

# TENGIZCHEVROIL

Fueling Progress



Corporate  
responsibility  
report

2021





Corporate  
responsibility  
report | 20  
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# Preface by the leadership team



**Kevin Lyon**  
TCO General Director



**Aibek Krambayev**  
TCO Deputy General Director

Dear Readers,

2021 was another unprecedented year in the history of Tengizchevroil (TCO). Like many companies across the world, we continued to be touched by the effects of the COVID-19 pandemic that we had all hoped would be behind us by now. After launching a voluntary COVID-19 vaccination program in April 2021, by year-end TCO had achieved a vaccination rate of 99% totaling over 100,000 people. This remarkable achievement was enabled by our unwavering commitment to workforce health and safety and the resilience of our workforce in the face of adversity.

At the same time, TCO closed the year delivering outstanding business results and celebrated several important milestones. We met our production targets and delivered the annual turnaround five days ahead of schedule. We advanced the Future Growth Project-Wellhead Pressure Management Project (FGP-WPMP) to 89% total completion. And we marked an incredible milestone in our company's 28-year history by surpassing 500 million tonnes (4 billion barrels) of crude oil production since the founding of the company in 1993. TCO achieved all of this while continuing to reduce our emissions intensity by 65% since 2000 and total flaring volumes by 68% over the previous five-year period.

TCO continues to meet its commitments to the Republic of Kazakhstan. Since 1993, the company has delivered more than \$162 billion in direct financial payments to the country, including more than \$40 billion spent on local goods and services. In 2021 alone, TCO achieved 68% Kazakhstani Content performance, which is the highest rate since 2010. In addition, between 1993 and 2021, TCO has invested over \$2.3 billion to fund social projects and programs in Atyrau Oblast for the community and employees.

In 2021, it was a great honor to celebrate the 30th anniversary of Kazakhstan's Independence and the unity of all people in this great country. We are grateful to the early pioneers of Kazakhstan's energy industry who discovered and developed the Tengiz field. And we are proud of our skilled and talented people who deliver safe and reliable operations day in and day out. They have all stayed true to our primary purpose as a company – creating value for the Republic of Kazakhstan, our four shareholders, and the communities where we work.

2021 was a remarkable year for TCO. Behind all of the company's major achievements are incredible stories about the people of TCO, their human energy, and the role our culture plays in helping unite us around our main priorities of protecting people and the environment while working together to unlock the full potential of Tengiz. We encourage you to read and learn more about TCO's performance in the pages that follow.

# The story of TCO



## Fueling progress

The Tengiz oil field, located in the western part of Kazakhstan, was discovered in 1979. Tengizchevroil was formed in April 1993 as a joint venture, with the Government of the Republic of Kazakhstan and Chevron Corporation as its original founding Partners.

Today, TCO is a partnership between

**50%**

Chevron

**20%**

JSC NC KazMunayGas

**25%**

ExxonMobil

**5%**

LukArco

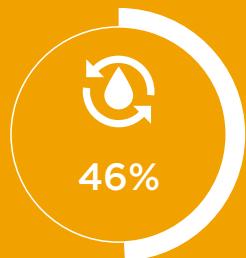
## About the oil field

The areal extent of the Tengiz reservoir is large, measuring 20 kilometers (12 miles) by 21 kilometers (13 miles). Total recoverable crude oil in the Tengiz and Korolev fields is estimated to be 1.4 billion metric tons (11.5 billion barrels). The estimated oil in place in the Tengiz field reservoir is 3.1 billion tons (25 billion barrels). The Tengiz field is the world's deepest giant oil field, with the top of the reservoir standing at a depth of about 4,000 m (13,000 ft).

## Safety, health and environmental protection



TCO gas utilization rate



Water reuse rate



Waste reuse/  
recycling rate



TCO's support for Kazakhstan in dealing with the COVID-19 pandemic

## OUR ACHIEVEMENTS IN 2021

### Contributions to the economy of Kazakhstan

Direct payments to the Republic of Kazakhstan

**\$ 9 billion**

Goods and services purchased from Kazakhstani Suppliers in 2021 – more than

**\$ 3.6 billion**

Since 1993, TCO has purchased goods and services from Kazakhstani suppliers totaling over

**\$40 billion**

### Workforce development



Kazakhstani personnel employed in the Base Business

**94%**

Share of Kazakhstani managers and supervisors assigned to the Base Business

**88%**

### Investment in communities

Since 1993, TCO has allocated more than \$2.3 billion to fund various Social Projects for the residents of Atyrau Oblast and employees.

The "Egilik" Voluntary Social Infrastructure Development Program Budget allocated for 2021 – \$25 million

Community Investment Program Budget – \$1.6 million for 2021



## The TCO Way

# Who we are

We are a leading company that produces oil, gas and associated products that fuels the modern economy. Our history is closely interlinked with the rise of an independent Kazakhstan.

# What we believe

We strive to operate in a safe, reliable and environmentally responsible manner and our TCO Way values of Diversity and Inclusion, High-Performance, Integrity and Trust, Partnership and Protecting People and Environment, define us and guide our actions in delivering results. We operate in a socially responsible manner and are committed to investing in the communities where we operate and in the well-being of our employees. We believe that sustainable local companies are beneficial to the economy and society and we support businesses to help them enhance their capabilities and to prosper.

# How we do it

We conduct our business responsibly, we deliver results, the right way and we always strive to be the best at getting better. We differentiate our performance through our people - our diverse and inclusive workforce, working as one focused team, as well as through technology, digitalization, innovation, and functional expertise. We build respectful, trusting, collaborative and productive relationships with government, our shareholders, communities, business partners, customers and each other.

# Where we come from

We respect the history, traditions and culture of Kazakhstan. We are grateful to the early pioneers for their hard work and dedication to discover and develop one of the world's most technically-challenging oilfields. They left a strong foundation for future generations.

# What we do

We safely and reliably produce products that heat homes, fuel cars, support businesses and benefit society, and we make a significant contribution to the economic progress of the Republic of Kazakhstan and Atyrau Oblast where we operate.

Our primary purpose is to create value for the Republic of Kazakhstan, our four shareholders, the communities where we live and operate and ourselves. We are proud to contribute to the country's economic progress and future – we are building a new legacy for generations to come.

# Why we do what we do

# Where we are going

We have embarked on the next major expansion of the Tengiz oil field. FGP-WPMP is a state-of-the-art project that will create a legacy of a trained skilled workforce, new facilities, technology transfer through partnerships between Kazakhstani and international companies, and upgraded infrastructure in the region. FGP-WPMP is a landmark project for the nation that will deliver the promise of a world-class petroleum resource to future generations of Kazakhstan.



# we are TCO

## Mission

Our mission is to create superior value for the Republic of Kazakhstan, our shareholders and employees

## Vision

To be the safest, most efficient and profitable oil and gas enterprise in the world, most admired for its people, partnership and performance



## The TCO Way

### Getting results the right way

The TCO Way explains who we are, what we believe, how we achieve our mission and where we aspire to go

It establishes a common understanding of our values and behaviors not only for us, but for all who interact with us



## Social impact on the region

TCO's social impact initiatives aim to stimulate the full potential of people in Atyrau Oblast communities. TCO strives to empower people and help improve access to better healthcare, education and social entrepreneurship opportunities.

