

## SUMMARY OF PROJECT IMPLEMENTATION ALIGNED WITH STRATEGIC PRIORITIES

Investment projects are implemented to advance progress towards KMG's strategic goals, i.e. to achieve reserves growth, increase oil and condensate production, grow gas exports to China, and supply the domestic market with oil products and sales gas.

KMG is committed to smart and efficient capital allocation with a focus on priority projects aligned with our strategic goals and targets for cash flows, debt reduction, and higher returns on equity to drive shareholder value growth.

### TRANSITION TO INVESTMENT AND PROJECT PORTFOLIO MANAGEMENT

Aimed at effectively achieving strategic goals under KMG's Development strategy the Company started a transition to portfolio-based investment management in 2019. One tool of the portfolio-based investment management is project ranking, prioritizing highly efficient strategically important projects.

Prioritized portfolio of projects based on their ratings enables effective allocation of the Company's set limited financial resources, leading to increased competition for investments in the business segments.

In 2019, the Company also launched an initiative to introduce a project management system. The system aims to improve the quality of planning and implementation of investment projects by applying the best practices of project management from the world's oil & gas companies.

In 2020, it is planned to introduce a unified project management standard for the Company, conduct full-scale training for participants of project management and launch an information system to control and monitor projects.

In general, the objectives of the reorganization of the investment process in 2019 and for the future are aimed at improving existing processes to increase the maturity of the Company in terms of investment management and project management.

## INVESTMENT PORTFOLIO OVERVIEW

KMG's investment portfolio encompasses development projects related to various business segments in the medium and long term. As previously, KMG devotes significant resources to the implementation of oil exploration and production projects. Projects for the development of the oil and gas transportation infrastructure of Kazakhstan also continue to be actively implemented. Completed refinery modernization projects have enabled the production of K4 and K5 quality oil products and increased refining depth. In addition to the upstream, midstream and downstream projects, KMG is also interested in implementing social and environmental projects.

### UPSTREAM

In the context of KMG's strategic initiative for Improving Operational Efficiency under the Strategic Goal "Value creation for shareholders by improving production efficiency and investment in growth", driving increases in reserves and cost-effective production are among the Company's top priorities.

Approximately 40% of KMG's investment portfolio relates to oil and gas exploration and production projects. These projects are funded both directly by KMG and in conjunction with strategic partners on a parity basis. For example, several offshore projects are implemented on the basis of carry financing (Abay, Isatay, Zhenis, I-P-2, Bekturly Vostochny), where capital investments at the exploration stage are borne only by KMG's strategic partner. In the event of hydrocarbons discovery, KMG and its partner finance production at subsequent stages of the project implementation.

KMG holds interests in mega projects Tengiz (20%), Karachaganak (10%) and Kashagan (8.44%).

Tengizchevroil is implementing two integrated projects – the Future Growth Project (FGP) and the Wellhead Pressure Management Project (WPMP). The implementation of the projects will boost oil production from Tengiz field by 12 mln tonnes per year.

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At Kashagan field, as sustainable production rates are achieved, two projects are under consideration under Phase 1 to ramp up to plateau production capacity. A FID for the projects is expected in the first half of 2020.

The Karachaganak oil and condensate field is in Phase 2 development (Stage 2M), which includes several major Capex projects, aimed at increasing raw gas treatment and reinjection capacity to extend the duration of the liquid hydrocarbon production plateau at the achieved rates.

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## OIL AND GAS TRANSPORTATION

Oil and gas transportation projects are implemented to advance KMG's strategic initiative of Improving Operational Efficiency under the Strategic Goal "Value creation for shareholders by improving production efficiency and investment in growth".

### OIL TRANSPORTATION

Oil transportation is a strategic segment of KMG's asset portfolio to maintain access to markets, and a diversified oil transportation system with high transit and export potential has been built.

In 2019, the Company was focused on implementing two major projects:

- The flow reversal project at the Kenkiyak–Atyrau oil pipeline (reversing the flow to carry oil from Atyrau to Kenkiyak and beyond), which started in 2018. The project is aimed at supporting oil supplies from West Kazakhstan to Kazakhstan oil refineries, and bolstering exports to China. The start of oil flow reversal is scheduled for 2020.
- A project to remove bottlenecks in the Caspian Pipeline Consortium's oil pipeline system, approved by shareholders in July 2019. The project aims to increase the capacity of the Kazakhstan section within the Tengiz–Astrakhan–Novorossiysk pipeline to 72.5 mln tonnes per year, with a view to expected higher oil production from Tengiz and Kashagan. The project is expected to be implemented in 2019-2023.

### GAS TRANSPORTATION AND MARKETING

The Company has successfully completed the construction of the gas transportation infrastructure to support domestic and export gas sales, and the medium-term challenges include

**<>** For more details see the Oil Transportation section



increasing utilisation rates for existing capacity and ensuring operating cost control.

Under the Development of the Amangeldinskaya Group of Deposits project, progress was made on the Barkhannaya-Sultankuduk exploration cluster, with the seismic programme scheduled for the next two years.

The construction of the Beineu–Bozoi–Shymkent gas pipeline continued. The project, whose timeframe spans 2011–2021, is to transport up to 15 bln m<sup>3</sup> of gas per year from the western fields of Kazakhstan, supply gas to the southern regions of Kazakhstan, and diversify gas exports. The Beineu–Bozoi–Shymkent gas pipeline is the largest pipeline project in Kazakhstan's post-Soviet history and has an important role to play in improving the energy security of the nation.


## OIL REFINING

Oil refining projects are implemented to advance KMG's strategic initiative of Improving Operational Efficiency under the Strategic Goal "Value creation for shareholders by improving production efficiency and investment in growth".



In 2019, the Company completed the remaining works of major investment projects, including a refinery modernisation programme in Kazakhstan. Following the completion of the extensive upgrade of Kazakhstan’s leading refineries – Atyrau, Pavlodar, and Shymkent refineries – the throughput capacity and refining depths were increased, oil product quality was elevated to meet the K-4 and K-5 (equivalent to Euro-4 and Euro-5) standards, and oil products were exported for the first time.

Under the framework of the Kazakh-Romanian Fund KMG International N.V. 25 filling stations (Stage 1) are under construction in Romania aimed at developing a retail network for the sale of petroleum products.

 For more details see the Downstream section

Pavlodar Refinery is making progress on its Yertis project, which will allow for the production of winter diesel fuels with a cloud point of  $-32^{\circ}\text{C}$  or lower.

Reaffirming its commitment to best practices in health, safety, and environment management (HSE), in 2019 Atyrau Refinery started designing and constructing new treatment facilities for its site as part of the Tazalyk project. Modernization of treatment facilities is planned in two stages: upgrade

and retrofit of the first mechanical wastewater treatment train in 2019–2021, and the retrofit of the biological wastewater treatment facility and construction of an advanced treatment facility in 2019–2023.

 For more details see the Environmental responsibility and safety section

## SERVICE PROJECTS

KMG’s service projects are not capital heavy, offer quick returns, and are mainly focused on enhancing oilfield services provided to major oil and gas assets.

 For more details see the Service projects section