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# FUELING PROGRESS

2019 Year in Review





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## TCO LEADERSHIP TEAM



**Kamshat Baizhanova**  
General Manager,  
Human Resources



**Murat Mukashev**  
Deputy General  
Director



**Eimear Bonner**  
General  
Director



**Jack Baker**  
General Manager,  
Operations



**Mick Kraly**  
FGP-WPMP  
Project Director



**Rzabek Artygaliyev**  
General Manager,  
Government,  
Policy and Public  
Affairs



**Raigul Dzhetpisova**  
General Manager,  
Finance



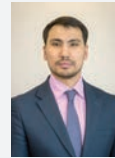
**Kevin Kassner**  
General Manager,  
Projects



**Kalibek Mukhanov**  
General Manager,  
Strategic Planning  
and Analysis



**Murat Munbayev**  
General Manager,  
Marketing and  
Transportation



**Asset Kurmanbayev**  
General Manager,  
Legal



**Dan Weidlein**  
General Manager,  
OE/HES

## A MESSAGE FROM OUR LEADERSHIP

### Dear Readers,

On behalf of the Tengizchevroil (TCO) leadership team, we are pleased to share with you our 2019 Year in Review.

For more than a quarter of a century, our purpose has been – and continues to be – to fuel progress in Kazakhstan. We accomplish this by relentlessly focusing on safe and reliable operations and delivering on our

commitments to the Republic of Kazakhstan, our shareholders, our employees and the communities where we live and work.

Last year, we worked hard to improve our performance. We achieved new records in production by improving processing plant reliability and successfully executing our drilling campaign. We met key milestones in the next major

expansion project of the Tengiz field, the Future Growth Project – Wellhead Pressure Management Project (FGP-WPMP). And we continued our digital transformation journey to unlock new value from our assets.

Our company's success in 2019 would not have been possible without the unwavering dedication of our

talented workforce to delivering outstanding results. Every day, the efforts of our employees to meet TCO's commitments to our stakeholders are guided by the values embodied in the

TCO Way. These values define who we are and how we conduct our business, always striving to work safely and responsibly, and to continuously improve our performance.

Some of the highlights of TCO's performance in 2019 are included below:

**136 million**

TCO employees and contractors achieved world-class safety performance by working more than **136 million** man-hours with low Days Away from Work (DAFW) rate.

**29.8 million**

TCO achieved a historical production record, with **29.8 million** tons of oil produced in 2019.

**96.5%**

Plant reliability remained high and production efficiency achieved **96.5%**.

**9,400 specialists**

In September 2019, approximately **9,400 specialists** safely completed the largest, mega-complex turnaround in TCO's history at the KTL plant.

**10.6 billion**

Direct financial payments to the Republic of Kazakhstan totaled more than **\$10.6 billion**.

**4.6 billion**

TCO spent over **\$4.6 billion** on Kazakhstani goods and services, including over \$3.25 billion for FGP-WPMP.

**8 projects**

TCO completed **eight important social infrastructure projects** in Atyrau Oblast and continued successful implementation of Community Investment Program in Atyrau and Mangystau Oblasts.

Looking to our exciting future, FGP-WPMP continues to make progress and is ramping up its execution activities at Tengiz. FGP-WPMP is a project of national importance that will create superior value for the Republic of Kazakhstan by increasing oil and gas production, introducing new oilfield technology, using local

goods and services and creating jobs. At the end of 2019, FGP-WPMP had exceeded 74% cumulative progress.

Our strong performance in 2019 enabled us to meet our commitments to the Republic of Kazakhstan, our shareholders, our employees and the communities where we work.

2020 is the next opportunity for TCO to reach new heights in performance and continue our journey of being the safest, most efficient and profitable oil and gas enterprise in Kazakhstan and the world.

For more information go to our website [www.tengizchevroil.com](http://www.tengizchevroil.com)



## HIGHLIGHTS FROM 2019 PERFORMANCE

### PRODUCTION

Crude oil –  
**29.8 million tons**

### RELIABILITY

In September 2019, the largest turnaround in TCO's history was completed safely with no serious injuries and two days ahead of schedule