### The battle against COVID-19

TCO's experience in overcoming the challenges of the COVID-19 pandemic have proved that integrity, compassion, and human energy can solve any challenge. Together with the Republic of Kazakhstan, TCO continues the battle against COVID-19 by providing medical equipment and supplies to be delivered to the local health authorities.

### Doctors from Georgia

Since the beginning of the COVID-19 pandemic, one of the biggest challenges for Atyrau Oblast authorities was the shortage of doctors. To solve this problem, the Atyrau Oblast Akimat initiated "Medical services for the treatment of patients with COVID-19 and managing the patient flows" project in Atyrau Oblast Hospital #2. The team of professional doctors arrived to Atyrau and together with local staff deployed a 20 bed ICU department as well as an emergency department with all the necessary equipment, medication and medical supplies.

### Digitalizing the vaccination campaign

In 2021, measures taken against the spread of COVID-19 led to a robust vaccination campaign at Tengiz. More than 95,000 employees received their shots in only seven months. In support of the State vaccination campaign against COVID-19, TCO developed a vaccination digital tool. This solution enabled TCO to track Tengiz workforce vaccination progress. The tool equipped the medical team with input data, provided the TCO management team with reliable, up-to-date information and allowed TCO to comply with Government reporting requirements. The tool also helped to control vaccine supplies at TCO's vaccination safety centers in Tengiz and Atyrau, helping planning teams schedule appointments and manage patients.

### Medical equipment

Throughout the pandemic, TCO has supported Atyrau Oblast with the following projects and medical equipment:

- Donation of 34 freezers of various capacities for storing vaccines to the Health Department
- Provision of 4 minibuses for Zhylyoi District mobile groups.
- Provision of premises in the Interteach clinic for the vaccination center in Atyrau from May until August 2021.
- Additionally, in 2021 TCO started a new donation project of the medical equipment to local hospitals in Atyrau Oblast.

TCO invests in Atyrau Oblast communities through two voluntary programs: the Egilik social infrastructure program and the Community Investments Program (CIP). The Egilik program is focused on the construction of social infrastructure (kindergartens, schools, parks, etc.), while the Community Investments Program is aimed at improving the quality and accessibility of health care, education, and development of social entrepreneurship in both Atyrau and Mangystau Oblasts. Since 1993, TCO has spent over \$2.3 billion to finance various social programs for residents of the Atyrau Oblast and TCO employees.

### Egilik program

Within the framework of Egilik the company has built 134 socially significant facilities, such as schools, clinics, kindergartens. Egilik was launched in 1998 with an initial budget of \$4 million, and today TCO spends \$25 million annually on the program. TCO has created thousands of new jobs through the construction and maintenance of new facilities, for example, each kindergarten creates about 40-70 jobs for teachers, nurses, and other employees.

#### List of Egilik projects, 2021

Projects	Project start year	Project completion year
Kindergarten for 280 seats in Vodnikov mcrd		2021
Kindergarten for 280 seats in Rakusha mcrd		2021
A 580-seat school in Kulsary		2021
A 200-bed hospital in Kulsary	2020	2021
Central Hospital in Kulsary	2020	
Central Stadium in Kulsary	2021	
Kindergarten in Koktem	2021	
Kindergarten in Zhuldyz 3	2021	
School Annex for Tuschykuduk village	2021	

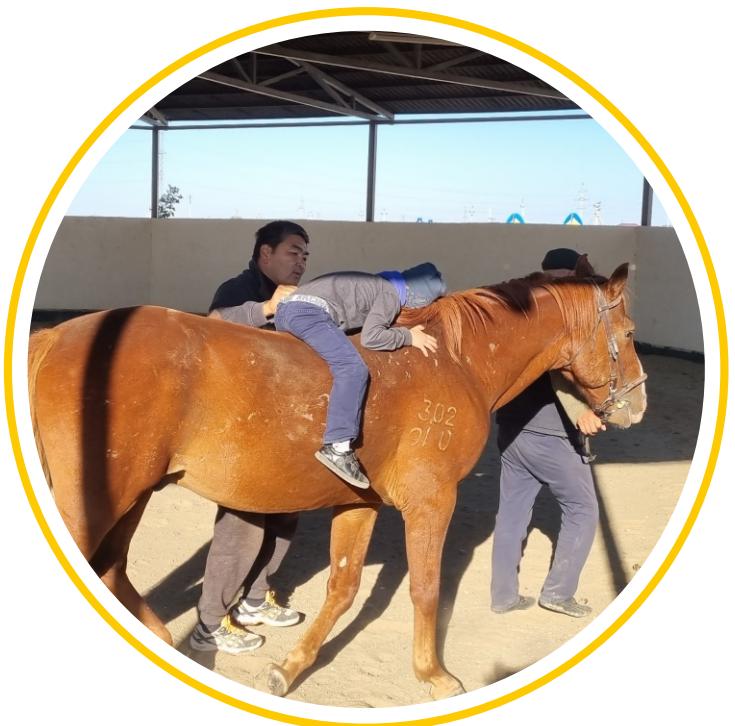


## Community Investments Program

For more than 10 years, TCO has been supporting healthcare, education and social entrepreneurship Non-Government Organizations' (NGO) projects in Atyrau Oblast. Yerlan Kumiskaliev had been developing his "Atyrau. Little Country" project for a few years when he learned about the Community Investments Program (CIP) from volunteers visiting the "Little Country" in 2019. His unique project allows children with special needs and neurological diseases to get healing through the horseback riding practices impressed volunteers.

In the summer, Yerlan sent via e-mail an Expression of Interest of a prospective supplier. Together with the positive answer, he had received a request for the provision of offer. It consisted of detailed information about the requirements for bidders, legal documents needed, and instruction on how to write the proposal.

"Literally the instruction explained all the steps: how projects will be selected, who will pick the best projects, what are the requirements for bidders, what will be covered by TCO and what is not. Everything was completely transparent," explained Yerlan Kumiskaliyev. "In 2020, our project for development of the "Little Country" was approved by the council, but the next project on post-COVID rehabilitation for 2021 didn't get approved. And that's fair enough, I looked through the lists of winners that are publicly available, and realized that another organization, more competent in this issue, was dealing with this problem. Therefore, when choosing a project to participate in 2022 tender, we focused on what we are really strong and competent in – therapy classes for children who need special care."



All potential projects are reviewed by TCO's Community Investment Program Council, which includes representatives from various departments of the company with diverse competencies. Most importantly, projects should be aimed at stimulating the economic development of the region, improving the availability and quality of education, improving population health, awareness on environmental issues, solving issues related to the pandemic and its consequences, and supporting people with disabilities.

“When evaluating each project, we look at the availability of professional experience, sufficient human resources, technical resources, and potential for further sustainability. We do this so that as a result of our support, the project will become even stronger and bring much greater benefits to the maximum number of residents of Atyrau Oblast,” said TCO Policy, Government and Public Affairs General Manager, Rzabek Artygaliev. “A shining example is Eurasia Foundation of Central Asia with “Zharkyra” project. They taught people the essentials of social entrepreneurship, and at the end of the course they provided scholarships and interest-free loans to the best projects. During implementation, the first loans have already returned to the Fund, and last year they continued their activities and issued new grants from the returned funds. In 2021, no funds were allocated from our side to this project. This is an indicator of the sustainability and independence of the project. It is very important for the company to know that the project is not only very impactful, but also viable in the long term, and can increase its returns to society. Thus, we changed the philosophy of providing assistance to residents of Atyrau Oblast: we stopped providing “fish” to individuals on individual requests, instead we “equipped them with fishing rods.” In other words, we provided activists and NGOs with the necessary tools so that they would teach those in need to use a “fishing rod” and provide themselves with “a fish” on their own every day.”



