

MACROECONOMICS AND GLOBAL TRENDS



GLOBAL TRENDS AND SHORT-TERM DRIVERS

CHANGES IN THE GLOBAL FUEL AND ENERGY BALANCE

CHALLENGE FOR THE INDUSTRY

Increase in demand for liquid fuel in non-OECD Asia. Increase in global demand for gas, including demand in China as the main driver.

STRATEGIC RESPONSES TO TRENDS

Market expansion and diversification through developing oil and gas midstream capacities.





DYNAMIC DIGITALISATION AND AUTOMA-TION IN THE INDUSTRY



INCREASING SIGNIFICANCE OF ESG IN BUSINESS COMMUNICATION



HYDROCARBON PRICE VOLATILITY

Development and implementation of Smart Field technology, digitalisation and automation of business processes in the oil and gas industry. Introduction of best practices in ESG as a trend in the oil and gas industry.

Oil prices are affected by both fundamental and geopolitical factors, which results in high price volatility.

KMG is implementing Digital Transformation Programme. Integrating sustainability principles into core business processes is a key element of KMG's long-term strategy.

KMG is focused on maintaining its financial stability, in particular through financial discipline, and maintaining a well-balanced capital structure.

CHANGES IN THE GLOBAL FUEL AND ENERGY BALANCE

According to the International Energy Outlook by the US Energy Information Administration (EIA) dated 24 September 2019, energy consumption in non-OECD countries will increase by about 70% between 2018 and 2050 versus 15% in OECD countries.

Non-OECD countries will account almost exclusively for liquid fuel consumption growth between 2018 and 2050, following population growth and economic development. Non-OECD Asia accounts for about three-fourths of the increase in global liquid fuel consumption.

STRATEGIC DIRECTION

KMG considers global trends in liquid fuel and natural gas and seeks to maximise the efficiency of its oil transportation infrastructure to increase oil exports. In particular, by developing the Kazakhstan–China Pipeline, KMG will ensure hydrocarbon supply from Western Kazakhstan fields to the high-potential Chinese market, and the Caspian Pipeline Consortium is a key component of the transportation infrastructure targeting Europe.

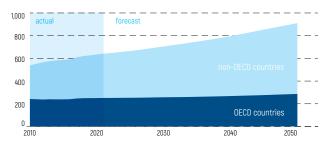
INCREASE IN GLOBAL DEMAND FOR GAS

As a fossil fuel with a relatively low carbon footprint, natural gas plays a critical role in balancing solar and wind energy. Global gas demand will remain solid in the long term.

According to the International Energy Outlook by the US Energy Information Administration, global natural gas consumption will increase by more than 40% between 2018 and 2050, while in non-OECD countries the increase will reach 70%.

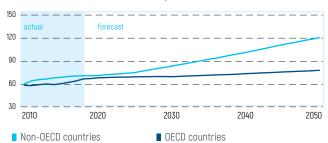
+10% gas consumption in China in 2019

GLOBAL ENERGY CONSUMPTION, QUADRILLION BTUS



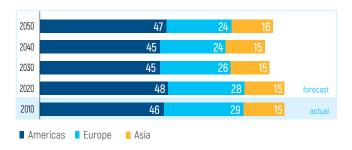
Source: US Energy Information Administration, Report "International Energy Outlook 2019" dated 24 September 2019

GLOBAL NATURAL GAS CONSUMPTION, QUADRILLION BTUS



Source: US Energy Information Administration, Report "International Energy Outlook 2019" dated 24 September 2019

LIQUID FUEL CONSUMPTION BY OECD COUNTRIES, QUADRILLION BTUS



Source: US Energy Information Administration, Report "International Energy Outlook 2019" dated 24 September 2019

LIQUID FUEL CONSUMPTION BY NON-OECD COUNTRIES, QUADRILLION BTUS





Source: US Energy Information Administration, Report "International Energy Outlook 2019" dated 24 September 2019

According to the National Development and Reform Commission of the People's Republic of China, apparent natural gas consumption CAGR in 2012–2019 was at 15.4%. In 2019, apparent gas consumption was at 306.8 bln m³, having increased by 10.0% year-on-year.

As Sinopec Gas Company estimated in its report dated 15 October 2019, the long-term gas demand in China will reach 510 bln m³ by 2030, supported by continued industry upgrades and urbanisation. In August 2019, CNPC Economics & Technology Research Institute estimated China's gas demand at 610 bln m³ by 2035, and 690 bln m³ by 2050.