### SAFETY

Man-hours worked –  
**136 million**

Kilometers driven –  
**209 million**

### FUTURE GROWTH PROJECT – WELLHEAD PRESSURE MANAGEMENT PROJECT

Project progress is more than  
**74% complete**

74%

Engineering progress is more than  
**97% complete**

97%

FGP-WPMP KC spend since project start is **\$8.4 billion**

### ENVIRONMENT

TCO's gas utilization rate in 2019

98.7%

Total water reuse rate in 2019

40%

Waste recycling/reuse rate in 2019

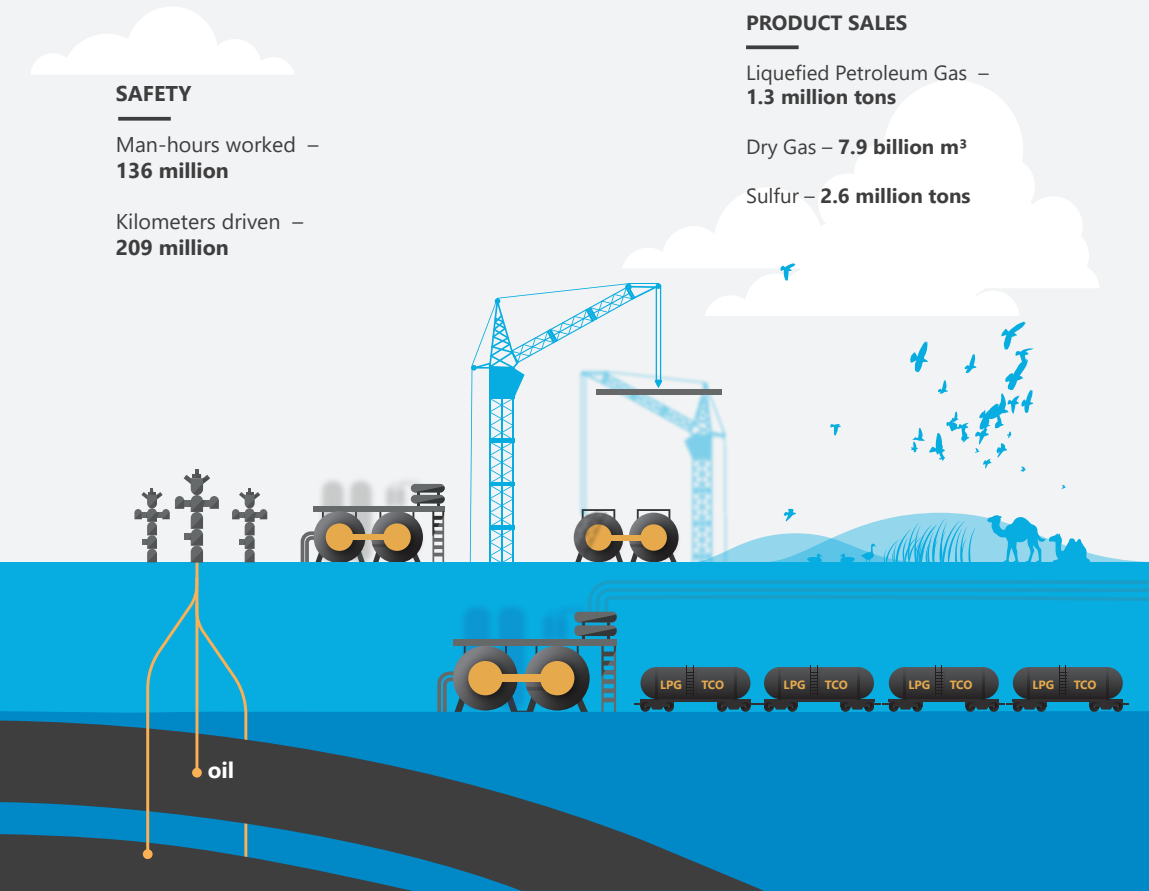
64%

### PRODUCT SALES

Liquefied Petroleum Gas –  
**1.3 million tons**

Dry Gas – **7.9 billion m<sup>3</sup>**

Sulfur – **2.6 million tons**



**INVESTING IN OUR PEOPLE**

International and Domestic Assignments – **51**

Kazakhstani employees in Base Business – **89%**



Including FGP-WPMP – **80%**



Kazakhstani managers and supervisors – **80%**



Kazakhstani citizens replaced foreign colleagues at managerial and technical positions since 2007 – **198**

TCO’s investment into development of national workforce since 2008 – **\$80 million**

**INVESTING IN OUR COMMUNITY**

TCO’s investment into social projects and programs in Atyrau Oblast since 1993 – over **\$1.9 billion**

Number of infrastructure projects completed in 2019 – **8**

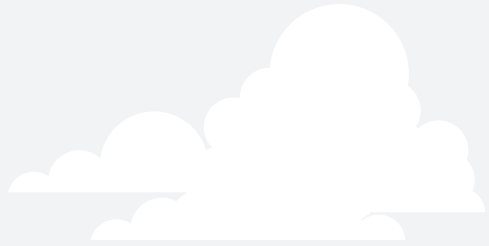
Egilik budget for 2019 – **\$25 million**