In 2021, Sezual activists under the leadership of scientist Galymzhan Gabdreshov created electronic Braille tutorials in three languages: Kazakh, Russian and English. As part of CIP, 45 self-help books were donated to visually impaired children of Atyrau Oblast. It should be noted that the inventions of Sezual have been recognized by the World Bank. They were nominated for a UN Prize and won the Tribune Award.

Also in 2021, TCO supported “Career guidance: choose and manage the future” Project from the Integrity team. This project helps teenagers decide on their future career, teaches them to prioritize, soberly assess their strengths and weaknesses, time management and emotional competence, and research necessary information. The significance of the project is emphasized by the fact that it won the “Gold” in the Second national competition “QAZAQSTAN PROJECT MANAGEMENT AWARDS 2021” in the category of “The Best Project of the Year” for “Non-Governmental Organizations”.



In November 2021, the Eurasia Foundation of Central Asia (EFCA) corporate foundation with the financial support of TCO published the “Complicated things in simple words” guidebook for monitoring and assessment of social projects’ effectiveness and launched it to 18 resource centers of the Civil alliance for NGO across Kazakhstan. This is the first guidebook that was developed for NGOs in Kazakhstan and published in Russian and Kazakh.

It should be highlighted that the scope completed by the NGO was highly appreciated by the republican civil society. Thus, within framework of the X Civil Forum, the Academician Mr. Kabdolov Foundation was awarded a diploma on behalf of the RoK Minister of Information and Public Development Aida Balayeva for achievements in education, science, information, physical culture, and sports. The foundation named after Academician Z. Kabdolov helps audiences on the Internet learn Kazakh language online. In addition, Social Fund “Bolashak K” received a diploma for its nomination called “Protection of citizens health, promotion of a healthy lifestyle”. The foundation is engaged in training, retraining and advanced training of rehabilitologists. The head of the NGO “Biz de adambyz” Gulnaz Kosmurziyeva was awarded a state award “Shapagat”. Thanks to trainings organized by the NGO, three residents of Atyrau became candidates for the Paralympic national team of Kazakhstan.

In total, 94 social projects totaling about \$11.1 million have been implemented since 2010 as part of the financing of TCO social projects. In 2021 alone, a total of over 171,000 people benefited from 14 TCO social projects.

Invitations to participate in the CIP tender are distributed to all interested NGOs whose activities are related to social and environmental issues. The mailing list is formed on the basis of 4 databases:

- Department of Internal Policy of Atyrau Oblast sends TCO a list of active NGOs
- TCO database, formed on the basis of the lists of NGOs that previously participated in the tender
- Any NGOs interested in cooperation can send an email to [tcoinfo@tengizchevroil.com](mailto:tcoinfo@tengizchevroil.com) and they will also receive an invitation to participate in the tender
- Since 2021, everyone who has been trained within framework of NGO School project of the Eurasia Foundation of Central Asia is also invited to participate in the tender.



## The list of 2021 Community Investments Projects

### Education

**Project: «Zhalyn» - the formation of civil and personal values of Kazakhstan youth and development processes.**

NGO: "Zhurekten Zhurekke" Social Fund

Coverage of settlements: Kulsary town, Borankul Village.

**Project: Career Guidance - Choose and Manage the Future - Identification and development of each child's individual abilities in order to develop independent living skills.**

NGO: Personal Growth INTEGRITY Social Fund

Coverage of settlements: Atyrau city

**Project: Electronic Alphabet Simulator in Braille - Assistance in the educational process of learning English, Kazakh, and Russian languages with the help of an electronic technology tool developed at the request of the school-gymnasium for the blind and visually impaired.**

NGO: Sezual Public Disability Association

Coverage of settlements: Atyrau city

**Project: «K@Z@Ksh@ S@IR@!» - Increasing the coverage of the audience for the promotion and teaching of the Kazakh language through innovative technologies.**

NGO: Private Fund named by Z. Kabdolov, Academician

Coverage of settlements: online project



## Healthcare development

**Project: Building capacity in Zhylyoi and Borankul to fight against communicable and noncommunicable diseases at primary care and among communities.**

NGO: Kazakhstan Association of Family Physicians (KAFP)

Coverage of settlements: Zhylyoi Region and Borankul village

**Project: Implementation of TB prevention activities among children and adolescents in Atyrau and Zhylyoi district.**

NGO: Project HOPE

Coverage of settlements: Atyrau

**Project: Efficient rehabilitation of people with disabilities.**

NGO: "Bizde Adambyz" Public Fund

Coverage of settlements: Atyrau city

**Project: Health and prevention, including addressing the challenges posed by the pandemic and its aftermath.**

NGO: "Bolashak K" Public Fund

Coverage of settlements: Atyrau region

**Project: «Little Country» Social Village - Use the «hippotherapy» method for health improvement of children with brain damage.**

NGO: "Atyrau. Little Country" Public Association

Coverage of settlements: Atyrau city

**Project: «KOLTANBA» Workshop - strengthening the «Workshop «KOLTANBA» project focused on career guidance for people with disabilities by including of training modules aimed at developing the personal / interpersonal potential of people with disabilities (PD).**

NGO: «Mugedeck Alemi» Public Disability Association

Coverage of settlements: Atyrau city



## Civil society development

**Project: Public Spaces in Zhylyoi District and Borankul Village – Involvement of local communities in improving public spaces and solving local problems.**

NGO: Eurasian Foundation of Central Asia corporate fund

Coverage of settlements: Zhylyoi district (Kulsary town, Akkiztogai village, Zhana Karaton village, Koschagyl village, Maikomgen village, Turgyzba village, Shokpartogai village), Borankul village.

**Project: NGO School - Improve the access and quality of education and training opportunities for NGOs. The proposed program Goals to enable NGOs to strengthen the role of civil society in meeting the needs of citizens.**

NGO: Eurasian Foundation of Central Asia corporate fund

Coverage of settlements: Atyrau city and Zhylyoi district

**Project: Yntymak Community Development Program - Increasing the social capital of the local community for sustainable economic development by implementing educational, social, environmental, and charitable projects. Improving the availability and quality of education in orphanages, higher and secondary educational institutions of Atyrau Oblast; and engaging TCO employees in volunteering, contributing to the reputation of TCO and increasing the potential of the local community.**

NGO: Yntymak Atyrau NGO

Coverage of settlements: Atyrau city and Zhylyoi district

## Economic development

**Project: «ZHARKYRA» Social Entrepreneurship Development Program - promote innovative social initiatives aimed at providing sustainable business solutions to social, economic, and environmental issues affecting the community in Atyrau.**

NGO: Public Foundation “Social Programs and Innovations Fund” together with Eurasian Foundation of Central Asia (EFCA) Corporate Fund

Coverage of settlements: Atyrau city

# Minimizing environmental impact

## Environmental protection

TCO operator based on the principles of environmental responsibility, supporting the lower carbon strategy of the Republic of Kazakhstan, ensuring environmental safety of operations and continuous improvement of environmental performance. Protecting human health and the environment is one of the company's core values, as noted in the TCO Way.

