

# STRATEGY

## MARKET OVERVIEW

### Macroeconomics and global trends

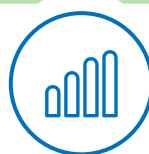
Global trends and their impact on strategy implementation

#### Challenge for the industry

#### GLOBAL TRENDS

#### Strategic responses to trends

- Recovery in global demand and oil prices.
- Slowdown in renewable energy sources expansion within the energy balance
- Record-high gas prices – soaring Chinese demand and Europe's energy crisis.
- Long-term growth in demand for petrochemicals.



#### Changes in the global energy balance

- Supporting OPEC+ measures, improving production efficiency
- Transferring JSC KazTransGas to JSC Samruk-Kazyna
- Expanding the value chain within the existing business and developing the petrochemical segment.

- Accelerated growth and use of digital technologies.
- Business process digitisation and automation

- The growing importance of sustainability and ESG financial instruments across the investment community.

- The trend towards carbon neutrality in the oil and gas sector.



### Digitalisation

- Digitalisation focusing on specific issues in business processes, with an emphasis on Exploration and Production and on Refining, as well as development of targeted solutions across KMG Group.



### Sustainable development and ESG

- Integrating sustainability principles into key business processes.



### Alternative energy sources, carbon neutrality

- Promoting a low-carbon approach.

### 1. Recovery in global demand and oil prices

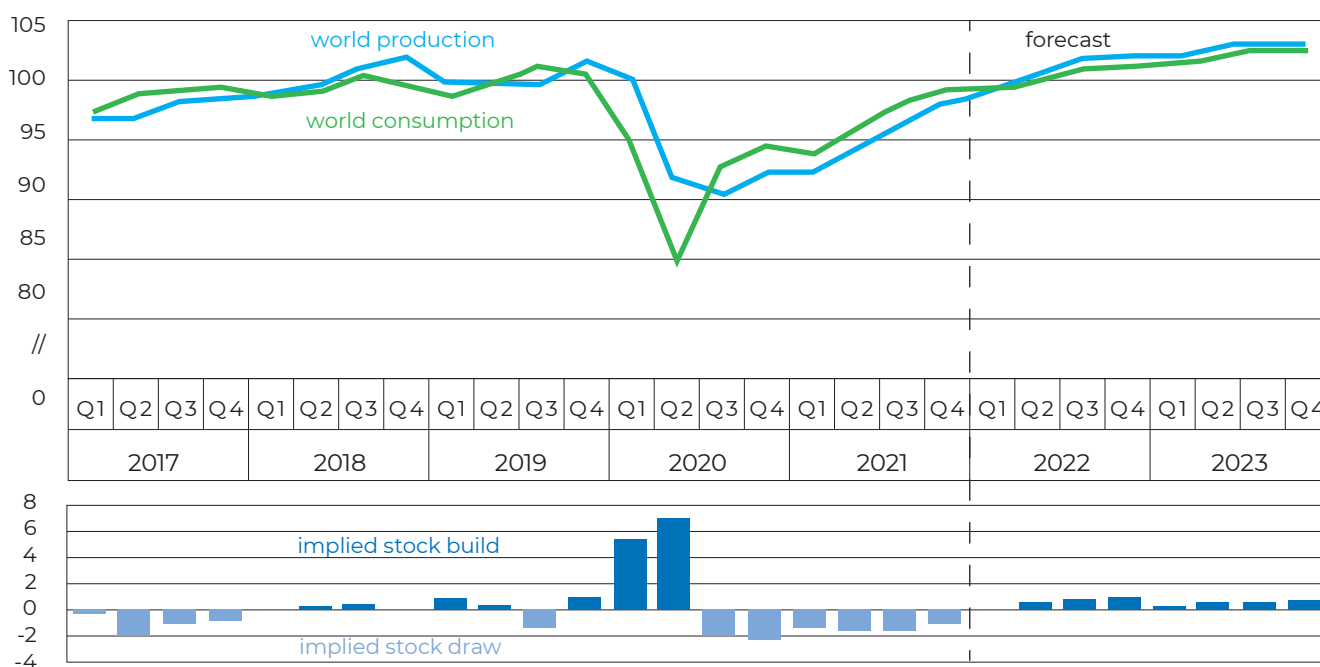
In 2021, the demand for liquid fuels outstripped the supply in the production and consumption balance, which was due to a relative recovery in tourist flows and air transportation coupled with the global economy being unshackled from the major restrictions of the prior year.

According to the U.S. Energy Information Administration (EIA), the average liquids consumption in 2021 amounted to 96.9 mln bbl per day, up 5.0 mln bbl compared to 2020 with its significantly lower consumption due to COVID-19.

For more than a year, oil consumption was ahead of production due to cuts under the OPEC+ agreement,

restricted investment on the part of US oil producers, and other supply disruptions, which also led to constant release of oil stockpiles around the world and a spike in oil prices.

World liquid fuels production and consumption balance, mln bbl per day



Source: U.S. Energy information Administration, Short-Term Energy Outlook, January 2022

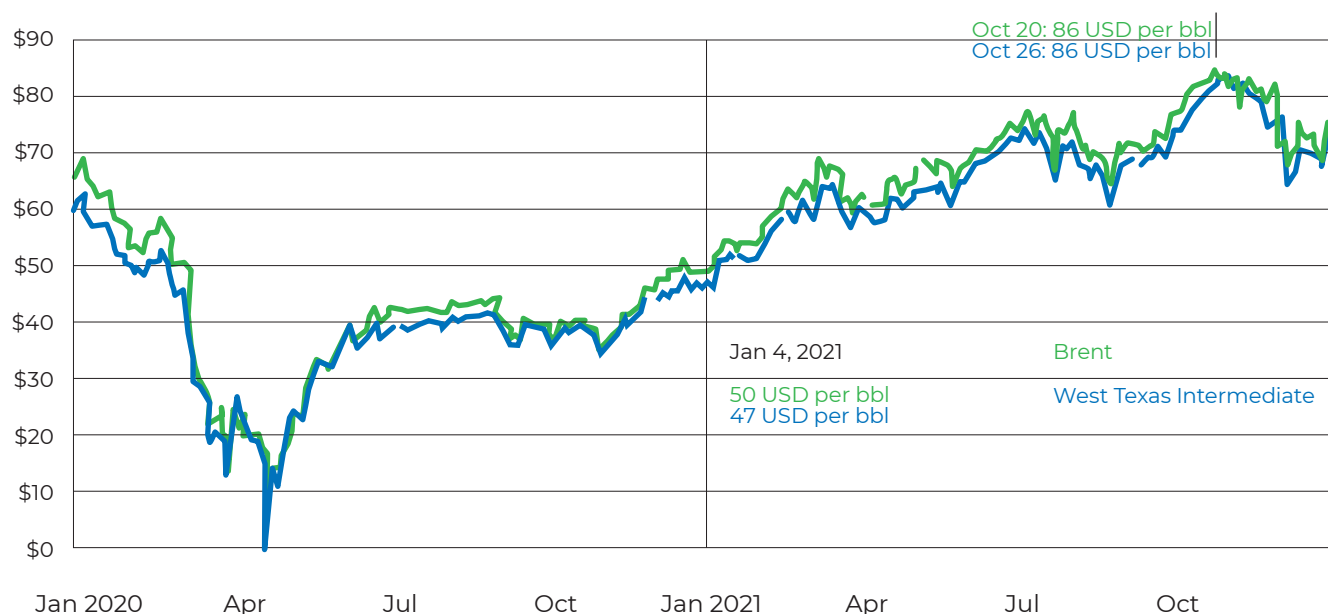
Brent crude traded at an average of USD 70.86 per bbl in 2021, up 70% year-on-year amid the easing of pandemic-related restrictions. In 2021, the U.S. Energy Information Administration (EIA) recorded the highest average annual Brent crude price in the last three years.

It was USD 50 per bbl at the start of the year and peaked at USD 86 per bbl at the end of October, reflecting the December 2020 decision by OPEC+ to limit production growth in 2021 in order to support higher prices. By the end of the year, there was a price increase precipitated in part by fears around the Omicron variant causing

oil consumption drop-off, followed by a decrease when the variant turned out to be less dangerous, but more contagious.

The West Texas Intermediate (WTI) crude price mirrored Brent, trending USD 3 per bbl lower on average.