CIP budget for 2019 – over **\$2 million**

**CONTRIBUTIONS TO KAZAKHSTAN’S ECONOMY**

Spend on Kazakhstan Content (KC) – **\$4.6 billion**

Total payment to Kazakhstan – **\$10.6 billion**



## 01

**SAFETY AND HEALTH**

TCO continues to achieve industry-leading safety results in standard industrial safety measurements such as Days Away from Work (DAFW) and Total Recordable Incidents (TRI). Working safely is a TCO core value and everyone's responsibility. We achieved excellent outcomes in process safety and made significant progress with our Fatality Prevention deliverables.

In 2019, TCO had the longest period of ZERO Tier 1 LOC (Loss of Containment) in TCO's history.

Ensuring the safety of our workforce remains our top priority. In 2019, TCO worked 136 million man-hours with low DAFW rate. In 2019, we had the highest man-hours worked in TCO ever, as well as the largest number of miles driven in TCO's history – over **209 million** km by end of 2019.

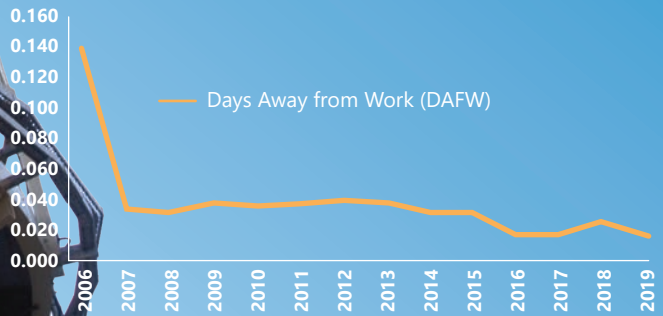
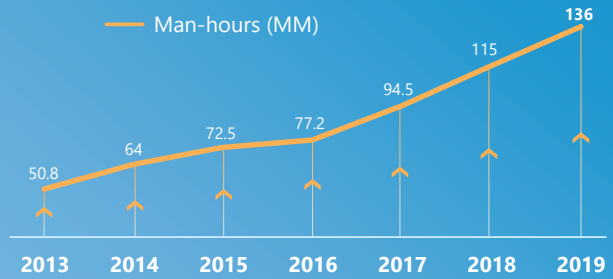






## 0 Tier 1 LOC

In 2019, TCO had the longest period of ZERO Tier 1 LOC in TCO's history.



## 02

**ENVIRONMENTAL PERFORMANCE**

Protecting the environment is one of TCO's core values and we take seriously our obligation on environmental performance and RoK environmental requirements.

TCO has implemented an Environmental Process to provide a consistent, methodical approach for improving environmental performance and reducing potential impacts over an asset's life-cycle. The Environmental Process drives effective management of potential impacts and identifies beneficial environmental improvement opportunities for consideration during the business planning process.

The consistent and systematic implementation of the Environmental Process, including the Environmental, Social and Health Impact Assessment Process, the Natural Resources Standard and the Third-Party Waste Stewardship Standard facilitates TCO to continue progressing the goal of leading environmental performance.

Since 2000, TCO has invested over \$3.1 billion on projects to minimize environmental impact at Tengiz. This investment has enabled TCO to achieve reductions in flaring and air emissions, enhance waste management, improve waste water treatment and support an increase in water reuse.

**73%**

Total air emissions generated per ton of oil produced have decreased by 73%.

**98.7%**

TCO's gas utilization rate in 2019 was 98.7%.

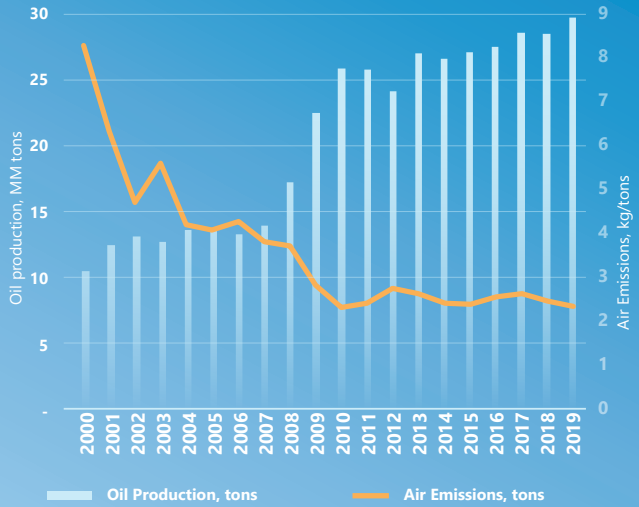
## 40%

Total TCO water reuse rate in 2019 was 40%. TCO continues its water conservation efforts by recycling domestic wastewater effluent, as well as treating and reusing it for industrial purposes.