STRATEGIC DIRECTION

KMG aims to implement a number of initiatives to ensure sufficient reserves of commercial gas and adequate pipeline capacities to boost exports to China while meeting growing domestic demand. The Kazakhstan-China trunk gas pipeline, and Beineu-Bozoi-Shymkent trunk gas pipeline are the key projects to unlock KMG's potential for natural gas exports to China.

NATURAL GAS CONSUMPTION IN CHINA, BLN M3



Source: National Development and Reform Commission of the People's Republic of China, Bloomberg

DIGITALISATION

At present, digital technology penetrates in all economic sectors, allowing fundamental improvements in efficiency and safety. Energy is also no exception: leading oil and gas companies around the world efficiently use Big Data, predictive analytics, artificial intelligence, machine learning, robots, etc.

Innovative digital technology means:

- reduced capital expenditures and operating expenses;
- better profitability amidst volatile oil prices;
- improved efficiency, including through data analysis;
- better failure prediction;
- process safety.

Digitalisation can become the engine of the national economy. Digitalisation will become a driver for the development and adaptation of new technologies to the economy of Kazakhstan, which would allow launching a new wave of job creation.

Given the growing relevance of digitalisation in the world, the state has launched the Digital Kazakhstan state programme to ensure the country's competitiveness.

The program covers almost all economic sectors, including the oil and gas industry, for which it provides:

- adopting the Smart Field technology across Kazakhstan's upstream majors;
- ensuring transparency of commercial oil production reports by deploying metering systems;
- Ensuring uninterrupted domestic fuel supplies by deploying automated maintenance and repair management, and control systems, as well as repairs at Kazakhstan's refineries.

The ongoing rollout of the Smart Field project is implemented at JSC Embamunaigas, JSC Ozenmunaigas, JV Kazgermunai LLP under the Digital Kazakhstan programme.

STRATEGIC DIRECTION

The company will focus on the implementation of the Digital Transformation Program with a focus on the implementation of new digital technologies, a data-oriented approach to management, as well as the formation of digital culture. As part of the implementation of the corporate strategy in 2020, the Company began to develop KMG Digitalisation Strategy.

DEVELOPING ESG PRACTICES

In September 2015, the leaders of 193 countries approved an ambitious comprehensive programme Transforming our World: the 2030 Agenda for Sustainable Development, which included Sustainable Development Goals. Combating climate change and transforming energy systems are key challenges to a sustainable future for the business community, society and the environment. The Paris Agreement sent a strong and global message that the transition to a low-carbon economy is inevitable. Kazakhstan's Intended Nationally Determined Contribution (INDC) to the Paris Agreement is to reduce the country's GHG emissions by 15% (unconditional goal) compared to the 1990 base year or, even more ambitiously, by 25% (conditional goal) by 2030.

STRATEGIC DIRECTION

In making decisions, KMG factors in the national and global trends for a transition to a greener economy and recognizes that long-term success in the industry requires strong ESG performance. As a signatory to the UN Global Compact, KMG reiterates its commitment to the principles of sustainable development and embraces Sustainable Development Goals while particularly focusing on climate change, prevention of adverse environmental impact, and corporate social responsibility.

VOLATILITY OF CRUDE OIL PRICES

In 2019, Brent crude futures traded averaged at USD 61.9 per bbl, down by 6.6% year-on-year. During the year, crude oil prices remained volatile (with 30-day volatility¹ at 28%), higher than in 2018 (20%), due to heightened geopolitical risks.

On 19 March 2020, Brent crude settled at USD 28.47 per bbl, having decreased by 56.0% year-to-date, amidst the coronavirus pandemic, and higher expected oil supplies. The COVID-19 outbreak is expected to slow economic growth and suppress oil demand in the short-term.

On 6 December 2019, the 7th OPEC and non-OPEC Ministerial Meeting decided to increase crude oil production cuts by a further 500 kbopd, bringing the total production cut to 1.7 mbopd, starting from 1 January 2020.

STRATEGIC DIRECTION

On the COVID-19 outbreak, KMG takes a proactive approach and implements a set of measures, aimed at curbing the potential spread of the virus among employees.

BRENT CRUDE OIL PRICES, \$/BBL



Source: Bloomberg

^{1.} Annualised standard deviation of daily logarithmic price changes for the last 30 trading days.