Daily spot crude oil prices (Jan 2, 2020-Dec 30, 2021) USD per bbl



Source: Graph by the U.S. Energy Information Administration, based on data from Refinitiv

### Strategic direction

KMG generally improves the efficiency of its production assets, supports OPEC+ measures to recover oil demand, and takes care to prepare for low oil prices and global economy deterioration.

### 2. Slowdown in renewable energy sources expansion within the energy balance

Despite the headway made in renewable energy, 2021 saw a substantial increase in the use of coal and oil. Fast, patchy economic recovery following the COVID-19-induced recession puts intense pressure on the energy system, which leads to sharp rises in the price of natural gas, coal, and electricity. This is also the cause of the second-largest annual increase in CO<sub>2</sub> emissions ever recorded (from 31.5 ths tonnes in 2020 to 33 ths tonnes in 2021).

This trend is a far cry from the Net Zero Emissions by 2050 Scenario modelled in the 2021 World Energy

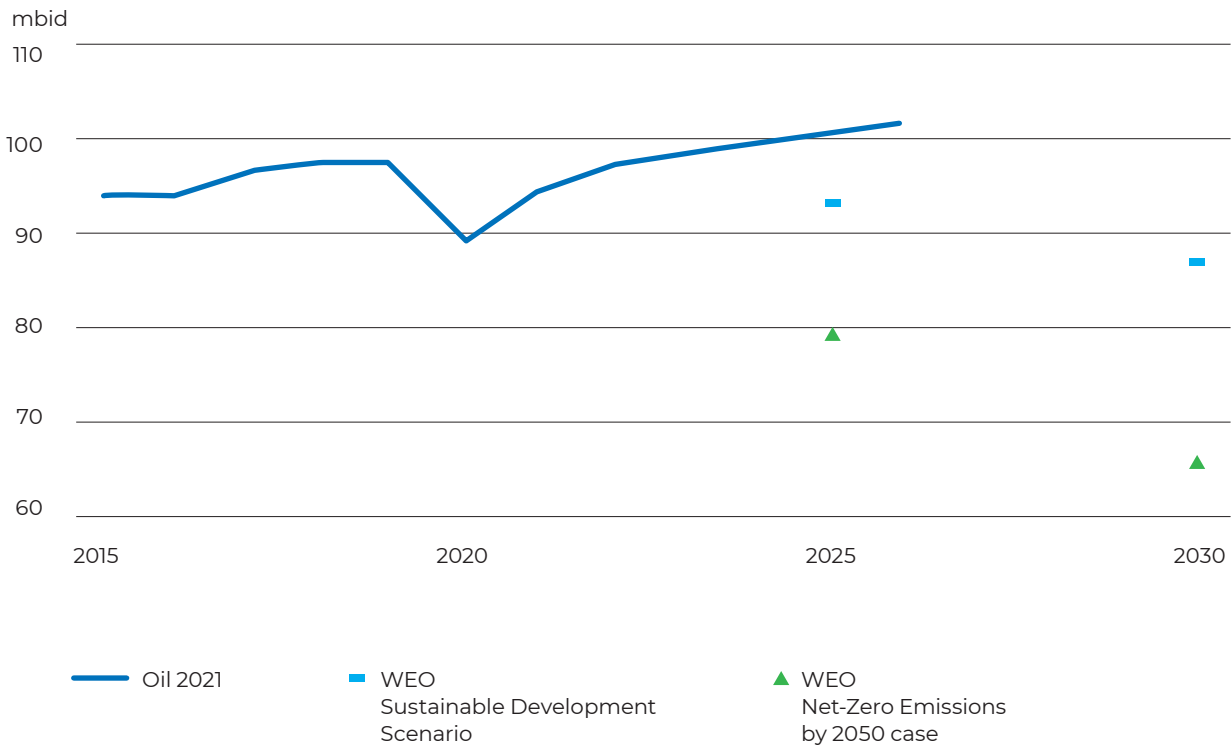
Outlook (WEO) by the U.S. Energy Information Administration (published in May 2021). The scenario envisions a pathway for the global energy sector to achieve net zero CO<sub>2</sub> emissions by 2050 while limiting the global temperature rise to 1.5 °C without a temperature overshoot. The EIA report is the world's first comprehensive study focusing on a way to achieve a clean and sustainable energy economy by 2050 with renewables as the primary source.

For WEO-2021, several scenarios were modelled based on global economy development:

- Net Zero Emissions by 2050 Scenario (NZE) – a normative IEA scenario of achieving net zero CO<sub>2</sub> emissions by 2050, with advanced economies reaching net zero emissions sooner than others. This scenario also meets key energy-related United Nations Sustainable Development Goals (SDGs).

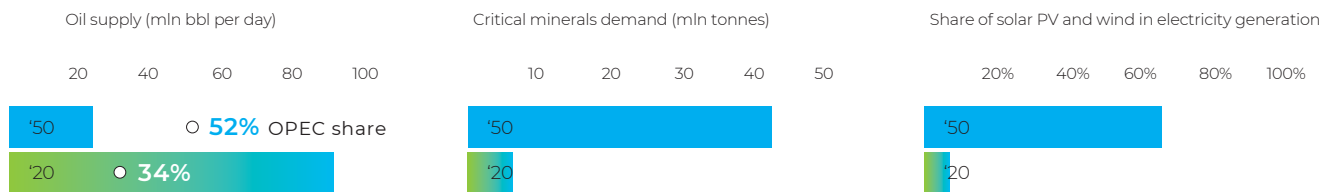
- Stated Policies Scenario (STEPS) – takes account of existing policies and measures, as well as those that are under development. Under the scenario, CO<sub>2</sub> emissions remaining on the current trajectory will lead to a global temperature rise of 2.7 °C by 2100 (with a 50% probability).
- Announced Pledges Scenario (APS) – assumes all announced net zero ambitions and targets are on the path to deliver the necessary emissions reductions, regardless of whether these have been anchored in any concrete policies. Under the scenario, CO<sub>2</sub> emissions remaining on the current trajectory will lead to a global temperature rise of 2.1 °C by 2100 (with a 50% probability).
- Sustainable Development Scenario (SDS) – a “well below 2 °C” pathway to the outcomes targeted by the Paris Agreement.

### Global oil demand forecast in scenarios of Oil 2021, sustainable development and net-zero emissions by 2050



Source: U.S. Energy Information Administration

### Global energy security indicators in the net zero pathway



#### Strategic direction

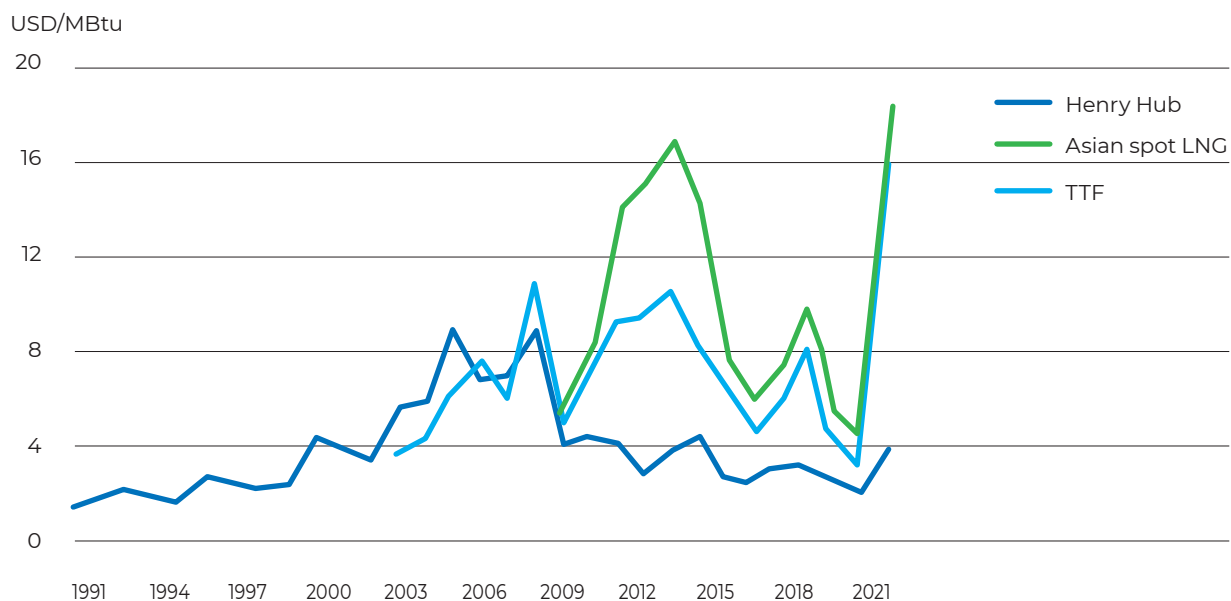
In 2021, KMG adopted the Low-Carbon Development Programme 2022–2031, which sets out the key areas for KMG to reduce its carbon footprint. To monitor progress towards the respective targets and report on GHG emissions, KMG plans to develop a GHG Emission Monitoring and Reporting Methodology.