## 64%

TCO sends more than 35 types of waste for recycling. In 2019, total TCO waste reuse/recycling rate was 64%.

Since 2000 TCO reduced air emissions per metric ton of crude oil produced by **73%**



## 03

## PRODUCTION

**29.8** million

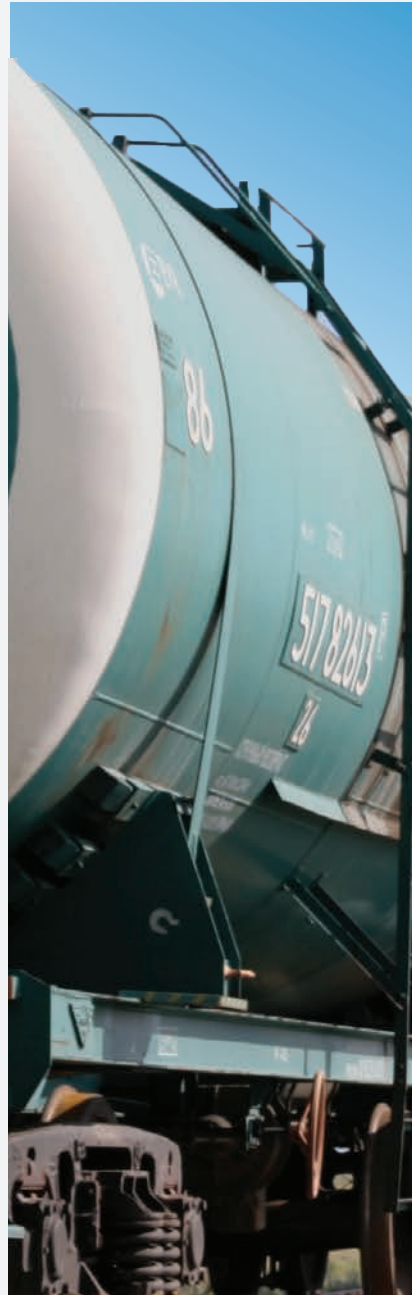
TCO's production remains strong and has **exceeded historical production record, with 29.8 million tons** of crude oil produced.