In 2021, TCO achieved high performance in environmental protection, focusing on air protection, rational use of water resources, protection of subsoil and land, waste disposal and raising environmental awareness.



## Air protection program

TCO rigorously complies with the legislative requirements of the RoK and performs extensive air protection activities through use of state-of-the-art technologies resulting in the continuous reduction of air emissions while oil production volumes have at the same time increasing significantly over the years.

During the last 20 years of operation, TCO reduced its air emissions intensity by 65% with a corresponding 2.6 volume increase in crude oil production. Such result was achieved by leveraging monitoring and emissions data to invest in major capital projects to improve operational reliability.

## Gas flaring reduction

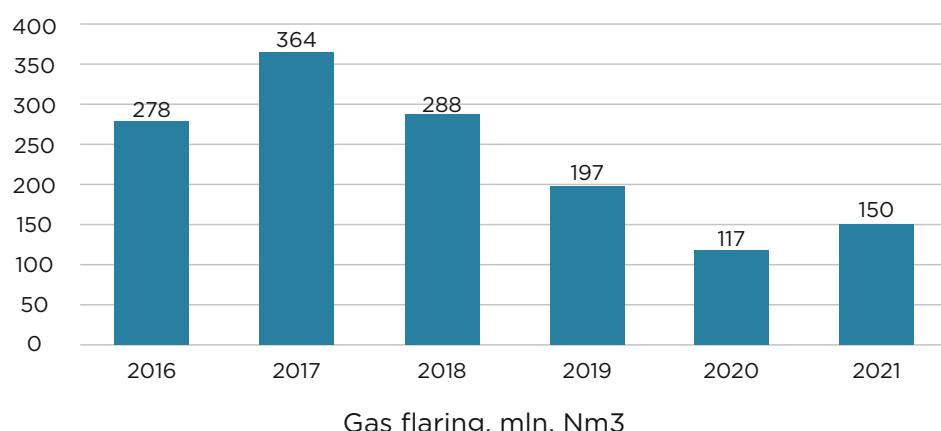
A flare is a critical safety device used at oil and gas processing plants around the world to ensure safe operation of its equipment. TCO relies on flares during maintenance, repair, startup works, shutdowns and also during process upsets resulting from technical malfunctions. Flaring is used when necessary to allow for safe operation and protection of people.

TCO's KTL and Second Generation Plant (SGP) are some of the most reliable, efficient and safe facilities in Kazakhstan as a result of improvements in plant reliability and upgrades of processes and equipment.

TCO eliminated continuous routine flaring of associated gas since 2009 and now 99% of the produced gas is exported or used for the Company's internal needs.

**Total gas flaring reduction throughout 2020-2021 was achieved by the reduction of technological unavoidable flaring resulting from the following mitigation measures:**

- Upgrading infrastructure and processes at the Sour Gas Injection (SGI) plant by decreasing the well's pressure to reduce technological unavoidable gas flaring without sacrificing productivity.
- Making specific adjustments in the operating conditions for gas plant distillation columns and refrigeration units allowed TCO to reduce volumes of ethane flared from the KTL in 2021 by 94%.
- Transferring propane refrigerant from a production unit to the sales propane pipeline allowed TCO to reduce potential gas flaring in 2021 by 83%.



## Managing greenhouse gas emissions

Looking for ways to reduce carbon while delivering the TCO business plan is a high priority for the Company. TCO is taking a proactive and pragmatic approach underpinned by three buckets of opportunities: operational improvements, capital investments, and renewable power:

- Operational improvements focus on efficiency gains achieved by changing the operations in a way that maintains operational reliability while reducing TCO's emissions.
- Capital investments that will result in emission reductions.
- TCO is incorporating renewable power into its operations, consistent with the pace of introduction of renewables penetration in the Western Kazakh grid.

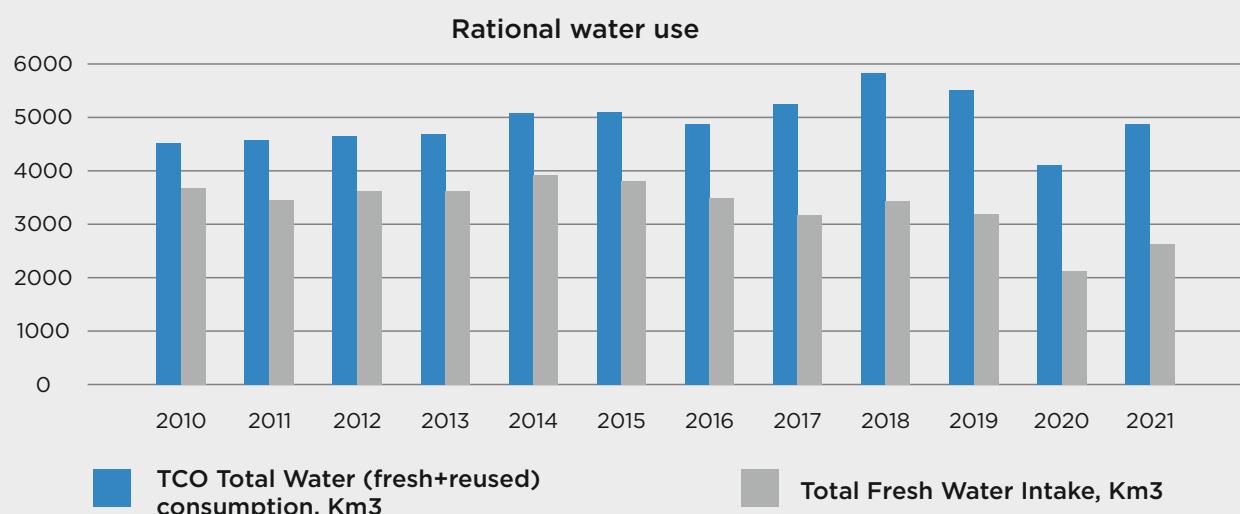
## Rational use of water resources

TCO is conscious of the social, environmental and economic importance of freshwater and therefore, the Company is committed to rational use of water resources. Increased water demand due to population and industrial growth has put limitations on the water supply from the Magistralnyi Vodoprovod (MV) line, the main waterline. TCO's goal is not to increase the water consumption volume from MV, despite the growing number of personnel and increase in production capacity due to the construction of Future Growth Project - Wellhead Pressure Management Project (FGP-WPMP).

From 2013 to 2016 TCO commissioned a Wastewater Treatment Facility (WTF) and associated Water Recycling Facilities (WRF) to focus on freshwater conservation and wastewater management. WRF is considered as a major component of TCO's long-term, comprehensive water management program.

At WRF the secondary treatment of wastewater from WTF is carried out by applying reverse osmosis technique. This system produces high quality treated water for operational purposes.

TCO regularly conducts water saving campaigns promoting a water saving culture. By supporting the water conservation initiatives and wastewater management the water reuse at TCO facilities in 2021 made up 46% of total water demand.



## Effective approach in waste management

There are more than 60 streams of hazardous and non-hazardous wastes generated at Tengiz, 35 of which are recycled. TCO's integrated waste management system focuses on waste reduction, reusing and recycling, or more simply the 3R (Reduce, Reuse, Recycle) Program. The 3R Program plays a crucial role affecting how much waste is generated at the source and promotes a recycling culture that brings along numerous benefits. The current waste management practice gives the wastes "a second life", when possible.