#### 3. Record-high gas prices – soaring Chinese demand and Europe's energy crisis.

In 2021, global natural gas consumption went up by 4.6%, which is more than double the decrease in 2020. The demand growth was driven by economic recovery and a number of extreme weather events. The year started out with a cold wave, which

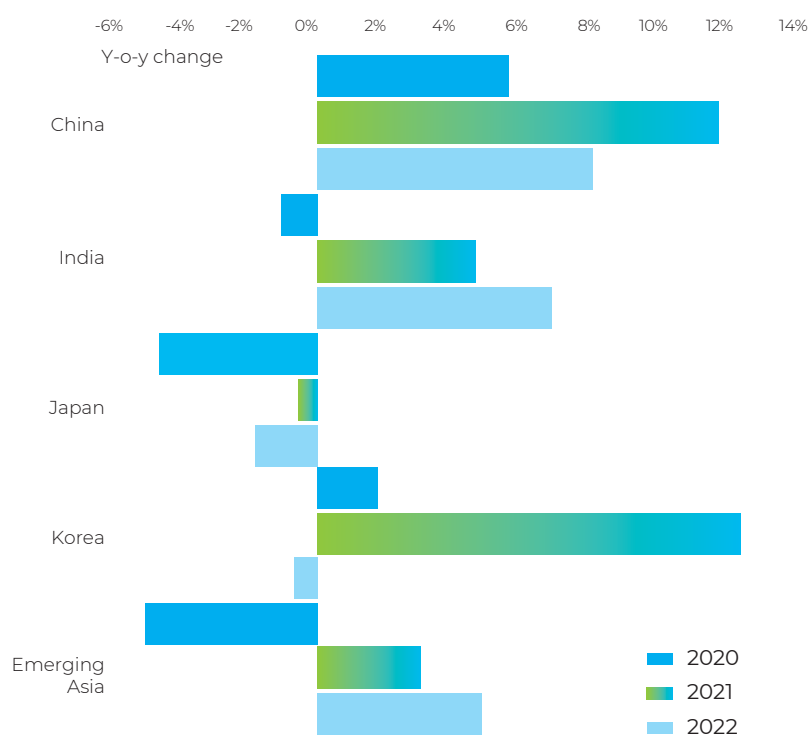
triggered price hikes in Asia and North America, and ended with record-high natural gas prices on the key import markets of Europe and Asia. Lagging supply coupled with unexpected outages led to market shortages and a sharp price increase, stymieing the demand in the second half of 2021.

## Regional natural gas prices, mln BTUs (1991-2021)



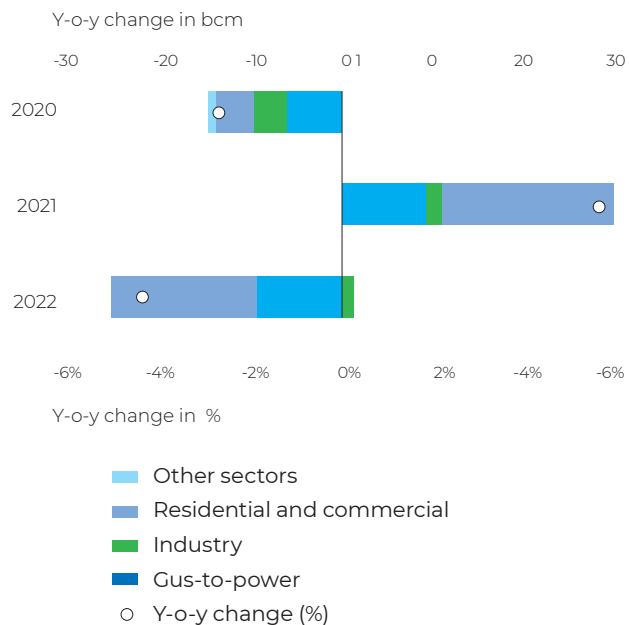
In 2021, gas demand in Asia grew 7%. Northeast Asia accounted for over 82% of the net growth in Asia on the back of a cold winter combined with a hot summer and sporadic droughts. China was responsible for 69% of the total 2021 consumption growth in Asia.

## Gas demand in selected Asian countries, including China, in 2020–2022, %



In 2021, Europe's gas consumption went up around 5.5%, or 30 bln m<sup>3</sup>. Following its strong 13% year-on-year growth in 2021's first half, gas demand in Europe shed almost 5% in Q3 amid price increases and remained stable in Q4, which caused a switch from gas to coal in the energy sector.

### Change in Europe's natural gas demand, % and bln m<sup>3</sup> (2020–2022)



Source: U.S. Energy Information Administration

### Strategic direction

On 9 November 2021, 100% of shares held by JSC KazTransGas (renamed later JSC NC QazaqGaz) were transferred from KMG to Samruk-Kazyna. As a result, JSC KazTransGas gained the status of a national company and a pre-emptive right to explore and develop gas and gas condensate fields. KMG seeks to promote the modernisation and diversification of Kazakhstan's gas industry. To that end, the Company will continue to cooperate with JSC KazTransGas in this area.

### 4. Long-term growth in demand for petrochemicals

Over a relatively short period of time, petrochemicals gained a strong foothold across almost all continents and now account for a structural share of up to 10% in many economies. According to Research and Markets, the world petrochemical market expanded from USD 365.0 bln in 2020 to USD 429.11 bln in 2021, demonstrating CAGR of 17,6%. It is expected to reach 860.8 bln by 2028.

### Global petrochemicals market, USD mln

Market forecast to grow at CAGR of 3%



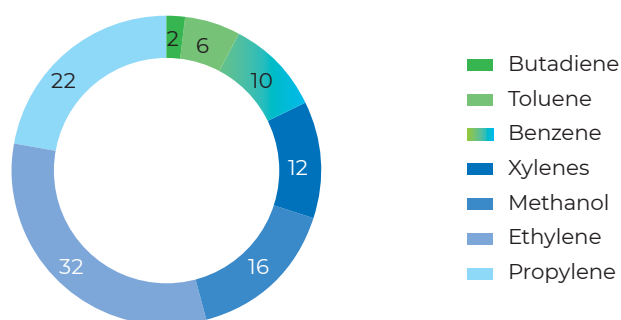
Source: Research and Markets

Over the last decade, investment in new chemical assets was mainly concentrated in China, the Middle East, and North America, each boasting unique investment incentives, such as fast-developing markets

and domestic advantages related to energy and raw materials. Mainland China has been focusing on investing in coal-based chemicals production and special propylene production processes, but these efforts slowed

down following the recent introduction of environmental control measures, especially those related to chemicals from coal.

### World consumption of primary petrochemicals, % (2021)



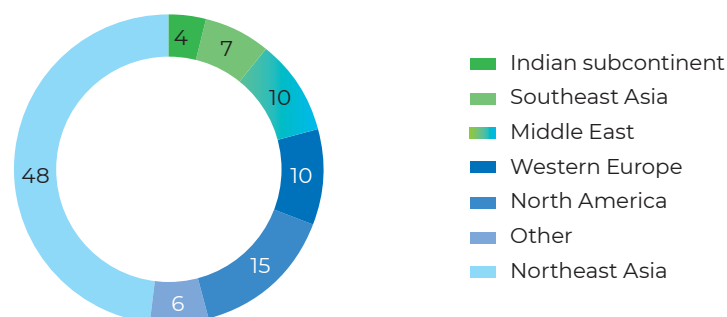
Source: IHS Markit

Asia-Pacific was the top region on the global petrochemicals market with a share of 48% in 2021, followed by North America in second place with 15%. The Indian subcontinent was

bringing up the rear with the smallest share. Asia-Pacific is predicted to experience the highest average annual growth rate in the foreseeable future on the back of crude refining

capacity expansion, population growth, and improvement of living standards all throughout the region.