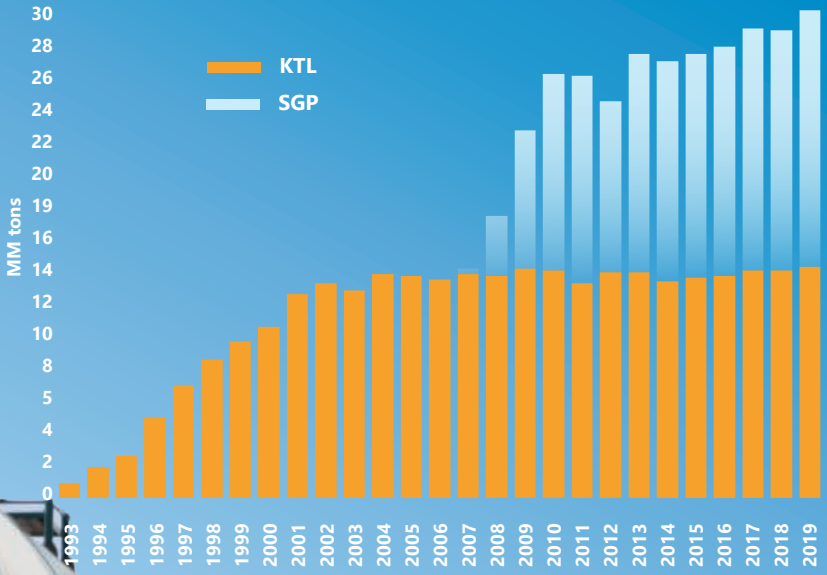
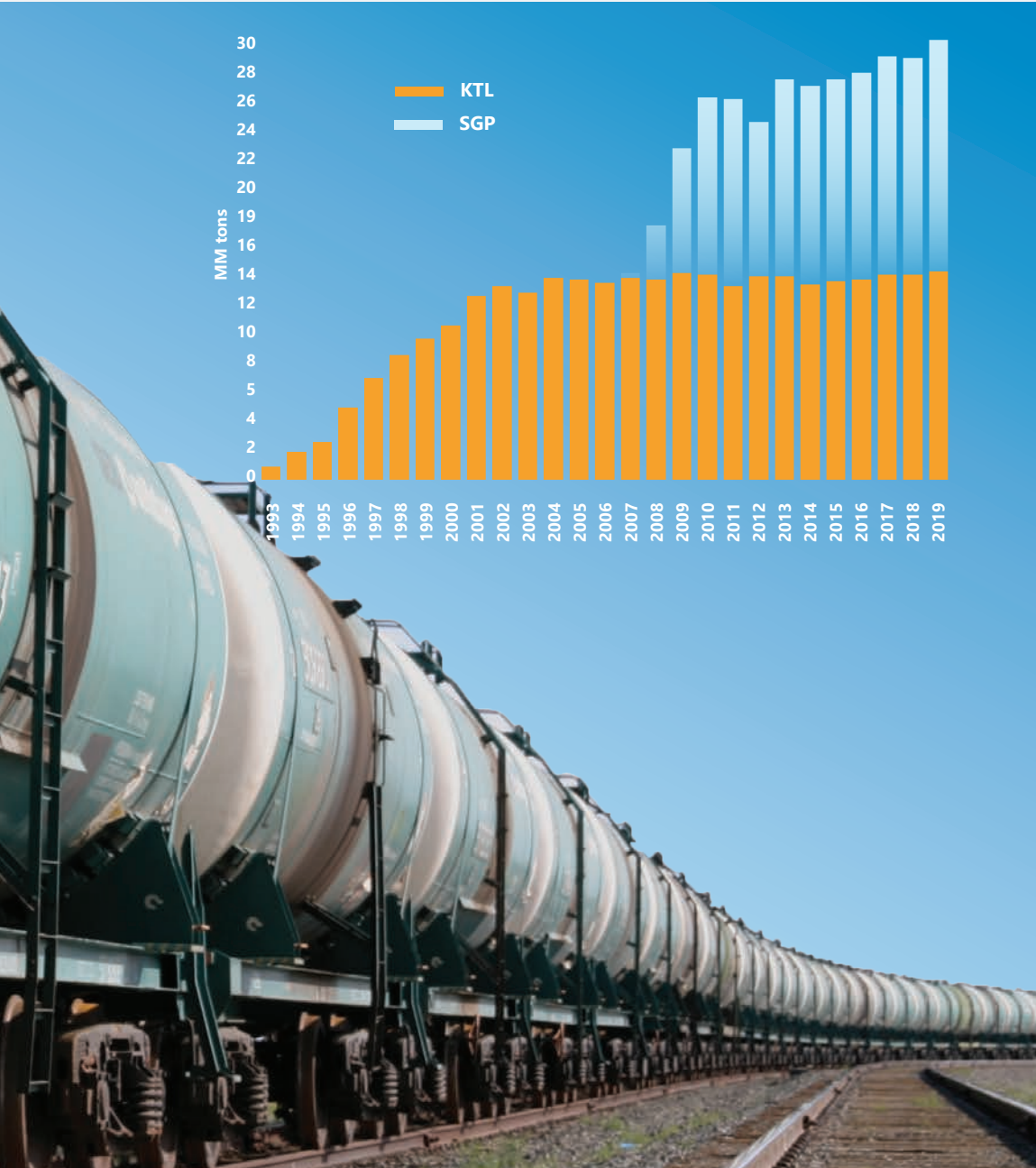
**96.5%**

Plant reliability continues to remain high and production efficiency is at **96.5%**. Investments in maintenance turnarounds that are focused on the integrity and reliability plant equipment underpin these achievements.

**9,400**  
specialists

In September 2019, approximately **9,400 specialists** safely completed the annual turnaround which was the largest, mega-complex turnaround in TCO's history. The team achieved great results and delivered the turnaround two days ahead of schedule, on budget and without serious incidents and DAFW cases.







## 04

## CONTRIBUTIONS TO KAZAKHSTAN'S ECONOMY

Our primary purpose is to create value for our shareholders and for the country. We continually strive to meet our commitments to the Republic of Kazakhstan and contribute to its economic progress and future.