The company successfully implemented a color-coding system: for example, black containers are for municipal waste; green containers for collecting paper and cardboard, plastic wastes, etc. These special color-coded and labeled containers are installed for collection and temporary storage of waste at all TCO production sites, camps and other facilities.

The Tengiz Eco Center (TEC) is the heart of waste management operations. The facility was commissioned to enable interim storage, disinfection, recycling, and disposal of waste generated by the company and its business-partners engaged in TCO operations.

It's is worth mentioning the Company's efforts in the development of waste reuse and recycling. TCO has already successfully diverted more than 50% of its waste to third party waste management facilities. In order to comply with the updated legislative requirements, in 2021 the company concluded agreements for the collection, removal and recycling of construction, demolition and food wastes: food waste is processed by thermomechanical treatment to produce fertilizer and technical water as final products; construction and demolition waste is sorted into components with release of secondary materials for recycling.

TCO continues to look for potential suppliers and study waste management options to identify more waste reuse alternatives. Hazardous waste streams are only sent to companies that have successfully passed through a third party waste stewardship audit and confirmed their waste management capabilities are protective of the environment.

TCO will continue to strive and achieve even better waste management performance to support Green principles outlined by the government of the RoK, thereby ensuring compliance with the RoK regulations and international standards.



## Land Reclamation Program Progress

Reclamation of disturbed land includes collection and removal of garbage, restoration of natural landscape by filling in holes, leveling slopes, correcting terrain irregularities, and creating conditions for the growth of natural vegetation. 22.5 hectares of land were reclaimed and returned to State Agencies in 2021.

### Old Waste Dump Site (OWDS) Reclamation Success Story

In 2021 TCO successfully executed the reclamation of an Old Waste Dump Site. The old solid municipal waste site had been used before the foundation of TCO and did not meet the regulatory requirements of the Republic of Kazakhstan for waste disposal facilities.

#### The scope of work on the project consisted of 2 stages:

- Extraction and segregation of 290 000 tonnes of waste and contaminated soil from the legacy dump site. Wastes were transported to the Tengiz Eco Center (TEC) landfills and recyclable materials were handled under TCO's established recycling program.
- Backfilling of the area with 41 000 tonnes of clean soil to restore the site.

The project started in March 2020 and was completed in July 2021 while facing the challenges of COVID-19 including a complete work stoppage for several months and workforce restrictions throughout the project.

Completion of the OWDS not only allowed TCO to meet commitments under the Environmental Protection Plan but also provided long-term benefits to the ecology in the Tengiz Oil Field.







## Biodiversity

The diversity of ecosystem in Western Kazakhstan provides ecological, recreational, cultural and esthetic value, playing an important role in sustainable development.

During the planning and construction of FGP-WPMP facilities, successful measures were taken to preserve the habitat and breeding conditions of several fauna species in the region. Prior to the start of the Project's construction works, preconstruction surveys were conducted to avoid or reduce potential impacts on biodiversity in project area.

Construction works are carried out only within the allocated land allotment, transport movement is allowed only on organized roads, land reclamation is carried out after construction completion.

In addition, TCO FGP-WPMP is supporting a conservation project to develop a number of conservation measures that will be implemented to provide breeding conditions for the Sociable Lapwing. The Sociable Lapwing, a bird listed as critically endangered by the International Union for Conservation of Nature (IUCN), breeds on open grassland in the steppes.

In 2021, TCO provided financial support to the Association for the Conservation of Biodiversity of Kazakhstan (ACBK) to initiate a three-year program with the following objectives: working with farmers to safeguard nests at risk from plowing, satellite tracking of these birds, field research to understand changes in their nesting habitat, and raising awareness of the Sociable Lapwing and its conservation status within local Kazakh communities.

More broadly, TCO implements environmental protection programs for the conservation of nests at the Project site. If a nest is found at one of the construction sites, various mitigation measures, which may include suspension of work, are implemented until the eggs hatch and the young birds fledge.

To increase TCO FGP-WPMP staff awareness of the local flora and fauna, a special guidebook identifying their key species was developed. Additionally, more than 100 large banners have been installed across the TCO FGP-WPMP sites for awareness of flora and fauna.

Due to the successful implementation of bird nests management plans and timely response, almost 60% of the discovered nests were active and nesting ended with a successful chick hatch.

### Sturgeon hatchery support

As part of the project efforts, an Additional Conservation Action to support Ural-Atyrau Sturgeon Hatchery was implemented to achieve Net Gain for sturgeon. The aim of the program is to reduce the number of adult fish removed from the wild population each year and increase the percentage of wild caught broodstock that are returned to the sea. This is being done by improving the survivorship and productivity of sturgeon broodstock of the Ural-Atyrau Sturgeon Hatchery. The following efforts led to positive changes: the provision of high quality feed for the broodstock and fry, aerators for oxygenation of rearing ponds, an excavator for external dredging work on the farm ponds. Additionally, TCO purchased and donated winter and summer water chillers for basins with closed water supply. As a result of the support provided to the Ural- Atyrau Sturgeon Hatchery, the sturgeon broodstock have shown an increase in weight.



### Ghost net removal project

The project aims to prevent seals and fish from being caught in fishing nets by physically retrieving abandoned nets and to protect and contribute to the growth of endangered marine species such as the Caspian seal and sturgeon. As a result of the efforts of this project around 4300 kg of abandoned nets and 1000 kg of marine debris were collected in one season in 2021.

Since 2014, 878 abandoned fishing nets (20 500 kg) and over 9000 kg of marine debris have been removed from the Caspian Sea, 53 sturgeons and 15 seals were freed from the abandoned nets.



## Environmental monitoring

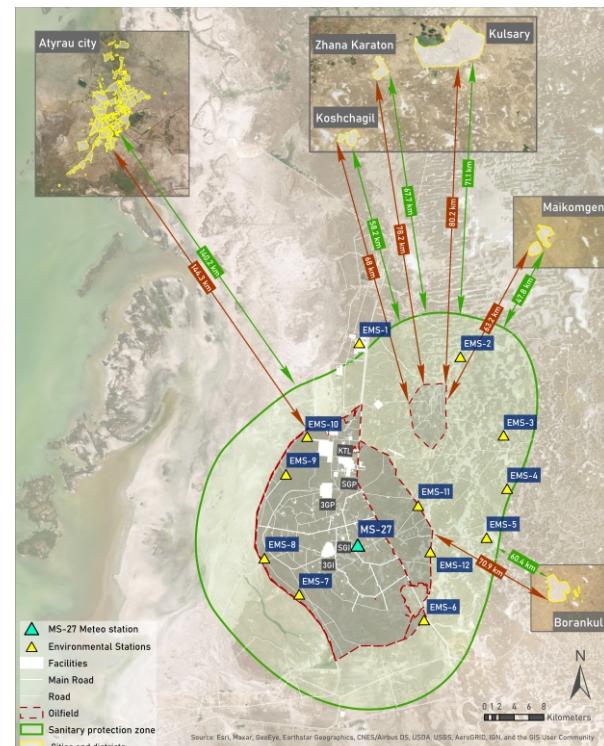
TCO conducts a comprehensive system of continuous environmental monitoring within its area of operations. Environmental monitoring includes atmospheric air, water and soil samples that are collected and analyzed in TCO's environmental laboratory against specified thresholds and background conditions to track and proactively manage potential impacts on the environment.