### World consumption of primary petrochemicals by region, % (2021)



Source: IHS Markit

#### Strategic direction

KMG is working on petrochemical projects to produce polypropylene and polyethylene, with plans for a butadiene production project as well. In late 2021, the main construction of a 500 ths tonnes annually plant, which will produce over 65 different polypropylene grades, was completed at Kazakhstan Petrochemical Industries Inc. (KPI) in the Atyrau Region. The project will fully meet the domestic polypropylene demand while also providing for exports.

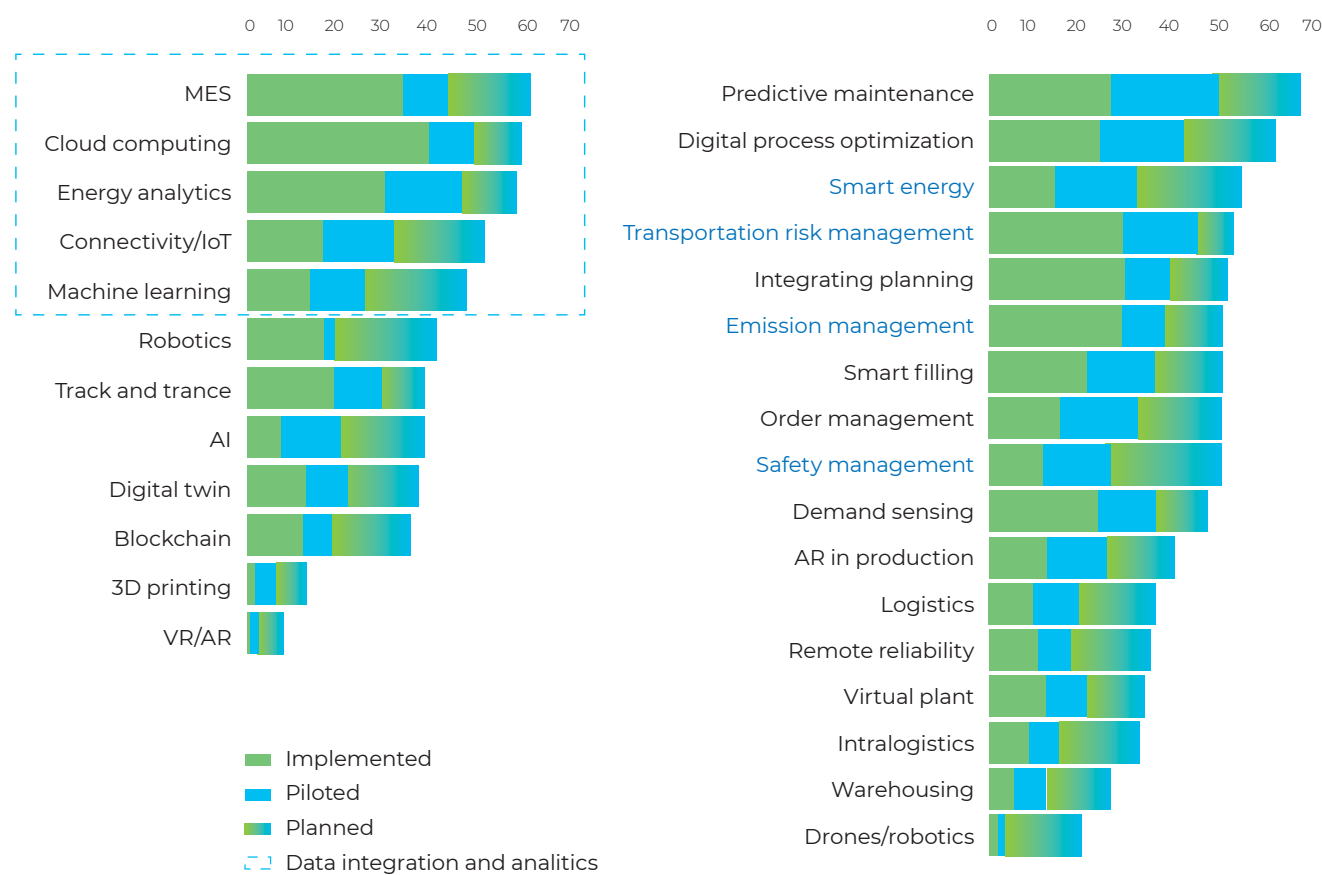
#### 5. Accelerated growth and use of digital technologies. Business process digitisation and automation

In recent years, the rate of technological innovation in oil and gas has gained considerable steam. Social, mobile, analytical and cloud solutions form the foundation for companies' technological development.

Global studies have identified the main trends that are set to hold sway over the oil and gas industry in the coming years. They include, among others, the DARQ technologies, technology identity, individuals' skillsets being empowered by a new set of capabilities made possible through technology, cyber risk management, and rise of "momentary" markets.



## Digital technology implementation in oil and gas by technology and by application

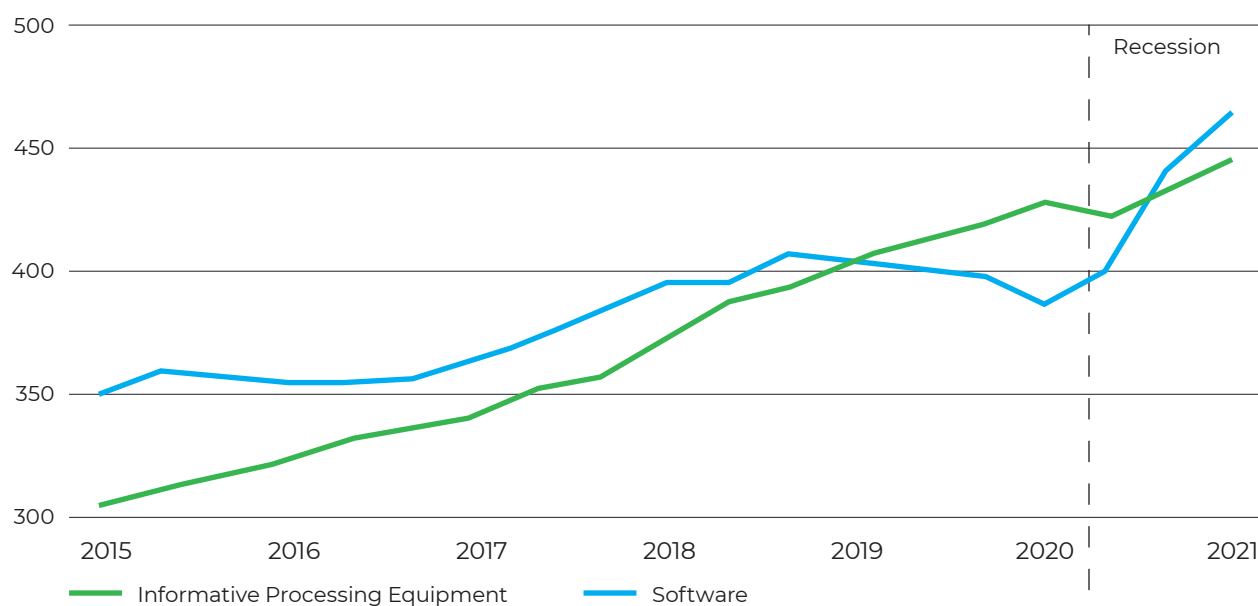


The COVID-19 pandemic has hastened the adoption of sensors, the Internet of Things and cloud computing

to support remote monitoring of oil wells and refineries, which is a trend that can still be seen today. Computing

technology, big data, clouds and machine learning streamline asset performance and remote operations.

## Surge in pandemic-induced digital transformation, USD bln



### Strategic direction

KMG's key processes are automated, and individual processes and systems are partly integrated. KMG runs a staggered pipeline of digital projects so as to tackle the challenges posed by the business world, engaging in what could be called reactive digitalisation.

