogen generation resources. Greece is decommissioning some of its old lignite plants and has begun implementation of a 'just transition' plan. Poland has been struggling to meet the EU renewable energy targets but has plans to develop significant offshore wind generation.

China continues to have ambitious renewable energy goals, aiming for an emissions peak by 2030, carbon neutrality by 2060 and a goal of 15 per cent of generation supplied by non-fossil fuel generation. There remains significant debate in Australia regarding the role of gas and coal in the energy landscape, which has led to a patchwork of national and state policies that point to continued uncertainty regarding Australia's commitment to carbon reduction. Malaysia continues its efforts to encourage greater entry into the renewable energy market and has goals to reach 31 per cent renewable generation by 2025 and 40 per cent by 2035, which reflects an increase in renewables of 15 per cent over previous targets.

The United Arab Emirates aims to reduce its carbon footprint by 70 per cent by relying on 50 per cent renewable energy by 2050, and recently launched an ambitious initiative to fund and supply clean electricity to almost 100 million people in Africa by 2035. In Brazil, hydroelectric resources constitute more than half of its installed generation capacity, and efforts continue to increase wind and solar generation as the cost of renewable generation has decreased.

II INFRASTRUCTURE DEVELOPMENT

The multiple crises so far this year (inflation, the war in Ukraine, supply chain issues and the continued covid-19 pandemic) have increased prices and slowed infrastructure development for many countries, particularly those in which a reliable energy supply remains the primary concern, regardless of fuel source. Even the United States is no exception, as controversy remains over the Dakota Access Pipeline, development and approvals for which have continued to stall, and the Biden administration revoked the Keystone XL Pipeline's presidential permit in January 2021, regardless of the recent dramatic increases in oil prices. The European Union has recognised the need to secure a diverse energy supply, particularly in view of Russia's invasion of Ukraine and the desire to reduce reliance on Russian oil and gas. Belgium is expected to increase investment not only in renewable generation but also in hydrogen and geothermal energy to combat reliance upon Russian oil and gas. Portugal is also seeking to expand the development of green hydrogen as an alternative fuel source, including development of the Sines project, which is intended to replace in part the capacity

lost following the retirement of coal generation. Furthermore, and unsurprisingly, Russia is expected to experience a significant downturn in foreign investment in its energy sector as a result of sanctions imposed by the United States, the European Union, the United Kingdom and many European states. Lebanon has developed a plan to reform its electricity sector to increase installed capacity so that electricity can be provided for up to 20 hours per day. Nigeria has only 12,000MW of installed generation capacity, which is insufficient to meet its needs, and is looking to the gas sector in the country to supply sufficient fuel to support additional generation resource development.

III NUCLEAR POWER GENERATION

Ten years after the Fukushima disaster, there is a struggle between efforts to limit reliance upon nuclear energy and the emissions reductions and fuel diversity benefits nuclear power offers. Because of the Ukraine war and the need for fuel diversity, and the importance of nuclear power for fighting climate change, Belgium has extended the economic lifetime of two nuclear power plants until 2035. France had previously sought to eliminate nuclear generation by 2025 but has extended that date. South Korea has continued its efforts to phase out nuclear power (replacing nuclear plants with new renewable facilities over time). However, the United Arab Emirates' new 5,600MW Barakah nuclear power station is almost complete and one of its units is already operational. When all units are online, Barakah will supply 25 per cent of the emirates' electrical needs. Poland still intends to explore the development of up to six new nuclear power units in the future, with a target date for the first unit in 2033. In the United States, although the early retirement of certain nuclear plants has been driven by cost and power market considerations (rather than safety concerns), some states have passed legislation to subsidise nuclear energy to allow owners to continue to operate through zero emissions credit programmes, including Illinois, New York, New Jersey and Ohio.

IV LIBERALISATION OF THE ENERGY SECTOR

We have seen significant energy sector regulatory reforms in many countries. The European Union has sought to continue efforts to centralise the regulation of the EU energy sector, albeit without the full participation of the United Kingdom. Belgium, Portugal, Greece and France (among others) have each taken significant steps towards further liberalisation of the energy sector. Australia has opened access to transmission through regulatory reforms to ensure timely transmission investment and encourage market entry, and continues to engage in significant changes in the regulation of the energy market. Brazil has recently implemented net metering regulations and is now implementing distributed generation regulations. China has reduced subsidies for renewable energy and has implemented a market-price mechanism for pricing coal-based generation. The United Kingdom has continued to implement a competitive tender process for the development of offshore transmission. In the United States, while states have continued to subsidise renewable generation (particularly significant new subsidies for offshore wind development in the Northeast), the Federal Energy Regulatory

Commission has continued to struggle between deference to states in making procurement decisions and protections against adverse impacts on competition by implementing minimum offer price rules to combat buyer-side mitigation markets.

I would like to thank all the authors for their thoughtful consideration of the myriad interesting, yet challenging, issues that they have identified in their chapters in this 11th edition of *The Energy Regulation and Markets Review*.

David L Schwartz
Latham & Watkins LLP
Washington, DC
May 2022

Chapter 9

KAZAKHSTAN

Shaimerden Chikanayev[1]

I OVERVIEW

Kazakhstan is a major producer of all fossil fuels (coal, crude oil and natural gas) and of uranium. Revenues from oil exports make up the bulk of Kazakhstan's budget, therefore Kazakhstan is now seeking new routes for the export of oil to Europe bypassing Russia.