TCO's environmental laboratory is certified and has been operating since 2016 equipped with state-of-the-art technology and equipment.

### Air Monitoring

Good air quality is foundational to environmental protection. And the air monitoring is a core component of TCO's Environmental Industrial Control Program. Continuous monitoring is in place to obtain the information on ambient air quality and proactively evaluate and mitigate potential impacts from the Company's production operations. The air monitoring system enables TCO to plan and implement preventive and mitigative measures to reduce or eliminate environmental impacts to the air surrounding its operations.

TCO carries out several types of air monitoring within its area of operations and Sanitary Protection Zone (SPZ), as well as in rotational village and in the village of Zhana Karaton.



### Underplume monitoring

Underplume monitoring is performed to assess the potential impact of emission sources from TCO production facilities. TCO monitors the following areas near the flare stacks:

- 1 point upwind from the plants at a distance of 16 kilometers in all directions, except for the west (in the west direction the point is at 8-10 km depending on accessibility of the road);
- 9 points downwind from the plants at the distances of 0.5, 1, 2, 3, 4, 6, 8, 10, 15 kilometers.

### Air monitoring at the border of the sanitary protection zone

There are 11 mobile posts with fixed coordinates at the border of the TCO SPZ that are used to assess the level of atmospheric air pollution and to comply with the established norms. On an ongoing basis, observations are made on the following ingredients: nitrogen dioxide ( $\text{NO}_2$ ), sulfur dioxide ( $\text{SO}_2$ ), carbon monoxide (CO), hydrogen sulfide ( $\text{H}_2\text{S}$ ), hydrocarbons (CH) and elemental sulfur (S). The results of observations at the border of the TCO sanitary protection zone for 2020-2021 showed no exceedance of maximum allowable concentrations.

## Air monitoring at settlements and in Zhana Karaton

Air samples are collected 4 times a day in TCO rotational village and on weekly basis in village of Zhana Karaton. TCO facilities do not have impact on the air quality of abovementioned areas due to the remote locations of these settlements.

## Air Monitoring at emission sources

TCO also performs regular monitoring at emission sources at specially equipped sampling points to monitor compliance with permitted limits. Vent gases are monitored using certified portable gas analyzers that register the concentrations of carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and the temperature, velocity and volume of the gas-air mixture.

## Environmental monitoring stations

TCO maintains a special air monitoring system comprised of 12 automated Environmental Monitoring Stations (EMS) within its area of operations and along the perimeter of the SPZ. The EMS stations are equipped with modern analyzers capable of detecting concentrations of hydrogen sulfide (H<sub>2</sub>S), carbon monoxide (CO), nitrogen oxides (NO, NO<sub>2</sub>), methane (CH<sub>4</sub>) and sulfur dioxide (SO<sub>2</sub>). Each EMS is automated and operates 24 hours a day.



## Case Study for EMS Data Sharing

As part of the Company's commitments in the Roadmap for an Integrated Solution to Environmental Issues in Atyrau Oblast, TCO initiated real-time air quality data sharing from four EMS stations.

The concentrations of hydrogen sulfide (H<sub>2</sub>S), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen oxides (NO, NO<sub>2</sub>), methane (CH<sub>4</sub>) and meteorological parameters are averaged and transmitted online to "Kazhydromet" RSE every 30 minutes. The EMS data from these four stations are available on the AirKZ mobile application and are shown at the interactive map of "Kazhydromet" RSE.

## Groundwater monitoring

Groundwater monitoring is completed through a large network of observation wells, including 125 observation wells at Tengiz and Korolev fields, and 11 background monitoring wells located away from operational facilities. In 2021, TCO completed the project of an upgrade of the existing groundwater monitoring network to improve sampling reliability.

## Monitoring of soil

There are 55 points where soil samples are drawn for further analysis, the result of which helps to ensure the control over the soil conditions within TCO's industrial areas. Soil samples are analyzed in accordance with the approved methodology in laboratories accredited in compliance with the legislation of RoK.

## Waste water monitoring

TCO monitors wastewaters on a regular basis to ensure the compliance with the established emission limits. Wastewaters are controlled in effluent treatment facilities, evaporation ponds and prior discharging into water injection wells. Frequency of sampling and analysis complies with the approved program and schedules of analytical control.

In summary, a constant monitoring is performed for all environmental components such as air, water, soil. TCO's environmental monitoring program complies with the current environmental regulations. All data obtained from monitoring is included into reports that are issued regularly under the TCO's Environmental Industrial Control Program.



## Protecting people

TCO's work is guided by two key principles: do it safely or not at all and there is always time to do it right. Every employee of TCO and its Business Partner companies is responsible for making sure that work can be safely started. Each person has the right to temporarily suspend or completely stop any work if unsafe behavior or conditions are observed. The TCO Safe Work Practices Management Group, together with other teams, ensure that Occupational Safety and Health (OSH) guidelines and procedures are continuously implemented and maintained.

## Occupational hygiene

In accordance with the regulatory requirements of the Republic of Kazakhstan, TCO assesses facilities to determine whether conditions for ensuring safety and health of employees meet various industry standards. In 2021, TCO facilities were certified for working conditions. The certification included the following elements:

- Assessment of actual working conditions and safety at workplaces.
- Confirming the fact that certain employees work in harmful and hazardous working conditions.
- Providing employees with necessary personal and collective protection equipment,
- ensuring their compliance with actual working conditions and requirements of standards imposed on them.
- Implementation of organizational and technical measures to improve working
- conditions and occupational safety in order to bring workplaces in compliance with requirements of current regulatory legal acts.
- Justifying compensation amounts and benefits provided to employees engaged in activities under harmful and hazardous working conditions as per labor laws of the Republic of Kazakhstan.

All production facilities undergo scheduled certification every 5 years. Based on the results of each certification, plans are developed to take corrective measures to improve working conditions.

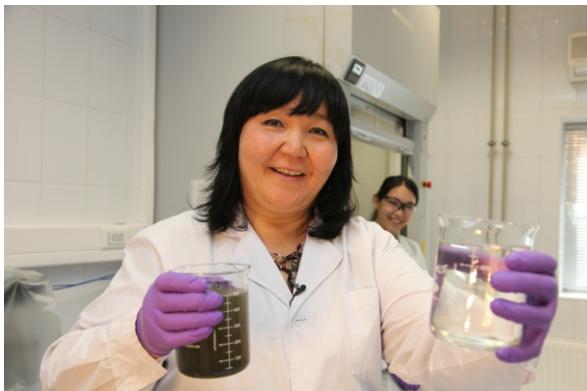
## Food safety

TCO is committed to meeting food safety standards of the Republic of Kazakhstan, as well as the latest revision of the United Nations Food and Agriculture Organization's CODEX Alimentarius Commission (CAC/GL18-1995), which is used as the basic food hygiene standard worldwide, except at those facilities where more stringent standards by Chevron are applied. In 2021, several online meetings on food safety were held in Tengiz together with the group of hygienists of the FGP-WPMP Industrial Relations department with involvement of other TCO departments and Business Partners. The following safety bulletins on relevant issues were prepared and published during the pandemic and summer period, which were timed to coincide with the World Food Safety Day on June 7: Safety Tips for Using Dairy Products in Summer, Safety Tips for Using Take-away Food Service.