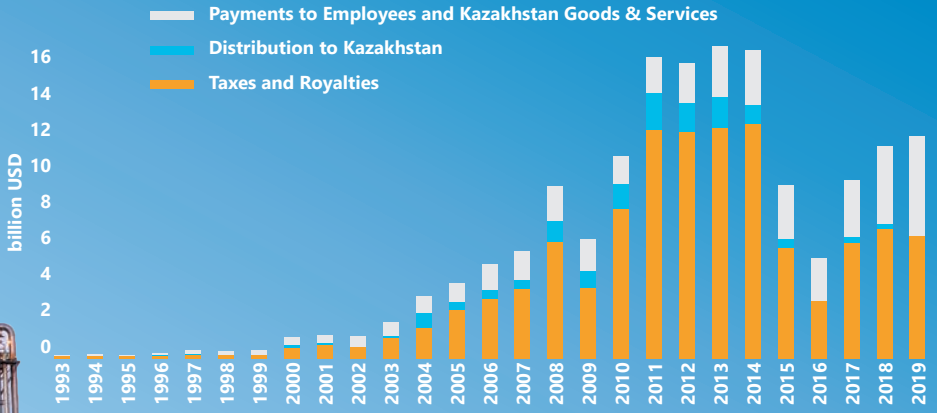
**146 billion**

Since 1993, TCO has made direct financial payments of **\$146 billion** to Kazakhstan. The company has invested over **\$1.9 billion** on employee and social programs, including over **\$300 million** on social infrastructure.

**10.6 billion**

In 2019 alone, TCO has made direct financial payments of over **\$10.6 billion to Kazakhstan.**





### Spend on Kazakhstani Goods and Services

## 4.6 billion

In 2019, TCO had a record year in Kazakhstani Content (KC) spend, with over **\$4.6 billion**.

The company has made some great progress around its major OEMs (Original Equipment Manufacturers) investing in Kazakhstan and TCO's investments to support the domestic machine building sector.

TCO believes that sustainable local companies are beneficial to the economy and society and we support businesses to help them enhance their capabilities and to prosper.

## 32.9 billion

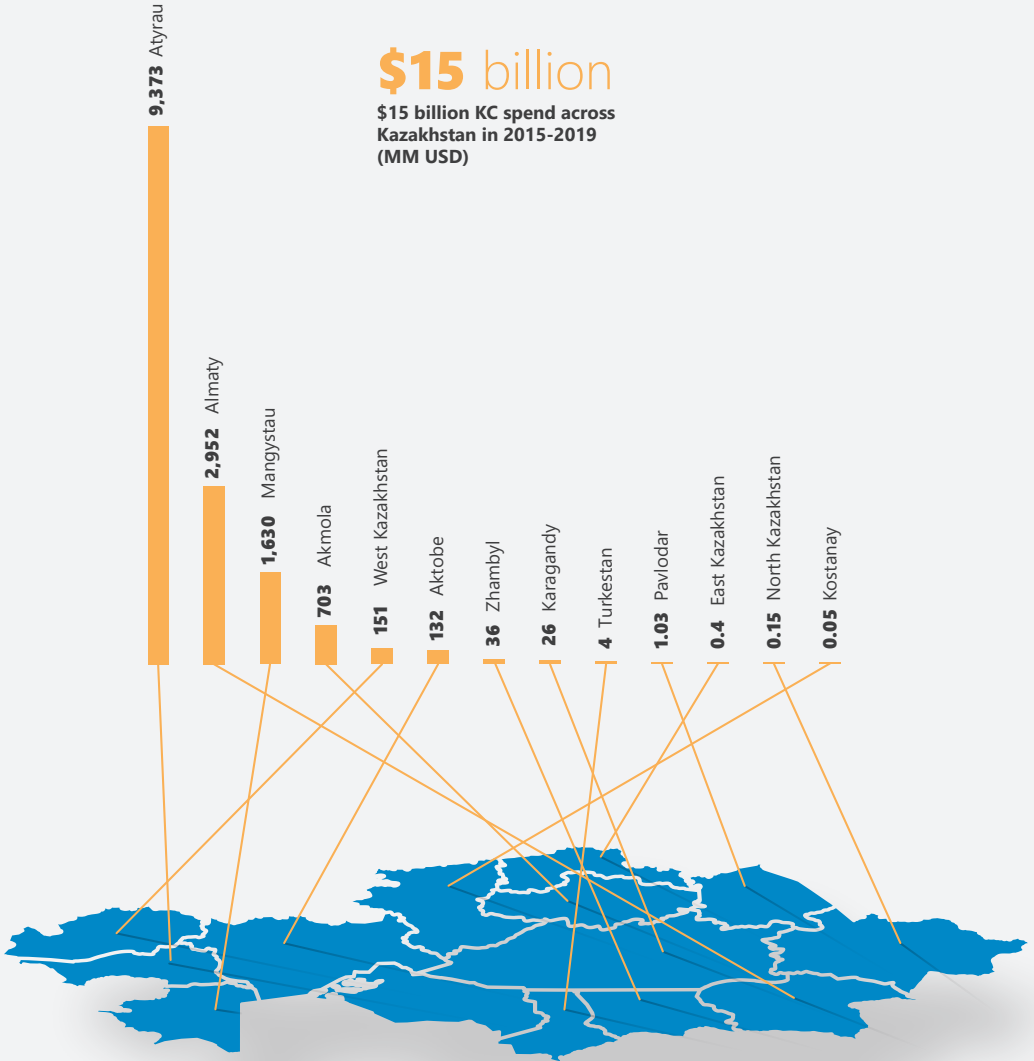
Kazakhstani Goods and Services cumulative payments since 1993 exceeded **\$32.9 billion**.