The potential for foreign investment in the Kazakhstan energy sector is huge. For instance, to cover the needs of the local economy and the population alone, the commissioning of at least 17.5GW of new power generation will be required by 2035. According to the Ministry of Energy of Kazakhstan, the proposed structure for the new energy capacity required by 2035 will be as follows:

a more than 5.1GW of gas generation;
b more than 2.1GW from hydroelectric power plants;
c 1.4GW of coal generation;
d more than 6.5GW from renewable energy sources; and
e more than 2.4GW of nuclear generation.

i Energy policy framework

A considerable role in governing energy relations in Kazakhstan is played by soft law instruments in a form of the 'documents of the system of national planning'. The energy sector-related documents of the state planning system include (in order of hierarchical importance):

a Strategy Kazakhstan 2050, which is the main long-term strategy document of the state planning system;
b the National Priorities;
c the National Development Plan;
d the National Security Strategy; and
e the Territorial Development Plan.

At the secondary level, relevant state planning system documents concern concepts of industry and sector development, and 'national projects', including:

a 'Concept for development of the Kazakhstan fuel and energy complex until 2030'; this concept in particular is currently the most important industry document in the strategic planning system in the energy field.
b 'Concept for development of the Kazakhstan gas sector until 2030'.

1 Shaimerden Chikanayev is a partner at GRATA International.

The following national projects are also directly related to the energy sector:

a the national project for 'Sustainable Economic Growth Aimed at Improving the Well-being of Kazakhstanis';

b the national project for the 'Development of Entrepreneurship for 2021–2025'; and

c the national project for 'Green Kazakhstan'.

The development plans of state bodies, national management holdings, national holdings and national companies are also of significance, including, most importantly, the current development plan of the Ministry of Energy, which covers the period until 2024.

Other energy policy documents of note include the following:

a 'Concept for the transition of the Republic of Kazakhstan to a green economy by 2050', approved in 2013 and setting a target of 50 per cent of energy in the energy mix to be from solar, wind, hydroelectric and nuclear power plants by 2050.

b Development plan of the Kazakhstan hydropower industry for 2020–2030.

c Road map for the development of the coal industry of Kazakhstan until 2030.

d General scheme of gasification of Kazakhstan for 2015–2030.

In general, the main problem in strategic planning for development of Kazakhstan's energy complex is the lack of a comprehensive and long-term national strategy in the form of a single policy document for the whole energy sector. At present there are disparate and superficial concepts, development plans and national projects, etc. that are largely declaratory in nature and do not take into account the challenges of the fourth energy transition, the covid-19 pandemic or the war in Ukraine.

ii External dimensions of Kazakh energy policy

Energy Charter Treaty

In 1994, Kazakhstan signed the multilateral energy-focused Energy Charter Treaty (ECT) and ratified it in 1995.

Eurasian Economic Union

It is planned to launch common markets for electricity, gas, and oil and petroleum products in the Member States of the Eurasian Economic Union (EAEU) in 2025. Member States include Russia, Armenia, Belarus, Kazakhstan and Kyrgyzstan. In accordance with the Treaty on the Eurasian Economic Union, the EAEU Member States undertook to pursue a coordinated energy policy.

Central Asia energy cooperation

The Central Asian power system (CAPS) was built during the Soviet period and designed without concern for what are today national borders. The mechanism was quite simple: the upstream countries of Kyrgyzstan and Tajikistan ensured a continuous flow of water to the downstream countries, and the downstream countries of Kazakhstan, Turkmenistan and Uzbekistan channelled fuel and gas to their upstream neighbours. Since the 1990s, a number of bilateral and multilateral documents have been signed by Kazakhstan in the field of joint management of water and energy resources in Central Asia. Nowadays, CAPS does not work at full capacity as the mutual trust necessary between countries for energy security has been lacking. However, with the support of multilateral development banks, the countries of

Central Asia are trying to revive CAPS, therefore Kazakhstan now faces a dilemma as the idea of the Central Asian countries building a unified system obviously conflicts with the idea of the Russian-led EAEU common electricity market.

Energy disputes

While principally a vehicle for enhanced cooperation in the energy sector, the agreements noted above also provide frameworks for dispute settlement. Kazakhstan, its partner countries and both Kazakh and foreign economic operators apply energy-specific and broader international treaties to defend their interests in their international energy relations. Examples of such application in recent disputes includes *Stati v. Kazakhstan*, in which the claimants alleged that Kazakhstan had violated the obligation to treat investors fairly and equitably pursuant to Article 10(1) of the ECT.

II REGULATION

i The regulators

The regulation of the energy sector is carried out by many state authorities, the most important of which is the Ministry of Energy, which is responsible for implementation of state policies and regulation of oil and gas extraction, oil refining, transportation of hydrocarbons, gas processing and distribution, power generation, coal production and nuclear energy.

Exploration for and production of oil, gas, coal and uranium

The most important piece of legislation governing the Kazakh upstream sector is the Subsoil Code, which was adopted in 2017.[2] According to the law of Kazakhstan, the right of subsurface use is a special type of limited proprietary right provided under the Subsoil Code, namely the right to use the subsoil on a reimbursable basis within the allocated area for business purposes for a certain period.

The right of subsurface use is granted for the following operations:

a geological study of the subsurface;
b mineral exploration;
c mining;
d use of subsurface space; and
e due diligence.

2 The Code of the Republic of Kazakhstan dated 27 December 2017 No. 125-VI on Subsoil and Subsoil Use.

The Subsoil Code regulates the use of subsoil in relation to the following resources:

a minerals;[3]
b technogenic mineral formations;[4] and
c subsurface space.[5]

Within the framework of the current legislation, there are two subsurface use regimes:

a the licence regime of subsurface use; and
b the contractual regime of subsurface use.