In the context of the current maturity level, digitalisation efforts are focused around the needs of specific subsidiaries and associates, with businesses being involved as early as ideation. The emphasis lies on targeted initiatives addressing concrete business gaps in production and yielding direct financial gains, which will result in improved

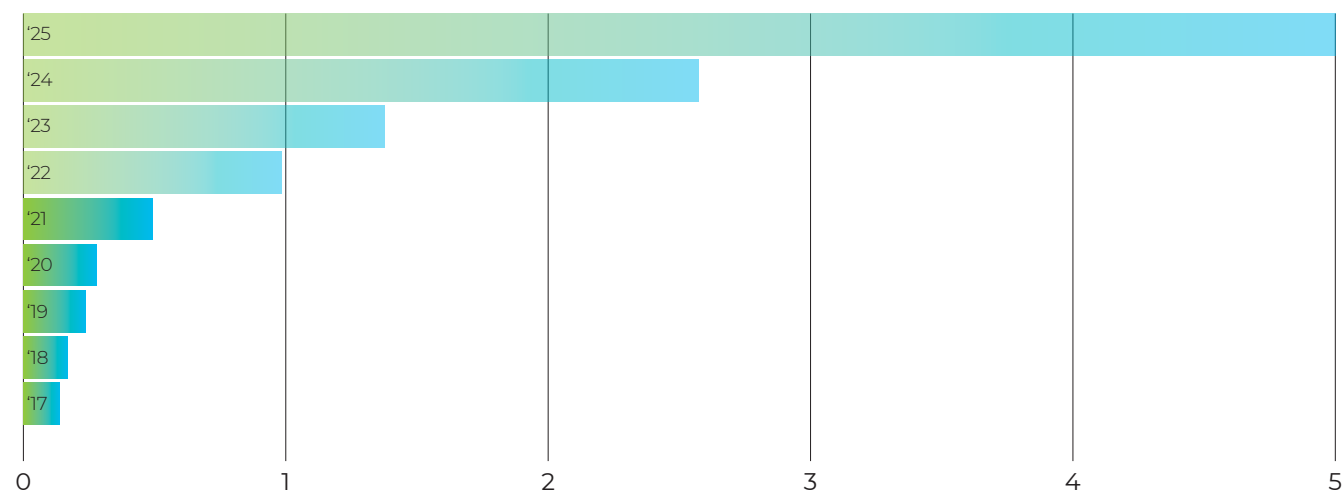
automation and digitisation of corporate business processes and, consequently, better efficiency and achievement of ever higher KPIs.

One of the Company's digitalisation initiatives is the development and implementation of the KMG automated environmental monitoring information system (AEMIS). AISEM is conceived as a vehicle for comprehensive automation of environmental activities, including collection, storage, processing and analysis of environmental data. Access will be granted to designated KMG Group employees.

### 6. The growing importance of sustainability and ESG financial instruments across the investment community. The trend towards carbon neutrality in the oil and gas sector

In 2021, Glasgow hosted the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26). Each Party to the 2015 Paris Agreement is required to establish a Nationally Determined Contribution (NDC) – a climate action plan to cut emissions – and update it every five years. Under a Global Coal to Clean Power Transition Statement, more than 40 countries have committed to phase out coal (by 2030 for OECD countries and by 2040 globally) and cut public financing for new coal-fired power stations. The Statement also provides for a threefold increase in annual renewables investment by 2030.

### Green bond issuance, USD tln (2017–2025)



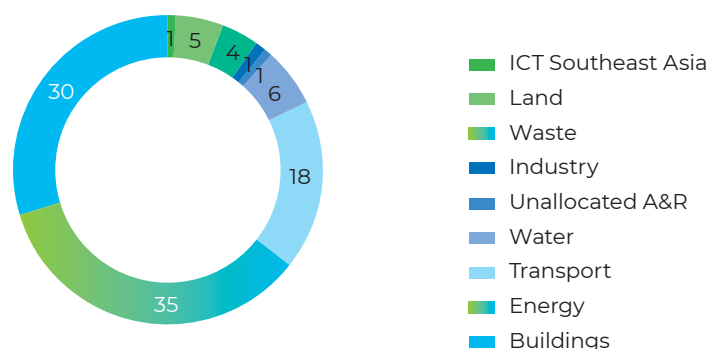
Green bonds represent a tool for attracting capital to be directed towards mitigation and adaptation climate objectives contained in NDCs.

One of the milestones advocated for at COP22 in 2016 was USD 1 tln in annual green investment. Climate Bonds Initiative estimates that the current green investment growth trajectory could land the first annual green trillion in 2022 then USD 5 tln by 2025. Hitting this milestone early this decade serves as key indicator that capital is being shifted at scale towards climate solutions.

The Renewable Energy category drew the largest share of green investment across sectors and issuer types in 2021, followed by investments into Low-Carbon Buildings and Transport.

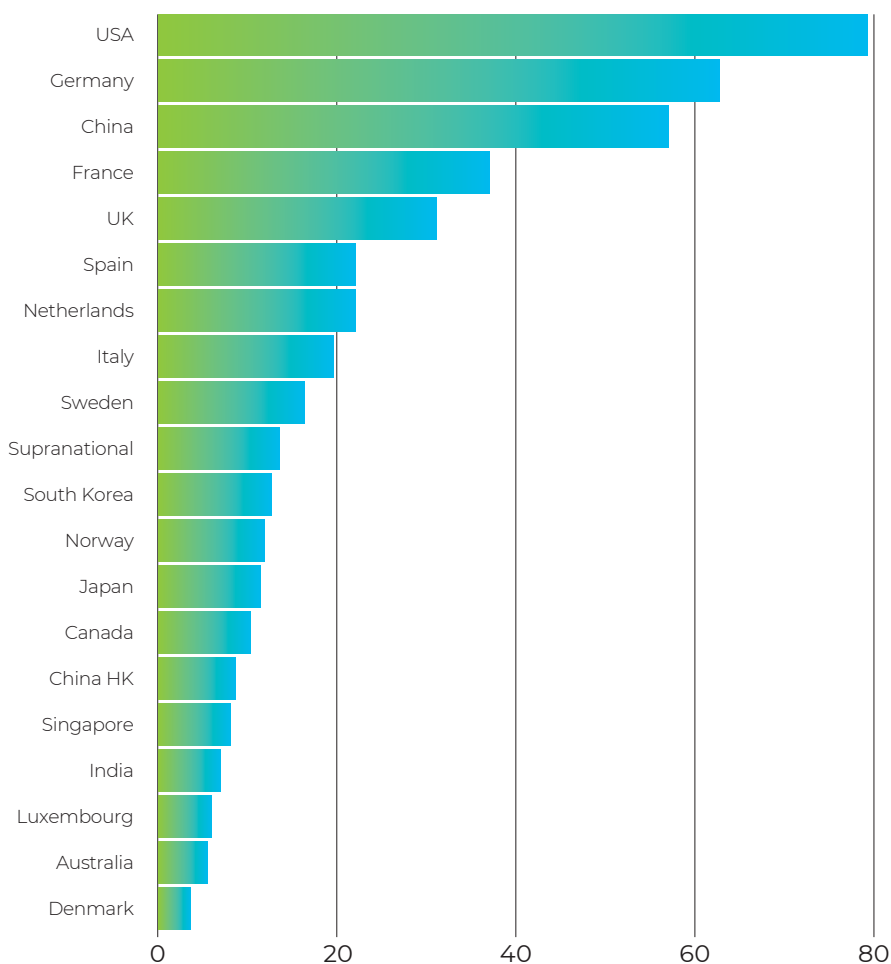
The US and Germany maintained their leading first and second positions. France, the third largest green issuing nation in 2020, was pipped for a podium place by China, which moved up a spot in 2021. Kazakhstan is at the start of its hydrocarbon-to-renewables transition. According to the Green Finance Centre (GFC) of the Astana International Financial Centre (AIFC), Kazakhstan has issued upwards of USD 250 mln in green bonds. In the short term, KMG may consider issuing green bonds as an additional source of investment for its Low-Carbon Development Programme 2022–2031.

Use of green investments in 2021, %



Source: Climate Bonds Initiative 2022

Top 20 green investors in 2021, USD bln



### Strategic direction

KMG remains committed to being an environmentally responsible business, further enhancing its environmental protection management system, maintaining continuous dialogue on sustainable development with all stakeholders, and actively contributing to nature preservation and social stability across its footprint. As part of these efforts, KMG fulfils its obligations of ensuring open communication, awareness, and regular reporting for stakeholders when it comes to material ESG aspects of the Company's operations.