TCO continues to make it a priority to support regional industrialization, localization of international products, encouraging joint ventures with Kazakhstani companies and encouraging nationalization and sourcing of local goods and services.

TCO is an active participant in the RoK Ministry of Energy's Machine Building initiative, providing local manufacturers with information and support needed to meet TCO business needs and specifications.

Additionally, TCO is working to develop goods and services with the RoK. This support includes developing more than 75 new RoK companies to provide goods to TCO and creating KC plans with over 100 current suppliers to improve their KC investment, nationalization, training, and local procurement.





## 05

**STRATEGIC WORKFORCE  
DEVELOPMENT****80%**

Today, local personnel account for about **89%** of the company with **80%** of the management team being citizens of Kazakhstan.

**2,000**

So far in 2019, more than **2,000 employees** have gone through different development and training programs.

**198**

TCO has placed an emphasis on nationalization: **198** KZ employees have replaced expats in key technical (87) and managerial (111) positions since **2007**.

TCO has increased development opportunities for employees. The company has gone from **41 to 51 people** currently on international and domestic development assignments. Current assignments include Philippines, China, Kazakhstan, South Korea, the US and UK. From 1993 through 2019, over **350 TCO employees** took international assignments with different business units in Chevron.

**43%**

In 2019, TCO rolled out a new medical insurance program for its employees. The company **increased its budget for the medical insurance program by 43%**, adding new services under a Premium program available to all TCO employees and their eligible family members. The total cost of the "Premium" package will be covered by TCO.

more than **350**

Employees sent on international and domestic development assignments since 1993

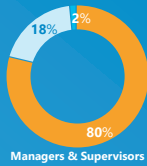
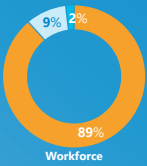
**198**

KZ employees replaced expats at key technical and managerial positions since 2007

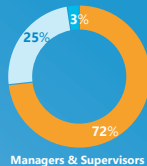
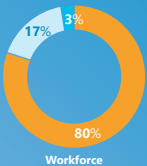
more than **2,000**

Employees went through training and development programs

**TCO Kazakhstani Employees in Base Business**

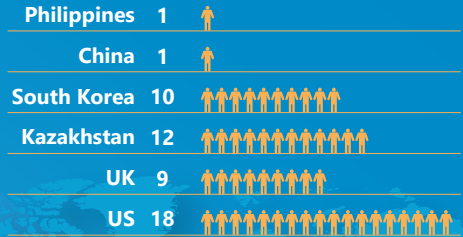


**Total TCO Kazakhstani Employees incl. FGP**



- Kazakhstani
- CIS
- Expatriate

**51 employees on International & Domestic assignments in 2019 and growing**



## 06

**FUTURE GROWTH PROJECT – WELLHEAD PRESSURE MANAGEMENT PROJECT****39 million**

The Future Growth Project (FGP) and Wellhead Pressure Management Project (WPMP) are two integrated projects that are being executed simultaneously to expand Tengiz production and to maintain full production rates at the existing Tengiz facilities. One of the global energy industry's largest major capital projects, the FGP-WPMP is anticipated to increase Tengiz crude oil production capacity by approximately 12 million tonnes per year, raising TCO's total production to **39 million tons of oil per year.**

FGP-WPMP will deliver further benefits to Kazakhstan through the extensive use of Kazakhstani goods, services and creation of jobs. In the course of the Project a selection of worker training programs are offered, and new oilfield technology and engineering solutions are introduced to the country, building the capacity and capability of local businesses.



