



# Tengizchevroil Fact Sheet

Year-end 2018

## History and Ownership

- Tengiz, the world's deepest producing super giant oil field, was discovered in 1979.
- The Tengizchevroil (TCO) partnership was formed on April 6, 1993, between the Republic of Kazakhstan and Chevron.
- Current partners are Chevron, 50 percent; KazMunayGas, 20 percent; ExxonMobil Kazakhstan Ventures Inc., 25 percent; LukArco B.V., 5 percent.

## Production and Reserves

- Estimated oil in place in the Tengiz field is 3.2 billion metric tonnes (25.5 billion barrels) with 200 million metric tonnes (1.6 billion barrels) in the Korolev field.
- Total recoverable crude oil in the Tengiz and Korolev fields is estimated to be 890 million to 1.37 billion metric tonnes (7.1 to 10.9 billion barrels).
- The areal extent of the Tengiz reservoir is large, measuring 20 kilometers (12 miles) by 21 kilometers (13 miles).
- TCO completed its Sour Gas Injection and Second-Generation Plant (SGI/SGP) expansion project in 2008, which brought daily production capacity to approximately 75,000 metric tonnes per day (600,000 barrels) of crude oil and 22 million cubic meters per day (750 mmscf) of natural gas.
- Crude production in 2018 was 28.6 million metric tonnes (228.2 million barrels).

## Health, Safety and the Environment

- TCO has invested \$3.1 billion since the year 2000 on projects to minimize environmental impact.
- TCO's current gas utilization rate is 98 percent.
- Investments in equipment reliability have reduced the number of technical malfunctions at the plants and the volume of unplanned sour and acid gas flaring during technological unavoidable gas flaring by 98 percent from 2000 to 2018.
- Total air emissions generated per tonne of oil produced have been reduced by 72 percent since 2000, even as annual crude oil production has grown by 2.7 times as a result of TCO's investments in capital programs and equipment reliability.

## Product Sales

- In 2018, TCO sold over 1.3 million metric tonnes of LPG, 9.2 billion cubic meters of dry gas and over 2.5 million tonnes of sulfur.

## Benefits to Kazakhstan

- From 1993 through 2018, TCO made direct financial payments of over \$135 billion to Kazakhstani entities, including Kazakhstani employees' salaries, purchases of Kazakhstani goods and services, tariffs and fees paid to state-owned companies, profit distributions to Kazakhstani shareholder and taxes and royalties paid to the government.
- In 2018, direct payments to the Republic of Kazakhstan totaled more than \$10.1 billion.
- In 2018, TCO spent over \$3.5 billion on Kazakhstani goods and services, including over \$2.3 billion for FGP-WPMP.
- TCO has invested more than \$28 billion on Kazakhstani goods and services since 1993.

## Workforce Development

- Kazakhstani citizens hold 81.6 percent of TCO positions, compared to 50 percent in 1993.
- Kazakhstani managers and supervisors represent 62.5 percent of the TCO managerial workforce. Ongoing training and development programs exist to support the advancement of employees to positions of increasing responsibility.



# Tengizchevroil Fact Sheet

Year-end 2018

## Community Outreach

- Since 1993, TCO has invested over \$1.7 billion to fund social projects and programs in the Atyrau Oblast for the community and employees.
- In 2019, TCO has budgeted \$25 million for Egilik social infrastructure program, the majority of which will be spent for construction of kindergartens, schools and other social facilities in Atyrau Oblast.
- In 2019, TCO's Community Investment Program has over \$1 million in projects planned to help improve the quality of health, education and develop social entrepreneurship in Atyrau Oblast.

## Future Growth Project - Wellhead Pressure Management Project

### General Information

- In 2016, TCO Partners announced approval for the final investment decision of the Future Growth Project - Wellhead Pressure Management Project (FGP-WPMP), the next major expansion of the Tengiz oil field.
- The FGP-WPMP is being constructed simultaneously to realize efficiencies and cost savings.
- Based on TCO's highly-successful SGI/SGP expansion project, FGP will expand production by approximately 12 million tonnes per year/260,000 barrels per day to about 39 million tonnes per year/850,000 barrels per day.
- WPMP will keep the existing Tengiz plants full by lowering the flowing pressure at the wellhead and then boosting the pressure to the inlet requirements of the six existing processing trains.

### Kazakhstani Content

- More than 45,000 Kazakhstanis working on FGP-WPMP in country, which is 91% of the total project workforce in Kazakhstan.
- TCO has engaged Kazakhstani entities to participate in FGP-WPMP in engineering, procurement and fabrication services and has pre-screened over 2,100 Kazakhstani companies to date, with over 400 Kazakhstani registered companies involved on FGP-WPMP. More than 160 Kazakhstani companies were visited for capabilities assessment. KC spend since the project start made \$5.6 bln.

### Project Progress Worldwide

- Engineering progressed in support of Fabrication and Construction teams.
- The main FGP-WPMP equipment is being fabricated in Kazakhstan, South Korea and Italy, and will be pre-assembled into modules for transportation to Tengiz and final assembly.
- Pre-assembled pipe-racks (PARs) are under erection at ERSAL's fabrication yard in Kazakhstan. 28 PARs delivered to Third Generation Plant (3GP) and Third Generation Sour Gas Injection (3GI) from ERSAL, Kazakhstan.
- Fabrication and supply of Frame 9 Gas Turbine Generator (GTG) modules continue in Avenza, Italy. First GTG delivered from Avenza earlier in 2018 enabled restacking the first GTG at 3GP.
- Sail away achieved for 12 modules from South Korea.

### Project Progress in Tengiz

- In Tengiz, General Services Team provided all critical services while delivering on infrastructure, permanent facilities and the Integrated Operations Control Center.
- 3GP Main Substation was set on foundation end of December 2018 by the Control and Power Team.
- The Gathering System Team progressed the Field Facilities and Pipeline work scope.
- At 3GP concrete and underground piping works continue. In November, the first Gas Turbine Generator was restacked.
- At 3GI civil and underground works continue. In November, the first pre-assembled pipe-rack was set on foundation.