In 2021, JSC NC KazMunayGas was, for the fifth year running, first among Kazakhstani companies in the Environmental Transparency Rating for Oil and Gas Companies compiled by WWF, ACRA, and CREON Group.

Furthermore, for the second year in a row JSC NC KazMunayGas topped the rating of the 50 best companies in non-financial corporate reporting, which PwC Kazakhstan picks out of 96 organisations. To arrive at the finalists, PwC Kazakhstan assessed the quality and availability of ESG information in the 2021 annual and sustainable development report of Kazakhstani companies. The rating aimed

to evaluate Kazakhstani companies' ESG disclosure, identify best practices, and provide recommendations for further development.

### Internal drivers and their impact on strategy implementation

#### 1. Kazakhstan's oil and gas industry in 2021

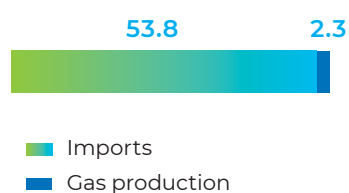
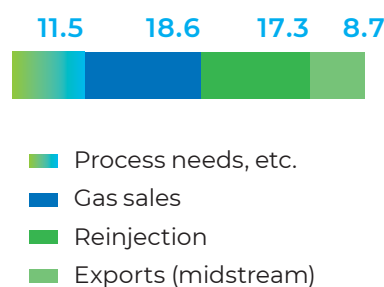
According to the US Energy Information Administration (EIA), Kazakhstan, an oil producer since 1911, has the second largest oil production after Russia among the former Soviet republics.

The oil and gas industry is a key sector of Kazakhstan's economy due to its significant hydrocarbon reserves. This industry, together with related sectors (such as transportation, construction of production facilities and geology), accounts for approximately 17% of the total gross domestic product (GDP) of Kazakhstan, according to estimates by the Kazakhstan Association of Oil, Gas and Energy Sector Organisations "KAZENERGY" in the fifth National Energy Report published by in October 2021. 28% of gross FDI inflows in 2021 came into the crude oil and natural gas production sector. In 2021, exports of crude oil, natural gas and oil products accounted for 57% of Kazakhstan's total exports.

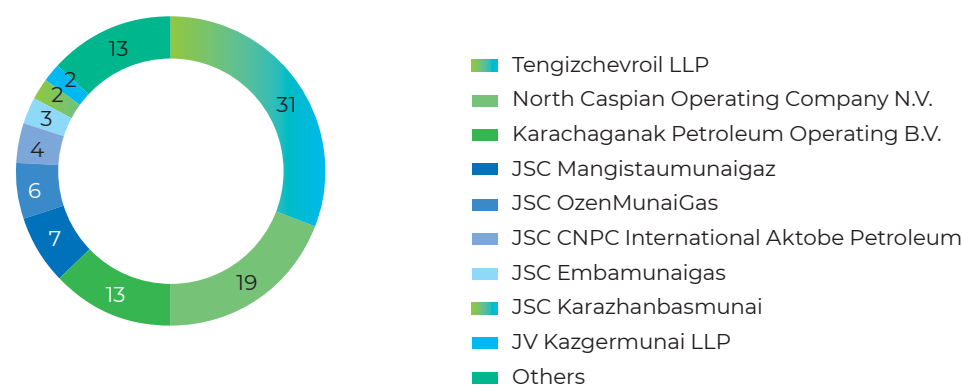
As production expanded over the past decades, Kazakhstan has significantly strengthened its position in the global hydrocarbon market. According to BP's Statistical Review of World Energy (July 2021), Kazakhstan ranks 12th globally by the volume of its proved reserves.

According to the data and analysis provided by the Information and Analytical Centre of Oil and Gas of the Ministry of Energy of the Republic of Kazakhstan, Kazakhstan produced 85.9 mln tonnes of crude oil and gas condensate in 2021 (83.3 mln tonnes and 2.5 mln tonnes, respectively), up 0.3% year-on-year. According to the Ministry of Energy, the country exported 67.6 mln tonnes. Gas production in 2021 totaled to 53.8 bln m<sup>3</sup>, down 2.4% year-on-year. According to the Ministry of Energy, the country exported 7.7 bln m<sup>3</sup> of gas.

At the end of December 2021, Kazakhstan's Ministry of Energy estimated the country's oil output in 2022 at 87.5 mln tonnes. Tengizchevroil LLP (TCO) is expected to produce 28.73 mln tonnes, Kashagan – 14.9 mln tonnes, and Karachaganak – 10.87 mln tonnes. Oil exports in 2022 are estimated at 67.5 mln tonnes.

Gas balance in Kazakhstan in 2021, bln m<sup>3</sup>Gas balance in Kazakhstan in 2021, bln m<sup>3</sup>

Oil and gas condensate production in Kazakhstan in 2021, %



Source: Information and Analytical Centre of Oil and Gas of the Ministry of Energy of the Republic of Kazakhstan

### Oil and gas transportation

Kazakhstan has advanced and diversified oil and gas transportation, refining and processing infrastructure, which facilitates the country's access to global sales markets.

### Oil refining and gas processing

According to the Information and Analytical Centre of Oil and Gas of the Ministry of Energy, the throughput at Kazakhstan refineries in 2021 was 17.03 mln tonnes, up 7.7% year-on-year. The production

of all grades of petrol was at 4.81 mln tonnes (up 7.3% year-on-year), jet fuel was at 0.587 mln tonnes (up 34% year-on-year), and diesel fuel was at 4.87 mln tonnes (up 7% year-on-year).

### KMG position in Kazakhstan's oil and gas industry

KMG is the national leader in Kazakhstan's oil and gas industry with a fully integrated value chain.

Proved (1P) oil and condensate reserves life was 16.5 years (based on the 2021 output), far exceeding the average

of about 11 years for the global oil majors (based on the 2020 output). KMG's proved and probable (2P) oil and condensate reserves life (based on the 2021 output) was 23.7 years.

KMG showed the best operating results in Kazakhstan's oil and condensate production segment in 2021, according to the Company's in-house estimates. In 2021, the share of KMG in Kazakhstan's oil and condensate production was 25%, while its share in the nation's gas production came in at 15%.

KMG operates four largest refineries in Kazakhstan with a share of 82% in the refining market in 2021. KMG completed an ambitious investment programme to upgrade three core refineries in Kazakhstan. As a result of this programme, KMG ramped up our refining capacity and improved product quality, fully met the domestic demand for oil products and expanded their exports to regional markets.

The oil transportation infrastructure managed by KMG is highly diversified and has a strong transit and export potential. KMG's share in the oil transportation market, including trunk pipelines and sea transportation, totalled 56% in 2021.

On 9 November 2021, 100% of shares held by JSC KazTransGas (JSC NC QazaqGaz) were transferred from KMG to Samruk-Kazyna. As a result, JSC

KazTransGas (JSC NC QazaqGaz) gained the status of a national company and a pre-emptive right to explore and develop gas and gas condensate fields. KMG seeks to promote the modernisation and diversification of Kazakhstan's gas industry. To that end, the Company will continue to cooperate with JSC KazTransGas (JSC NC QazaqGaz) in this area.

#### KMG's market share in Kazakhstan by segment in 2021, %



Sources: Company estimates, Oil and Gas Information and Analysis Center of the Ministry of Energy

#### Competition analysis

##### Hydrocarbon exploration

#### 1P oil and condensate reserves life in 2020–2021



### Strategic direction

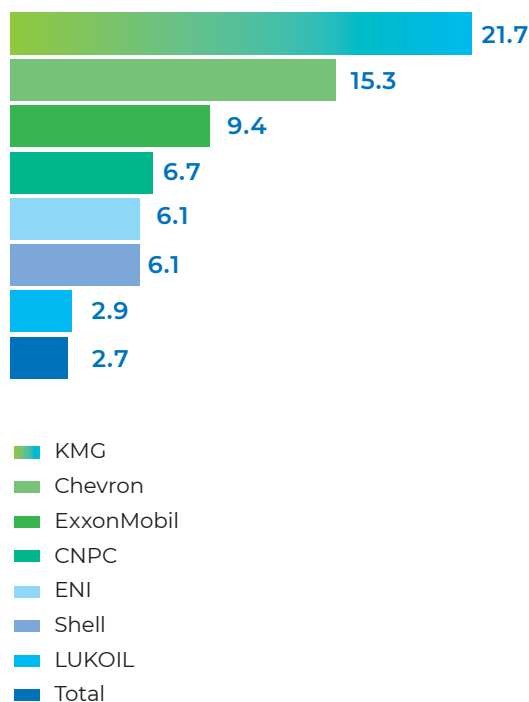
KMG focuses closely on further development of the nation's oil and gas industry, while also helping the government to address the challenges of social and economic development in Kazakhstan. The Company acts on behalf of the government in the oil and gas industry and demonstrates strong social responsibility. Successful and sustainable business development is inextricably linked to the nation's economic competitiveness, social welfare, conservation and efficient use of natural resources. KMG sees its mission in the effective and sustainable use of natural resources to ensure energy security, development and prosperity of Kazakhstan, while caring about future generations. In line with the KMG mission, we have set out four strategic goals:

1. resource base sufficient to support the Company's growth;
2. improved efficiency across the Company's value chain;
3. business diversification and product portfolio expansion;
4. sustainable development and gradual reduction in carbon intensity of production.