## PROJECT PROGRESS IN 2019

Overall Project progress  
is more than **74% complete.**

**74%**

**60 million**

TCO's commitment to safe execution of FGP-WPMP remains unchanged. Within the company's operating boundaries in safety, in 2019 the project had a good year, achieving over **60 million man-hours.**

**41,000**

Today, there are over **41,000 Kazakhstanis working on FGP-WPMP in country, which is 91% of the total project workforce in Kazakhstan.**

**8.4 billion**

TCO has engaged Kazakhstani entities to participate in FGP-WPMP in engineering, procurement and fabrication services. Spend on Kazakhstani Content since the beginning of the Project is **\$8.4 billion.**



## 07

## COMMUNITY INVESTMENT

One of TCO's core values is to operate in a socially responsible manner and to invest in the communities where we work.

**1.9 billion**

Since 1993, TCO has invested more than **\$1.9 billion** to fund social projects and programs in the Atyrau Oblast for the community and employees.

#### "Egilik" Voluntary Social Infrastructure Program

Working in partnership with the Akimat of Atyrau Oblast, TCO continues to make significant investments in the community through Egilik.

**25 million**

In 2019, TCO allocated another **\$25 million** for the Egilik for the construction of schools, kindergartens and other social facilities in Atyrau Oblast.

**300+ million**

Since 1999, the Egilik program has provided over **\$300 million** in funding for social infrastructure projects. In total, **96 projects** have been completed, creating over **1,000** new jobs.

#### Completed projects in 2019 in Atyrau Oblast

Community Center (200 seats) in Bodene

Community Center (300 seats) in Yesbol

School (624 seats) in Atyrau, Zhuldyz District

Kindergarten (100-seats) in Maikomgen

Health and Fitness Center in Maikomgen

Kursay River Clean-Up/Embankment in Kulsary

Dormitory (100 seats) for Energy and Construction College

Kindergarten (280-seats) in Dossor

## Craft Training Program for Atyrau and Mangystau Oblast residents

**2019-2020-2021**  
TCO plans to train  
**950** unemployed  
residents

**2-3** course  
duration  
**MONTHS**  
30% theory 70% practice

**420**  
residents  
completed courses  
in 2019

TCO initiated craft training courses for unemployed residents of Atyrau and Mangystau Oblasts in support of the State Comprehensive Program for social and economic development of the regions. Upon agreement with Akimats of Atyrau and Mangystau Oblasts, **TCO plans to train 700 unemployed residents** of Atyrau Oblast in 2019-2020 and **250 unemployed residents** of Mangystau Oblast from 2019 to 2021.

Training for unemployed residents of Atyrau and Mangystau Oblasts was

organized on the premises of Aktau and Atyrau Training Centers. APEC PetroTechnic Higher College (APEC) and Aktau Training Center are currently involved for this purpose. This program is carried out in partnership with local authorities. Participants can enroll into this program at job centers. The courses vary from **2 to 3 months** depending on the major discipline and are split 30:70 between theory and practice. TCO provides accommodation, three meals a day and training materials for practical exercises. The program offers six most demanded specialties

such as electric fitter, structural welder, pipe fitter, structural steel erector, scaffolder and rigger.

In Atyrau Oblast in 2019, **196 people completed courses** and received standard certificates during Phase 1 of this program. In Mangystau Oblast, **224 residents completed courses** in July-December 2019 during Phases 1 and 2. This program in the regions will continue through 2020.





## Community Investment Program

The Community Investment Program (CIP), launched in 2010, is TCO's initiative aimed at improving health, education and social entrepreneurship in Atyrau Oblast. TCO has also been executing this Program in Mangystau Oblast since 2018.

### Key focus areas of CIP include:

Improving capabilities of local citizens and organizations to benefit the community and TCO



Providing educational workshops, training sessions and socio-economic development programs in the regions



Promoting a healthy lifestyle and supporting initiatives to improve quality of life



Improving environmental literacy and supporting environmental initiatives



**2010-2019**

**80** projects  
**\$9** million

From 2010 to 2019, TCO executed 80 CIP projects totaling over \$9 million with NGOs.

**2019**

**16** projects  
**\$2** million

In 2019 alone, TCO implemented 16 CIP projects both in Atyrau and Mangystau Oblasts worth over \$2 million.



## Sponsorship Support in 2019

TCO continuously provides sponsorship support to Atyrau and Mangystau Oblast communities.

### Some of the highlights of sponsorship in 2019 are included below:

In February 2019, medical equipment and ambulance vehicles to Zhylyoi Central District Hospital in Kulsary totaling approximately \$1 million.



In March 2019, 50 passenger buses to Atyrau Oblast worth over \$5 million.



In May 2019, two soccer fields to Borankul village, Mangystau Oblast.



In August 2019, drones, radios, binoculars, trail cameras and trailers to Kyzylsai State Regional Nature Park.





In September 2019, robotics equipment to Kuryk village school #1, Mangystau Oblast.





## Headquarters

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