Therefore, the right of subsurface use may arise on the basis of a subsurface use licence or a subsurface use contract.

A subsurface use licence is a document issued by a state body and granting its holder the right to use a subsurface area for the purpose of conducting subsurface use operations within the specified subsurface area. Taking into account the type of subsurface use operations, the following subsurface use licences are issued:

a licence for geological exploration of subsurface;
b licence for exploration of solid minerals;
c licence for the extraction of solid minerals;
d licence for the extraction of common minerals;
e licence for the use of subsurface space;
f licence for prospecting.

A subsurface use contract is an agreement whereby one party (the Republic of Kazakhstan represented by the competent authority) undertakes to grant the right of subsurface use to the other party (the subsurface user) for a certain period, and the subsurface user undertakes to carry out subsurface use at his own expense and at his own risk in accordance with the terms of the contract. According to Article 35 of the Subsoil Code, a subsoil use contract is concluded for the exploration and production or extraction of hydrocarbons, as well as for the extraction of uranium.

The right of subsurface use as an object of civil rights can be acquired in the following cases:

a through the granting of the right of subsurface use (i.e., the emergence of the right of subsurface use as a new object of civil law on the basis of a licence for subsurface use or a contract for subsurface use);

3 Within the framework of the current legislation of Kazakhstan, natural mineral formations and organic substances containing useful components are recognised as minerals, the chemical composition and physical properties of which allow them to be used in the field of material production and consumption directly or after processing. Furthermore, minerals are divided into the following groups: (1) groundwater, (2) hydrocarbon minerals (hydrocarbons), and (3) solid minerals. Hydrocarbons are oil, crude gas and natural bitumen; and solid minerals are natural mineral formations, organic substances and their mixtures in a solid state in the bowels or on the Earth's surface.

4 Technogenic mineral formations are recognised as accumulations of waste from mining, mining-processing and energy industries containing useful components or minerals.

5 The subsurface space is a three-dimensional spatial property of the subsurface, which, taking into account geotechnical, geological, economic and environmental factors, can be used as an environment for the placement of objects of industrial, scientific or other activities.

b through transfer of the right of subsurface use (share in the right of subsurface use) on the basis of civil law transactions; and
c through transfer of the right of subsurface use in the order of succession during the reorganisation of a legal entity, with the exception of transformation or inheritance.

As a general rule, the right of subsurface use for hydrocarbons is granted to all interested persons on the basis of an electronic auction; however, KMG[6] is entitled to use subsoil plots on the basis of direct negotiations and without an auction.

Oil supply

The legal framework for the Kazakh oil market (except for the upstream segment, which is mainly regulated by the Subsoil Code) is based on the following principal laws:
a The Law of 27 December 2018 No. 204-VI on Natural Monopolies (the Natural Monopoly Law).
b The Law of 22 June 2012 No. 20-V on the Trunk Pipeline. (the Law on the Trunk Pipeline).
c The Law of 20 July 2011 No. 463-IV on state regulation of production and turnover of certain types of petroleum products.

Notably, in Kazakhstan, as a general rule, only the national trunk pipeline operator[7] has the right to:
a provide operator services on the territory of Kazakhstan on the trunk pipeline for the corresponding type of product (i.e., oil or gas); and
b provide services for the organisation of transportation through pipeline systems of other states of products transported from the territory of Kazakhstan via a trunk pipeline owned by the relevant national trunk pipeline operator, on the basis of right of ownership or other legal basis (e.g., operator activity on a single routing).

Gas supply

The legal framework for the Kazakh gas market (except for the upstream segment, which is mainly regulated by the Subsoil Code) is based on the following principal laws:
a The Natural Monopoly Law.
b The Law on the Trunk Pipeline.
c The Law of 9 January 2012 No. 532-IV on Gas and Gas Supply.

6 The shareholders of JSC NC 'KazMunayGas' (KMG) are Sovereign Wealth Fund 'Samruk-Kazyna' JSC (Samruk-Kazyna) and National Bank of the Republic of Kazakhstan. The sole shareholder of Samruk-Kazyna is the Republic of Kazakhstan.

7 The national operator of the trunk oil pipeline is the company KazTransOil, 90 per cent of shares in which are held by KMG. The national operator of the trunk gas pipeline is the company Intergaz Central Asia, which is a subsidiary of QazaqGas (see below).

According to the current domestic gas market model, as a general rule, the following procedure is applied in the production, sale, marketing and distribution of gas in Kazakhstan:

a QazaqGas,[8] as a 'national operator', exercises the preferential right of the state[9] provided for by law and buys crude gas or commercial gas from subsurface users at a price determined according to the formula established by law;[10]

b QazaqGas[11] then sells gas to KazTransGas Aimak[12] to all regions of Kazakhstan at regulated wholesale prices, which are different[13] for each region of Kazakhstan; and

c KazTransGas Aimak,[14] in turn, sells gas to the population and other consumers at final (i.e., retail) prices, which are regulated by the Committee for Regulation of Natural Monopolies of the Ministry of National Economy of Kazakhstan (CRENM).

Electricity supply

The key law governing electricity supply in Kazakhstan is the Law of 9 July 2004 No. 588-II on the Electric Power Industry (the Power Law).