### 2. Development of Kazakhstan's petrochemical industry

Kazakhstan actively develops its petrochemical industry. Over the past ten years, the nation's petrochemical output has been growing driven by the launch of new manufacturing facilities. In 2021, petrochemical production is expected to come in at 185 ths tonnes, with plans to increase it to 560 ths tonnes in 2022.

### Estimated oil and condensate output in Kazakhstan in 2021, mln tonnes



Sources: Company estimates, Information and Analytical Centre of Oil and Gas of the Ministry of Energy of the Republic of Kazakhstan

In late 2021, the main construction of a 500 ths tonnes annually plant, which will produce over 65 different polypropylene grades, was completed at Kazakhstan Petrochemical Industries Inc. (KPI) in the Atyrau Region. Also in 2021, a 57 ktpa octane booster plant in Shymkent and a technical gas plant in Atyrau with a capacity of 57 mln m<sup>3</sup> of nitrogen and 34 mln m<sup>3</sup> of dry compressed air were commissioned.

Plans are underway to construct a number of major production facilities, including a polyethylene plant (1.25 mln tonnes), terephthalic acid and polyethylene terephthalate plant (1.25 mln tonnes) and butadiene plant (189 ths tonnes).

### Strategic direction

KMG will be strongly involved in developing Kazakhstan's petrochemical industry with support from the government, which is expected to significantly boost the national economy as growth in the petrochemical sector will have a multiplier effect on the entire domestic market

### 3. Kazakhstan's involvement in the OPEC+ agreement

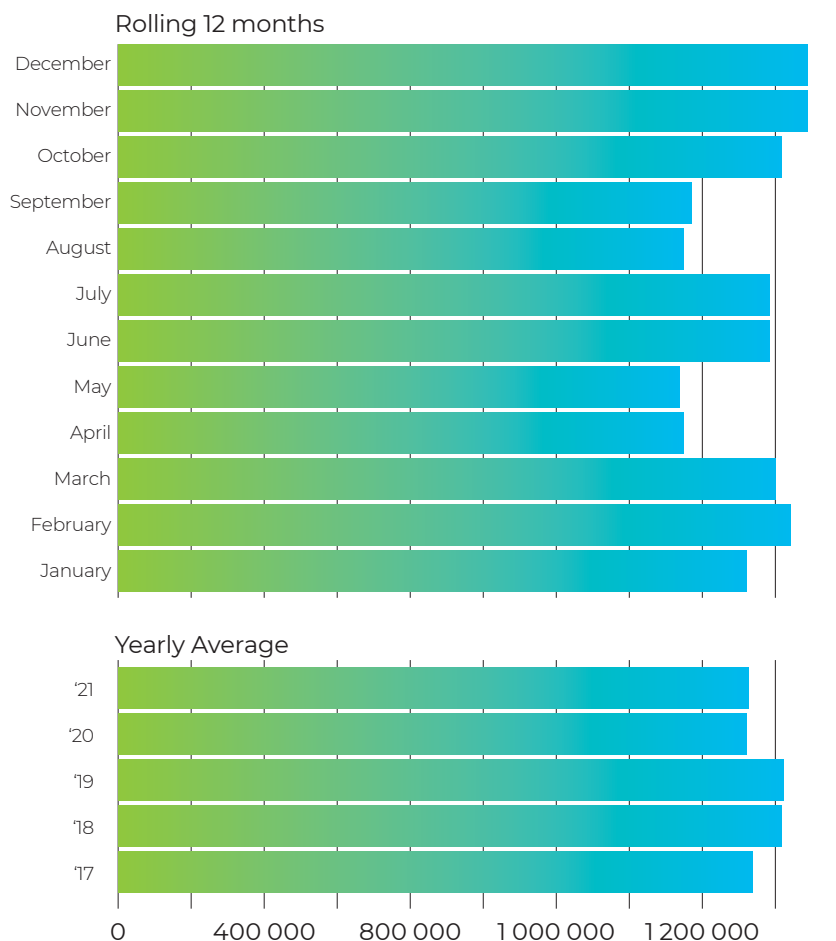
In April 2020, OPEC+ countries decided to cut oil production with plans to gradually ease curbs on oil supply later. As a member of OPEC+, Kazakhstan's Government introduced temporary restrictions on oil production effective from 1 May 2020. The Resolution of the Government of the Republic of Kazakhstan on introduction of temporary restrictions on the use of subsoils for exploration, production and extraction of hydrocarbons imposed limitations on some of the KMG fields. KMG fully honours all of these commitments.

Starting from August 2021, the OPEC+ nations decided to increase oil production by 400 ths bbl per day each month up to the moment when the member countries resolve to lift all relevant restrictions. This is the base case scenario, which was originally planned to stay in place until spring 2022. However, due to considerable uncertainty, OPEC+ nations hold monthly online conferences to confirm this scenario or review it for the upcoming period.

#### Strategic direction

Despite the negative impact the COVID-19 pandemic and OPEC+ restrictions had on the Company's operations, the implemented crisis response measures helped KMG adapt to new conditions and maintain financial stability.

### Production of liquid hydrocarbons (oil and condensate) in Kazakhstan in 2017–2021, bbl per day





#### 4. Kazakhstan's new Environmental Code

The new Environmental Code of the Republic of Kazakhstan came into effect on 1 July 2021. This new Code is based on the "polluter pays and remedies" principle, which implies that major industrial businesses take measures to prevent pollution and introduce best available techniques. The document provides for new approaches to environmental impact assessment, emission charges, streamlined industrial and consumer waste management, and significantly higher penalties, which will contribute to substantial environmental improvements. During the first phase, the 50 largest facilities accounting for 80% of pollutant emissions (including the oil and gas sector) will begin an orderly transition to best available techniques (BAT).

As part of the new Code implementation, Kazakhstan's Ministry of Ecology, Geology and Natural Resources launched a Unified Environmental Portal<sup>1</sup> as a venue for all environment-related government data. The Unified Environmental Portal is a critical platform designed to support the nation's businesses and help them develop. The portal unlocks a significant untapped potential in terms of digitalising business process related to environmental protection and sustainability. The platform will also help to automate such business processes as waste and emissions reporting and classification of facilities.

##### Strategic direction

KMG prioritises measures to minimise its environmental footprint. The Company's subsidiaries completed a number of initiatives designed to ensure environmental safety and provide tools for comprehensive assessment of their environmental

impact. Our digitalisation initiatives included a project to develop and implement the KMG automated environmental monitoring information system (AEMIS). AEMIS is conceived as a vehicle for comprehensive automation of environmental activities, including collection, storage, processing and analysis of environmental data.

KMG Group proclaimed 2021 the Year of Environment, using this occasion to raise ecological awareness, reduce environmental impact and take steps needed to meet new ecological requirements and global trends.

#### 5. Kazakhstan's doctrine (strategy) for carbon neutrality by 2060

The Republic of Kazakhstan is currently working on a doctrine (strategy) for carbon neutrality by 2060 to provide two distinctive scenarios for our economic future. The scenario-based analysis and assessment of investments needed for transition to carbon neutrality are based on the comprehensive models of potential industrial solutions, system evolution and macroeconomic effects.

In addition to the analysis of climate change mitigation options, the Strategy offers an evaluation of related benefits arising from the reduction of GHG emissions and higher carbon capturing capacity, as they will serve as an important driver for local economic, social and environmental changes.