## Potable water quality control

Potable water quality control programs at water supply facilities in Tengiz and Atyrau are critical for monitoring quality and safety of potable water for the purpose of protecting the health of TCO and Business Partner personnel. As part of the monitoring, potable water samples are delivered daily to the Central Plant Laboratory (CPL) and laboratories of the Atyrau branch of the National Center of Expertise (NCE) to be tested for 56 parameters in total. According to the results of all tests, potable water in the distribution network has met relevant sanitary and hygienic requirements.

In order to prevent the spread of COVID-19, avoid crowding and follow physical distancing requirements during the 2021 turnaround period, TCO amended the 2021 Turnaround Potable Water Provision Plan. Comprehensive support was provided in order to prevent intestinal infections associated with water, food products, household, and potable water supply conditions to ensure personal and industrial hygiene. The result of this work is zero rate of registered morbidity during the 2021 turnaround in Tengiz.



## Production process safety

Monitoring of harmful and/or hazardous chemical and physical production factors. Industrial control program for workplace air and physical factors at TCO facilities.

The industrial control program for workplace air and physical factors at TCO facilities is developed to assess potential impacts of production on human health, take effective measures to prevent or mitigate impact of production risks, and ensure compliance with sanitary and hygiene requirements in the course of technological processes in accordance with sanitary and hygienic standards of the Republic of Kazakhstan and Regulations for Control of Harmful Effects issued by the American Association of Industrial Hygiene (ACGIH). The updated industrial control program was developed to meet the requirements of Sanitary Rules "Sanitary and Epidemiological Requirements for Industrial Control Execution" (Prikaz of the RoK Minister of National Economy #239 dated June 6, 2016).

## Digitalization success story

In 2021, TCO deployed the first Industrial Internet of Things (IIoT) solution, an IoT Water Meter Reading, for managing non-process control. With IIoT sensors installed on each meter, this solution allows TCO to remotely collect and view data from 23 water meters in the Rotational Village in Tengiz without the need for human presence. This complex solution gives users the ability to analyze data and predict future water consumption, as well as to increase the reliability of potable water supply in Tengiz and eliminate safety risks.

## Fatigue risk management

During the COVID-19 quarantine period in 2020, TCO developed an additional program to manage risks associated with overfatigue of personnel with high-risk jobs, given extended rotations due to pandemic restrictions. The program allows employees to assess their physical condition for exposure to the risk of fatigue and communicate it to their line supervisors. This initiative was implemented to prevent any personnel incidents associated with fatigue risks.

## Employee mental health

The mental health, wellness, and safety of our employees remains a top priority for TCO. Due to the current situation in the country, many of our employees have faced various difficulties affecting mental health. If an employee needs psychological support, he/she can take advantage of the Employee Assistance Program. Employee Assistance Program services are available to TCO employees, agency, TCO Business Partner personnel and their family members. Employees or their family members can call the specialist and request information of interest or schedule a consultation.



## A learning organization

In 2021, TCO's organizational philosophy moved to focus on transforming workforce and leadership behaviors, organizational practices, and systems to enhance and support our Operational Excellence (OE) performance. We recognize that continuous learning and improvement is essential to business success, and that is where our efforts are focused.

TCO's aim is to systematically integrate and support organizational practices to seek, share and apply knowledge that strengthens safeguards and mitigates OE risks. The success of organizational learning relies heavily on key learning elements and strong feedback systems that stay connected to demonstrate knowledge transfer. Through these efforts TCO is creating a culture that provides workers a voice and avoids punitive consequences when incidents and near misses occur.



### TCO field safeguard verification & validation (V&V) program

The V&V program is a systematic approach to ensure that critical safeguards are available on-site and are functioning as designed to perform high-risk tasks. The program is focused on identifying vulnerabilities in safeguards and taking measures for further improvement.

Electronic permit-to-work is a digital permitting system that replaces paper-based permitting to enable control of work. Electronic permit-to-work manages risk, enhances safety, increases operational efficiency and effectiveness

### Contractor health, environment and safety management (CHESM)

The purpose of the Contractor Health, Environment and Safety Management (CHESM) Process is to establish clear accountabilities, ensure active engagement of contractors, and provide a consistent CHESM program to help eliminate health, environment, and safety (HES) incidents and injuries involving contractors.

Tengiz Safety Steering Committee meetings were organized to establish two-way communication between TCO management and Business Partners during implementation of new processes or programs, to collect feedbacks and best practices from our partners as end users.



## Emergency response drills

According to the Law of the Republic of Kazakhstan “On Civil Protection”, TCO conducts training sessions on emergencies and Emergency Response Drills/Emergency Drill Exercises (hereinafter referred to as ERD/EDE respectively) to ensure the preparedness of personnel to fulfill their roles and responsibilities in any emergency. In 2021, the following drills were successfully completed at all Tengiz facilities, which are under the operational control of TCO:

- 185 Emergency Drill Exercises (EDE), which involved the On-Scene Response Teams (ORT) of each facility and TCO Emergency Response Team (4 drills were conducted in addition to the approved schedule)
- 10 Emergency Response Drills (ERD) when Level 2 Emergency Management Teams (Level 2 EMT) were activated at the Incident Command Center and TCO's ORT and ERT were involved.

TCO practiced the “podding” approach to ensure safe distancing for the designated personnel engaged in operation of production facilities. In addition, TCO held its annual comprehensive ERD together with the Caspian Pipeline Consortium-K. Joint drills with third-party companies are effective tools for the response teams to practice the skills which are necessary in case of a real-life emergency, as well as to practice their teamwork, interaction, and difficult decision making in real life situations. The drills offer time and place to test the plans developed, the equipment and systems, analyze the practices and make recommendations for further improvement, because one of the company's key objectives is minimization of oil spill risks and protection of the environment.

## Incident command system training ICS-300

Advancing knowledge, practicing response protocols, or training teamwork leads to success, improves the efficiency of work performance, and reduces expenditures. ICS-300 training is a step in TCO's transition to a standardized ICS within OEMS (Operational Excellence Management System): a single ICS system is expected to be used in emergency management.

In 2021, Chevron trainers conducted training sessions in ICS-300 for EMT-3 members from October through November 2021. The EMT Level 3 members are those who occupy Unit Supervisor and Section Supervisor positions or have a role assigned in EMT Level -2 command center who may perform the functions in operational section of EMT Level-3.

## Personal H2S detector activation data collection

The process for collecting data of personal H2S detector activation was revised to simplify it. Personnel who do not have access to TCO's computer network may upload the data from any PC that has access to the Internet, or a smartphone with a QR-Code scanning function by scanning the QR-code with the smartphone camera.



# Kazakhstani content development

In 2021, TCO spent more than \$3.6 billion on Kazakhstani goods, works, and services.

## How to become a TCO supplier.

There are two possible scenarios:



TCO uses a fair and transparent contracting process that leverages the Supplier Expression of Interest (SEOI) portal to identify potential business partners. TCO encourages all interested parties to register on the SEOI portal for current and future opportunities. Furthermore, to promote transparency, TCO posts its annual contracting and procurement plan on its external website to ensure the market knows about all potential opportunities at TCO.

TCO conducts forums and seminars with the participation of local business community representatives to find partnership opportunities in various business sectors for the future strategic needs of the company in the relevant products and services. TCO shares technical specifications and requirements, organizes round tables with representatives of different TCO departments and technical experts.