Electricity market design

In Kazakhstan, the electricity market is divided into wholesale and retail markets. Under the Power Law, the wholesale market for electric power is divided into five categories:

a the decentralised market designated for the purchase of electric power on the basis of freely negotiated agreements but at prices not exceeding a selling price based on the maximum approved tariffs for electric energy (see below for details);

b the real-time balancing market designated for financial and physical regulation of imbalances of electric power in the single electric network of Kazakhstan. Participation in the balancing market for electric power is mandatory for all participants in the wholesale electricity market. To date, the balancing market in Kazakhstan has been operating in simulation mode (i.e., without real cash settlement of electricity transactions);

c the centralised market for electric power, which is operated by a centralised trading market operator to provide communication between sellers and purchasers of electric power. Sales on the centralised market are divided into three types: (1) short term sales (spot trade), (2) middle-term sales (week, month), and (3) long-term sales (quarter, year);

8 JSC NC 'QazaqGaz' (QazaqGaz) is a vertically integrated national gas company operating along the entire chain, from exploration and production to the sale of final products. The sole shareholder of QazaqGas is Samruk-Kazyna.

9 To ensure energy security and meet domestic needs for commercial gas, Kazakhstan, represented by QazaqGas as the national operator, has a pre-emptive right over other persons to purchase alienated crude gas owned by subsurface users, as well as commercial gas produced by subsurface users during the processing of crude gas extracted by them (the pre-emptive right of the state).

10 Since most of the gas produced in Kazakhstan is associated gas, and QazaqGas buys it at a price below fair value, the subsoil users in Kazakhstan do not have any incentive to invest in exploration for new gas fields.

11 QazaqGas is the only gas supplier for gas retailers in Kazakhstan (i.e., the wholesale market for commercial gas in Kazakhstan is a de facto monopoly).

12 100 per cent of the shares of KazTransGas Aimak JSC are held by QazaqGas.

13 When determining wholesale prices for each region, a separate approach is used, taking into account social aspects, the availability or absence of gas resources in the region, as well as the current level of gas prices.

14 KazTransGas Aimak occupies about 95 per cent of the retail gas market in Kazakhstan (i.e., KazTransGas Aimak is a de facto monopolist). The remaining 5 per cent is occupied by KazTransGas Almaty JSC.

d the system and ancillary services market; and
e the capacity market.

The following subjects comprise the wholesale electricity market:
a energy producing organisations;
b energy transmission organisations;
c energy supply organisations;
d consumers of electric energy;
e the system operator;[15]
f operators of the centralised trading market;[16] and
g the Financial Settlement Centre (FSC)[17] for the support of the development of renewable energy sources.

All generating companies in Kazakhstan must maintain a specific generating capacity and, correspondingly, the participants in the wholesale power market (such as industrial consumers) have an obligation to pay for the availability of the specific generating capacity. Any investor in the power sector of Kazakhstan, therefore, can now expect two different sources of income and compensation for expenses:
a proceeds from the sale of electric power in the free market under the power purchase agreements (PPAs) within price caps approved by the Ministry of Energy (i.e., the selling price for electric energy based on the maximum tariffs for electric energy as discussed below) set as the maximum limits on the prices that power plants can ask for the electricity they produce; and
b proceeds from the sale of capacity of a power plant (such as the availability of its generating facilities to produce electricity) to FSC as the state-owned single offtaker designated by law, under capacity purchase agreements (CPAs) and within price caps established by the Ministry of Energy (i.e., maximum tariffs for capacity as discussed below).

Both electricity and capacity are therefore considered *sui generis* goods under the Power Law.[18] Payments under the PPAs are expected to cover the operating expenses of power plants, whereas payments under the CPAs cover the capital expenses of investments in new projects and in the modernisation of existing power facilities.

15 JSC KEGOC acts as the system operator and it is the national transmission grid operator of Kazakhstan, 90 per cent of the shares in which are held by Samruk-Kazyna.
16 The operator of the centralised trading market carries out centralised trading of electric energy, including spot trading of electric energy and a service for maintaining the availability of electric power. As from 2022, JSC KOREM (the sole shareholder of which is Samruk-Kazyna) no longer has a monopoly right to the role of operator of the centralised trading market. Accordingly, it is expected that private operators will appear in the centralised trading market in the near future, and this will be determined by the Ministry of Energy on a competitive basis in accordance with the rules for organising centralised trading of electric energy.
17 FSC is a company wholly owned by the Republic of Kazakhstan. FSC acts as the single offtaker of electricity for renewable energy projects and as the single offtaker of capacity for conventional power projects.
18 Energy (i.e., all types of energy, including electric, thermal and nuclear energy) is generally considered to be a thing and movable property in Kazakh legal literature.

The introduction of the capacity market was expected to give impetus to new investment into the Kazakh electricity sector; however, industry participants and observers believe that the fixed prices envisaged (i.e., maximum and individual tariffs as discussed below) remain below market rates and insufficient to attract the levels of investment hoped for.

Tariff regulation

Under the Power Law, tariffs charged by a power generating company are regulated.

Maximum tariff for electric energy

According to the Power Law, a power generating company may set its own price for the sale of electricity, on the basis of an agreement with a counterparty. However, in any event, this price must not exceed the 'selling price' of electric energy,[19] the level of which mostly depends on the level of the corresponding maximum tariff for electric energy. This electricity price rule applies to all power generating companies, with the exception of cases of sale of electricity on the market of centralised trade in electric energy, in particular at spot auctions (no more than 10 per cent of the volume of electric energy generated by them for a calendar month) and for medium-term (week, month) and long-term (quarter, year) periods. Kazakhstan's energy policy is obviously aimed at reducing the number of non-transparent bilateral PPAs and at increasing the share of transactions through electronic auctions. In particular, in 2022, Kazakhstan introduced a statutory obligation for all power-generating companies to sell a minimum share of generated electric energy through centralised auctions for medium- and long-term periods, with this minimum share to be determined by the Ministry of Energy in coordination with the Agency for Protection and Development of Competition of Kazakhstan (the Competition Agency).