Furthermore, the Strategy focuses closely on the existing policy barriers and opportunities, such as regulations encouraging investments and market growth, as well as awareness-raising campaigns. The macroeconomic impact of carbon neutrality is benchmarked against the option

of sticking with the last years' policy of less ambitious climate goals.

Fending off climate change is not the only big challenge facing Kazakhstan – the country also has to find ways to adapt to the new post-climate change reality. The Strategy offers an overview of climate vulnerabilities and impacts, as well as the goals and initiatives Kazakhstan needs to pursue in order to successfully adapt to the upcoming changes. Furthermore, the document analyses the interdependence between climate change adaptation and mitigation strategies, including by placing an emphasis on country-specific priority areas, such as land use and agriculture, water management and clean energy projects.

##### Strategic direction

Amid the growing importance of the climate agenda and tightening carbon impact regulations, KMG approved its Low-Carbon Development Programme for 2022–2031. This programme advances a single low-carbon development agenda as an essential part of the corporate governance framework and seeks to streamline the Company's efforts in the realm of carbon footprint reduction. The document primarily aims to formulate the climate ambitions of KMG, structure key carbon footprint reduction approaches and initiatives through the analysis of the existing potential, define main avenues for development and increase the Company's preparedness. Given the country-specific ambitions and expectations, KMG strives to reduce carbon dioxide emissions by 15% or 1.6 mln tonnes of CO<sub>2</sub> by 2031 vs 2019. To achieve this goal, KMG plans to improve its energy efficiency and saving, and to scale up the use of renewables for industrial purposes.

<sup>1</sup> Unified Environmental Portal – <https://ecoportal.kz/Home/Contact>



## 6. National Project for the Geology Sector Development in 2021–2025

In 2021, the State Geological Exploration Programme for 2021–2025 was transformed into the National Project for the Geology Sector Development in 2021–2025.

Over the past decades, Kazakhstan has depleted many of its major polymetal ore fields, with oil output declining every year in some of the regions. That said, the country still has room for new discoveries of hydrocarbons and solid minerals.

That is why the National Project aims to define the oil and gas potential of poorly explored sedimentary basins and to prospect deep horizons in the mining regions.

Implementation of the National Project will help update exploration data and appraise prognostic mineral resources, while also increasing employment rates in the exploration industry, attracting investments and creating new jobs in the construction, mining and concentration sectors.

### Strategic direction

KMG will be exploring and developing new reserves in Kazakhstan, among other things in strategic partnerships with global oil and gas majors. To speed up the reserve growth, exploration will rely on the latest technologies and methodologies, including new processing approaches, high-quality re-interpretation of geological and geophysical materials, and the use of next generation technologies in seismic surveys.

## 7. Kazakhstan's economy

In order to maintain social and economic stability amid the state of emergency and pandemic-induced restrictions last year, the government adopted and implemented three crisis response packages: urgent measures to support the population and business, prompt measures to preserve socio-economic resilience and a Comprehensive Plan to Restore Economic Growth.

Kazakhstan's real GDP grew by 4.0% driven by a rally in commodity prices, revival of commercial and economic activity amid softening lockdown restrictions, and gradual global economic recovery. Transportation, construction and manufacturing were the main contributors to GDP growth. Higher cargo and passenger traffic was the key driver behind expansion in the transportation sector. Despite GDP growth, commerce was on the downward slope. The negative trends in commerce are associated with the slow-paced lifting of lockdown restrictions and suppressed demand.

Transition to tighter monetary policy in the developed economies, appreciation of the US dollar and capital flight from the emerging markets increased pressure on the tenge, which lost 2.6% in value in 2021. Dedollarisation / dollarisation of bank deposits and the status of the balance of payments were the most critical factors for the tenge

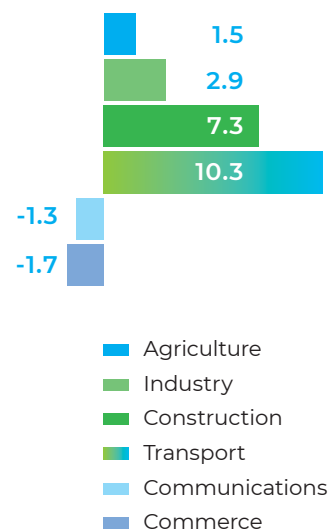
in the domestic market. Even though Kazakhstan's exports expanded on the back of rising oil prices, increasing imports continued to pile pressure on the national currency. Strong reliance on imports is one of the main factors hampering dedollarisation of households and the corporate sector.

Inflation in 2021 came in at 8.4%, i.e. within the 8.5% range fixed by the head of state, but above the inflation target for the year. The inflation target for 2022 is set at 4–6%. In 2022, this figure will go down to 4–5%. Mid-term inflation is expected to decrease to 3–4% in 2025.

Gradual recovery of consumer demand driven by adaptation to the imposed restrictions, higher production costs, ongoing disruptions in global supply chains, and rising inflation in the country's international trade partners accelerated the pace of price growth. In an attempt to stabilise non-monetary inflation drivers, the Government of Kazakhstan joined forces with the National Bank in September 2021 to launch a set of anti-inflationary response measures for 2021–2024. This helped keep food inflation, the main contributor to overall price growth, at 9.9%.

The National Bank of Kazakhstan, on its part, proceeded with its disinflationary monetary policy designed to curb rising prices and anchor inflation expectations. Starting from July 2021, the National Bank raised its key interest rate three times for a total of 0.75 p.p. (from 9.0% to 9.75%).

## Year-on-year growth in key sectors of the economy in 2021, %

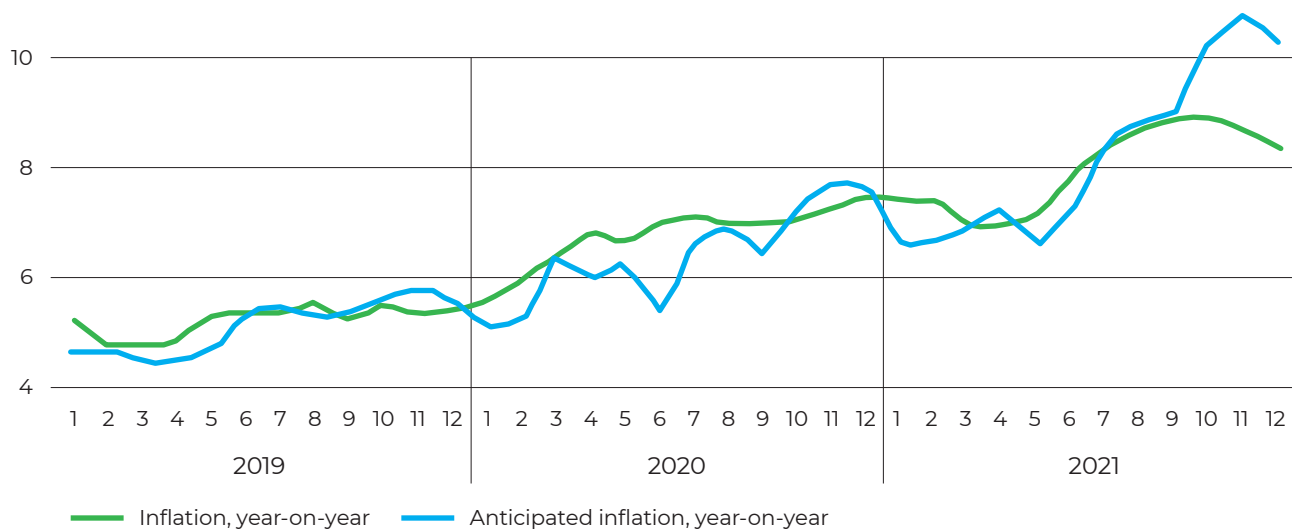


## Strategic direction

Amid the ongoing upheavals, KMG developed and successfully implemented its crisis response strategy for 2020–2021, which helped significantly mitigate the impact of the crisis on the Company. KMG's crisis response strategy primarily focused on the Company's adaptation to low oil prices along with the greatest possible retention of existing production and human resources.

In its operations, KMG seeks to achieve the key strategic objectives of the government in developing the country's oil and gas industry. The Company is guided by Kazakhstan's strategic documents and implements development programmes designed to support the country's economy and social initiatives.

## Inflation and anticipated inflation, %



Sources: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, FusionLab

## Dynamics of USD/KZT exchange rates in 2021