The maximum tariff for electric energy[20] varies depending on the specific group to which a particular power generating company belongs. Power generating companies are notionally allocated to a number of groups on the basis of criteria such as the type of power generating company, capacity, type of fuel and distance from fuel source. Maximum tariffs for electric energy and the allocation of power generating companies to various groups are prescribed by the Ministry of Energy. Maximum tariffs for electric energy are approved for each specific group of power generating companies for a seven-year period. Currently, all power-generating companies are divided into 47 groups. For instance, the following maximum tariffs for electric energy are approved for groups 1 and 2. The table below indicates maximum tariffs for electric energy in tenge, the local currency (the approximate amount of maximum tariffs for electric energy in US dollars are indicated in brackets) for the next four years.

19 The selling price of electric energy from an energy-producing organisation is the sum of the offer price of an energy-producing organisation included in the corresponding group of energy-producing organisations that sell electric energy (this offer price must not exceed the relevant maximum tariff for electric energy, as discussed below) and allowances to support the use of renewable energy sources determined in accordance with the legislation of Kazakhstan.

20 The maximum tariff for electric energy is a monetary expression of the value of the generated electric energy by an energy-producing organisation included in the group of energy-producing organisations that sell electric energy, approved by the authorised body every seven years, consisting of the costs of producing electric energy and the profit rate determined according to the Ministry of Energy's methodology.

Maximum tariffs for electric energy by years in tenge per kilowatt-hour (US$ per kilowatt-hour)				
Year	2022	2023	2024	2025
Group 1	5.90 (0.013)	5.90 (0.013)	5.90 (0.013)	5.90 (0.013)
Group 2	5.59 (0.012)	5.59 (0.012)	5.59 (0,012)	5.59 (0.012)

Corrections of maximum tariffs for electric energy are possible but no more than once a year, and such corrections can only be made on the basis of the appeal of the energy-producing organisation to the Ministry of Energy in connection with, inter alia, the change in the cost of the relevant fuel for the production of electric energy.

Maximum tariff for capacity

As a general rule, all energy-producing organisations with operating power plants are required to implement a service to maintain the availability of electric power to FSC at a price not exceeding the maximum tariff for the service to maintain the availability of electric power (i.e., maximum tariff for capacity). The table below indicates maximum tariffs for capacity in tenge for the next four years.

Maximum tariffs for capacity by years in tenge per megawatt-month (US$ per megawatt-month)				
Year	2022	2023	2024	2025
Maximum tariff for capacity	590,000 (1,283)	590,000 (1,283)	590,000 (1,283)	590,000 (1,283)

Individual tariff for capacity

In addition to the maximum tariff for the service to maintain the availability of electric power (i.e., capacity), the three following types of individual tariffs for capacity are applied if the size of the maximum tariff for capacity is insufficient to pay off the estimated capital costs:

a where it is necessary to modernise, expand, reconstruct or update the main generating equipment of existing electric power plants of existing energy-producing organisations, the individual tariff for capacity is determined on the basis of an investment agreement concluded between the Ministry of Energy and the energy-producing organisation;

b where it is necessary to build generating units to be put into operation again, the individual tariff for capacity is determined based on the results of a tender held by the Ministry of Energy; and

c where it is necessary to build newly commissioned generating units with a manoeuvrable generation mode,[21] the individual tariff for capacity is determined based on the results of the auction.

21 A generating unit with a manoeuvrable generation mode is a generating unit with an adjustable electrical power. Manoeuvrable capacities include hydroelectric power plants and gas turbine power plants.

Individual tariff for capacity based on an investment agreement

To modernise, expand, reconstruct or update the main generating equipment of existing power plants, existing energy-producing organisations develop appropriate 'investment programmes'. Then, based on the recommendation of the Market Council,[22] the Ministry of Energy decides (or declines) to conclude an investment agreement for the modernisation, expansion, reconstruction or renewal.

After the conclusion of such an investment agreement by the Ministry of Energy with an existing energy producing organisation, FSC, as a single buyer, enters into a CPA with this energy producing organisation at an individual tariff for capacity of the amount and for the terms determined by the Ministry of Energy. In addition, the individual tariff for capacity and the volume and timing of the purchase of this service for each investment agreement are established by the Ministry of Energy.

Individual tariff for capacity based on the results of the tender

If, in the approved forecast balance of electric energy and capacity for the upcoming seven-year period, the projected uncovered shortage of electric power in the unified electric power system of Kazakhstan or in any of its zones exceeds 100MW during the first five years of the forecast, the Ministry of Energy holds a tender for the construction of generating units to be put into operation again.

Within 45 calendar days of the date of summing up the results of such a tender, the Ministry of Energy enters into a contract (the implementation contract)[23] with the winner of the tender, in which it determines the date of commissioning of generating units and responsibility for non-fulfilment or improper execution of the tender obligations by the winner.

Within 30 calendar days of the date of conclusion of the implementation contract, FSC, as a single buyer, enters into a CPA with the winner of the tender for the purchase of services to maintain the availability of electric power at an individual tariff for capacity of the amount and for the terms set by the Ministry of Energy.

Individual tariff for capacity based on auction results

To implement the plan for the placement of generating units with manoeuvrable generation mode, the Ministry of Energy selects projects for the construction of suitable newly commissioned generating units by organising and conducting auctions using an electronic auction system.

FSC, as a single buyer, within 15 calendar days of the date of summing up the auction results, sends the winner of the auction a draft CPA. Within 30 calendar days of the date of

22 The Market Council is a non-profit organisation that carries out activities to monitor the functioning of the electric energy and capacity market, as well as other functions provided for by the Power Law.

23 Almost any investment project in the energy sector, including the power sector, can be implemented under the legal framework of either the Law of the Republic of Kazakhstan dated 31 October 2015 No. 379-V on Public–Private Partnership (the PPP Law) or the Law of the Republic of Kazakhstan dated 7 July 2006 No. 167-III on Concessions (the Concession Law). Therefore, although new power plant projects are generally expected to be implemented under the specialised legal framework of the Power Law (e.g., on the basis of the implementation contract), they may also be implemented under the legal framework of the PPP Law or the Concession Law on the basis of the public–private partnership agreement or the concession agreement.

receipt of this draft contract, the winner signs the CPA for a period of 15 years from the date of its first certification, at an individual tariff for capacity, which is determined by the results of the auction.

ii Regulated activities

The Law of 12 January 2016 No. 442-V on the Use of Atomic Energy defines the legal basis and principles of regulation of public relations in the field of the use of atomic energy to protect the life and health of the population and their property, and environmental protection; it provides for the regime governing non-proliferation of nuclear weapons, and radiation and nuclear physical safety in the use of atomic energy.

The Law of 23 April 1998 No. 219-I on Radiation Safety Population provides for the regime governing the radiation safety of the population, to protect their health from the harmful effects of ionising radiation.

The Law of 16 May 2014 No. 202-V on Permits and Notifications requires licensing of certain activities in the field of nuclear energy use as well as in the field of hydrocarbons. As for the power sector, only activities for the purchase of electric energy for the purpose of energy supply require a licence.

iii Ownership and market access restrictions

State ownership of subsoil resources

In accordance with the Constitution of Kazakhstan, the subsoil lies in state ownership. However, as soon as minerals are extracted to the surface of the earth during operations they enter into another legal category – mineral raw materials – and as such they can become, fully or partially, the property of the subsurface user (therefore subject to economic or operational management) in accordance with the terms of the relevant subsurface use contract or subsurface use licence.

State pre-emptive right

In newly concluded and previously concluded contracts for subsurface use, the state has a priority right over any persons and organisations, including foreign individuals and legal entities, to acquire the alienated right of subsurface use (shares in the right of subsurface use) for strategic subsoil areas, as well as shares issued in circulation on the organised securities market and other securities related to the right of subsurface use, according to the strategic section of subsoil concerned. A subsurface area is considered to be strategic in nature if it satisfies one of the following three conditions:

a it contains geological oil reserves of more than 50 million tons, or natural gas of more than 15 billion cubic metres;

b it is located in the Kazakhstan sector of the Caspian Sea; or

c it contains a uranium deposit.

The list of strategic subsurface areas is approved by the government.

Nuclear sector ownership

Kazakh law provides for a local participation requirement in the nuclear sector because, in accordance with the Subsoil Code, a subsoil plot for uranium mining can be provided only to the national atomic operator, Kazatomprom.[24] Thus current legislation does not provide for granting the right of subsurface use for uranium extraction to persons other than Kazatomprom. Moreover, since it is a national company in the field of uranium, Kazatomprom is granted the right of subsurface use for uranium extraction by a simplified process, on the basis of direct negotiations. In turn, having obtained this right on the basis of direct negotiations, Kazatomprom may then transfer it to another legal entity, but only an entity in which Kazatomprom directly or indirectly owns more than 50 per cent of the shares or participation interests. In the future, such a legal entity also has the right to transfer the received subsoil use right (i.e., the share in the subsoil use right) to other legal entities, but again only those in which Kazatomprom directly or indirectly owns more than 50 per cent of the shares.

Ownership restrictions for trunk pipelines

Within the framework of current legislation, the trunk pipeline is an indivisible property complex and may be in state or private ownership. However, in accordance with the peremptory norm of the law of Kazakhstan, ownership of the trunk pipeline by individuals (whether foreign citizens or citizens of Kazakhstan) is prohibited, as is ownership by legal entities registered in accordance with the legislation of a foreign state.

iv Transfers of control and assignments

Under Kazakh law, trunk pipelines, the national electric network, oil refineries, energy-producing facilities with a capacity of at least 50MW, and nuclear energy facilities may be designated as strategic facilities by the government. Any sale or encumbrance of a strategic facility is subject to prior governmental approval, and any transfer of ownership over such a facility is also subject to a state pre-emptive right.

III TRANSMISSION/TRANSPORTATION AND DISTRIBUTION SERVICES

i Vertical integration and unbundling

Transmission/transportation and distribution access

Under Kazakh law, entities operating in certain industries that render 'regulated services' belong to the sphere of natural monopolies. Accordingly, all natural monopoly entities are required to provide a regulated service at a tariff approved by the CRENM in accordance with the Natural Monopoly Law. Furthermore, the law of Kazakhstan explicitly establishes that although various methodologies (including the cost-plus and incentive-based methods) can be used in the formation of the tariff for regulation of the spheres of natural monopolies, the tariff should in any case provide both reimbursement of the costs of providing a regulated service and profit to be directed to the development and effective functioning of the subject of the natural monopoly, and other purposes not prohibited by law.

24 Kazatomprom is the world's largest uranium producer, 75 per cent of the shares in which are held by Samruk-Kazyna.

Another important feature of Kazakh law is that the equivalent of the legal category of third-party access[25] has historically been fixed as a legal doctrine of 'non-discriminatory consumer access to regulated services' of a natural monopoly entity; this is enshrined for the most part in the Natural Monopoly Law.

Furthermore, ensuring non-discriminatory access to the trunk pipeline is one of the basic principles of Kazakhstan's energy law. According to the Law on the Trunk Pipeline, if the trunk pipeline has free capacity, the owner of the pipeline (or a person who owns the trunk pipeline on another legal basis, or an operator authorised to provide services on behalf of the owner for the transportation of products to senders) must ensure equal conditions for provision of access to services for the transportation of products (i.e., oil or natural gas) through the trunk pipeline to all senders, taking into account the restrictions established by law. If the capacity of the trunk pipeline is limited, the provision of services for the transportation of oil or petroleum products through the trunk pipeline is carried out in the order of priority established in the Law on the Trunk Pipeline, with priority given to oil supplies to refineries of Kazakhstan. In contrast, for natural gas, according to the Law on the Trunk Pipeline, in the absence of free capacity in the trunk gas pipeline, the provision of gas transportation services is carried out in accordance with Kazakhstan legislation on natural monopolies, and not in the order of priority established in the Law on the Trunk Pipeline.

Finally, an essential-facility doctrine has recently been introduced in Kazakh law, which in some cases can be used for the purpose of ensuring non-discriminatory access not only to infrastructure but also to goods in the fuel and energy sector. In particular, current legislation requires that holders of essential facilities are obliged to provide equal access to other market entities in accordance with the essential-facility access rules approved by the Competition Agency, except where a different procedure for access to the essential facility is already provided for by Kazakhstan legislation; for instance, procedures for consumer access to regulated services of a natural monopoly entity.

Rates

As a general rule, prices and tariffs for goods, works and services in Kazakhstan are determined by business entities independently, but the state regulates prices and tariffs for the following goods, works and services in the energy sector:

a goods, works and services in the fields of natural monopoly, namely for the following services in the energy sector:
- the transportation of oil or petroleum products through trunk pipelines, except for their transportation for transit through the territory of Kazakhstan and export outside Kazakhstan;
- the storage and transportation of commercial gas through connecting, trunk gas pipelines or gas distribution systems, operation of group tank installations, as well as transportation of crude gas through connecting gas pipelines, with the exception of storage, transportation of commercial gas for transit through the territory of Kazakhstan and export outside Kazakhstan;
- the transmission of electrical energy;

25 The right of third-party access (often referred to as 'TPA') enshrined in the energy law of the European Union.

- the production, transmission, distribution or supply of thermal energy, with the exception of thermal energy generated using heat generated from soil, groundwater, rivers, reservoirs, waste water of industrial enterprises and power plants, and sewage treatment plants; and
- the technical dispatching of the supply to the grid and the consumption of electrical energy.

b the retail sale of petroleum products for which state price regulation has been established;

c the approval of the marginal prices of wholesale sales of commercial gas in the domestic market of Kazakhstan and the marginal prices of liquefied petroleum gas sold within the framework of the plan for the supply of liquefied petroleum gas to the domestic market of Kazakhstan outside commodity exchanges;

d the approval of the marginal price of raw and commercial gas purchased by the national operator within the framework of the pre-emptive right of the state; and

e the approval of the tariffs of energy-producing organisations.

The state also regulates prices and tariffs for goods, works and services in socially significant markets, including in the following areas in the energy sector:

a the retail sale of electric energy by energy supply organisations;

b the organisation and conducting of centralised trading in electric energy, ensuring the readiness of the trading system to conduct centralised bidding, centralised purchase and sale of electric energy produced by facilities for the use of renewable energy sources; and

c the retail sale of commercial gas, or liquefied petroleum gas, through group tank installations.

Pricing in Kazakhstan in the socially significant markets is carried out in accordance with the rules of pricing in socially significant markets approved by the CRENM. The CRENM, among other things, coordinates the maximum prices for goods works and services sold by subjects of socially significant markets.

Security and technology restrictions

The Law of 30 December 2020 No. 396-VI on Technical Regulation establishes the fundamental principles of technical regulation arising from the establishment and fulfilment of requirements for products, related processes and provision of services, and also defines the legal basis for the functioning of the state system of technical regulation.

The Law of 21 July 2007 No. 300-III on Export Control' establishes the basis and procedure for export control, including nuclear and special non-nuclear materials.

IV ENERGY MARKETS

Kazakhstan's domestic commodity markets for oil, petroleum products, natural gas and electricity have a monopoly structure. To address this problem, the Competition Agency has developed a number of measures to demonopolise the commodity markets, including:

a the introduction of state regulation of oil prices and the volume of supplies to the domestic market;

b the sale of oil on the stock exchange, at the first stage, of 5–10 per cent of oil produced by independent companies, and an increase of 30 per cent in exchange trading in petroleum products;

c the continued state regulation of gas prices;
d the introduction of a quota mechanism for gas supplies to the domestic market, with the definition of clear and transparent criteria for the formation of these quotas;
e gradual deregulation of the gas market by way of an increase in the volume of sales of commercial gas on the stock exchange; and
f cancellation of tariff differentiation in the retail and wholesale electricity markets.

V RENEWABLE ENERGY AND CONSERVATION

i Development of renewable energy

The goals, forms and directions of support for the use of renewable energy sources (RES), as well as the regulation of mechanisms for supporting energy waste disposal and the use of secondary energy resources are defined in the Law of 4 July 2009 No. 165-IV on Support for the Use of Renewable Energy Sources (the Law on RES).

According to the Law on RES, these are continuously renewable energy sources deriving from naturally occurring processes, including the following types: solar radiation energy, wind energy, hydrodynamic water energy, geothermal energy from the heat of soil, groundwater, rivers and reservoirs, and anthropogenic sources of primary energy resources such as consumption waste, biomass, biogas and other fuels from consumer waste used for the production of electrical or thermal energy.

Unlike conventional energy projects, renewable energy projects in Kazakhstan do not have to participate in the capacity market and, therefore, investors in renewable energy projects in Kazakhstan have only one source of income and compensation for expenses – the proceeds from the sale of electric power. FSC as a single offtaker enters into a long-term PPA (of up to 20 years) with a renewable energy producing company to purchase power at a fixed auction price from the project. To develop renewable sources of energy, Kazakhstan has recently introduced an electronic auction system, which has made the process of granting renewable energy projects open and transparent, and given impetus to the implementation of the most cost-effective projects. To address currency risks, Kazakh law provides for the annual indexation of auction prices, from the second year of generation, with 70 per cent of prices based on the national currency exchange rate for convertible currencies and 30 per cent based on the consumer price index.

ii Energy efficiency and conservation

The Law of 13 January 2012 No. 541-IV on Energy Saving and Energy Efficiency Improvement regulates public relations and defines the legal, economic and organisational basis for the activities of individuals and legal entities in the field of energy saving and energy efficiency improvement.

VI THE YEAR IN REVIEW

Civil unrest in Kazakhstan in January 2022 (the January Tragedy) was triggered by cancellation of state subsidies on liquefied petroleum gas and gave impetus for long-overdue political and economic reforms in the country. In the energy sector, the following developments are expected:

a By the end of 2022, the Competition Agency is expected to formulate its 'Concept of protection and development of competition in the Republic of Kazakhstan until 2026',

which will be aimed at demonopolising key commodity markets, including domestic oil, gas and electricity markets, and creating a favourable competitive environment for business.

b The Ministry of Energy, together with interested government agencies and the state-owned national gas operator QazaqGaz, is now working on its comprehensive plan for the development of the gas sector aimed at rebooting the industry.

c In March 2022, the Ministry of Energy adopted the 'Energy Balance Plan for Kazakhstan until 2035', on the basis of which the 'Concept for the development of the electric power industry until 2035' is currently being prepared.

d By the end of 2022, Kazakhstan is expected to formulate its 'Doctrine on achieving carbon neutrality of the Republic of Kazakhstan by 2060'. The current draft of the Doctrine suggests that the main barrier to carbon neutrality in Kazakhstan is the existing system of regulated and low tariffs, and cross-subsidisation, in the energy sector, which leads to distorted market price signals about deficits and a lack of incentives to improve energy efficiency.

e The current Law on RES does not regulate the production and use of all alternative energy sources, namely sources such as hydrogen, industrial gases, coal seam gas methane, biofuels or solid household waste. To address this issue, the Ministry of Energy is currently working on the draft for the Law on the Development of Alternative Energy Sources. The country's hydrogen energy development strategy is also expected to be unveiled by the Ministry of Energy by the end of 2022.

f At present, there is no single industry law regulating the sphere of heat power in Kazakhstan. To address this issue, the Ministry of Energy is currently working on the draft of the Law on Heat Power Engineering.

VII CONCLUSIONS AND OUTLOOK

Kazakhstan's energy sector faces the following main challenges:

a a heavily statised and monopolised energy sector (i.e., the absence of market competition);

b ever increasing inefficiency and low energy efficiency, mainly because of the practice of forms of hidden protectionism and cross-subsidisation; and

c lack of political will to carry out long overdue reforms and introduce market competition, because cheap or cross-subsidised energy, petrol and utilities are currently used by the Kazakh government and offered as a palliative especially to avert potential discontent.

There are high hopes that, because of the January Tragedy, the government is finally ready to address the above-mentioned issues and carry out the reforms needed. Nonetheless, Kazakhstan has to find its own way through the energy transition as rapid development of RES in Kazakhstan has exposed many problems in the power industry, including lack of manoeuvring capacity. It remains to be seen which areas of the energy industry (i.e., coal, gas or nuclear) the country will prioritise in the future. In any case, Kazakhstan shall at least move first from coal to natural gas or nuclear energy to reduce emissions from coal, and provide the population and industry with the energy they need in the most cost-effective way.

Appendix 1

ABOUT THE AUTHORS

SHAIMERDEN CHIKANAYEV

GRATA International

Shaimerden Chikanayev is a Kazakh advocate with over 13 years of legal experience advising clients in both the public and the private sector on all legal aspects of infrastructure, public–private partnership (PPP) and project finance, including cross-border lending transactions involving taking of security, and cross-border capital markets transactions. Shaimerden has developed extensive knowledge in a wide range of industries, in particular in energy, healthcare, utilities and social infrastructure, financial services and transportation in Kazakhstan and other countries of Central Asia.

GRATA INTERNATIONAL

Ospanova 104
Almaty
Kazakhstan
050020
Tel: +7 701 787 8020
Fax: +7 775 030 0009
schikanayev@gratanet.com
www.gratanet.com

ISBN 978-1-80449-080-8