TCO strives to develop and maintain strong business relationships with customer-oriented suppliers who have a strong safety culture, track record of reliability, cost management skills, and quality products as well as services with competitive prices and innovative business solutions. Tengiz is a complex field, so TCO has high expectations for itself and its business partners to ensure effective management. TCO work affects the lives of tens of thousands of people across Kazakhstan, and it affects the lives of our customers around the world who rely on safe and reliable supplies of energy.

## Local procurement and supplier development

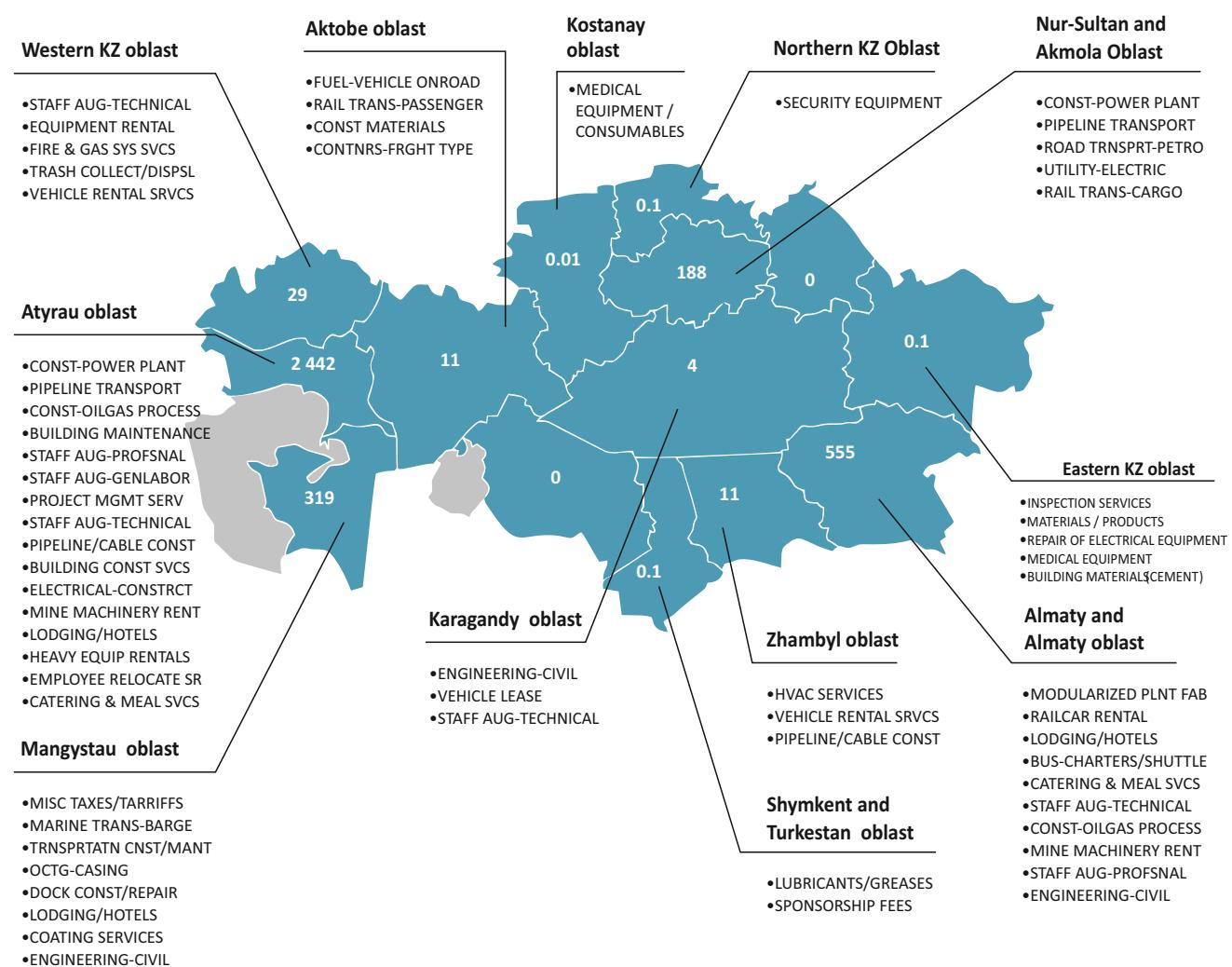
TCO's local content programs aim to develop sustainable, meaningful local content and grow local capabilities. Investing in our suppliers fosters local economic growth and helps TCO meet our business needs. TCO believes that if the company is to achieve its Kazakhstani Content (KC) objectives, it must generate long-term opportunities for the suppliers of local goods and services.

In recent years, KC has been growing steadily. In 2021, the purchase of TCO goods, works, and services (GWS) amounted to almost \$5.2 billion, of which the share of KC was \$3.6 billion (or 68% of total GWS). TCO saw significant gains in local content across the following categories: +2% in goods, +17% in works and +28% in services.

According to a recent study\*, every TCO job creates another 39 jobs in other industries across Kazakhstan, and every dollar of local spending by TCO triggers another dollar of economic turnover. This direct and indirect economic impact makes TCO one of the driving forces for the economy of Kazakhstan.

\* IHS Markit. The Economic Contributions of Tengizchevroil to the Republic of Kazakhstan, 2010 - 2019

## TCO RoK Economic Impact TCO KC Spend by Oblast (\$MM) in 2021



## Impact across Kazakhstan

While TCO is proud of its Western Kazakhstan roots, its influence is spread also to Business Providers throughout the whole country. This includes purchases of Oil Country Tubular Goods (OCTG) casing from Aktau, Lubricants from Shymkent, and security equipment from Petropavlsk, Heating, ventilation, and air conditioning (HVAC) service and pipeline construction services from Taraz, equipment rentals from Western Kazakhstan oblast, construction materials and passenger rail services from Aktobe oblast, and pipeline transport services and rail cargo services from Nur-Sultan.

TCO will continue to reach out the business community and engage different associations such as Petrocouncil, KazService, and Union of Machine building in Kazakhstan as well as different Oblast leaders to identify the next wave of Kazakhstani business partners throughout the Republic.

### Supplier Development

TCO has a supplier development program that consists of three main directions:

an internal program,

an external program with the European Bank for Reconstruction and Development (EBRD),

and soon with the International Machine Building Center (IMBC).



For TCO's internal program, the company undertakes spend analysis, reviews upcoming procurements, and reviews potential suppliers together with our technical experts. This leads to the development of a list of "target items" which we review, qualify, and move to trial orders using internal staff. Below is the list of electrical, chemical, and maintenance repair and operations (MRO) items for TCO needs. During 2021, TCO had several teams developing over 18 products and service lines under categories such as: emergency equipment, electrical equipment, drilling materials, maintenance services, telecommunications equipment, and maintenance, repair, and operations materials (MRO).

We are proud of our external program implemented in conjunction with the EBRD which provides direct consulting to businesses that resulted in increased quality and improvements in revenue and employment for participating companies. These programs covered areas such as access to finance, cost reduction, quality management, and safety. The program was very successful and posted the following results:

- 77% of evaluated companies reported increase in turnover with an average increase of 4MM euros with the median increase of 35% at the enterprise level
- 50% reported 43% growth in female personnel
- 73% of clients reported an average productivity increase of 48%

Finally, we are looking forward to working with the newly established **IMBC** which is currently finalizing its workplan, staffing, and budget.

## FGP-WPMP Kazakhstani Content

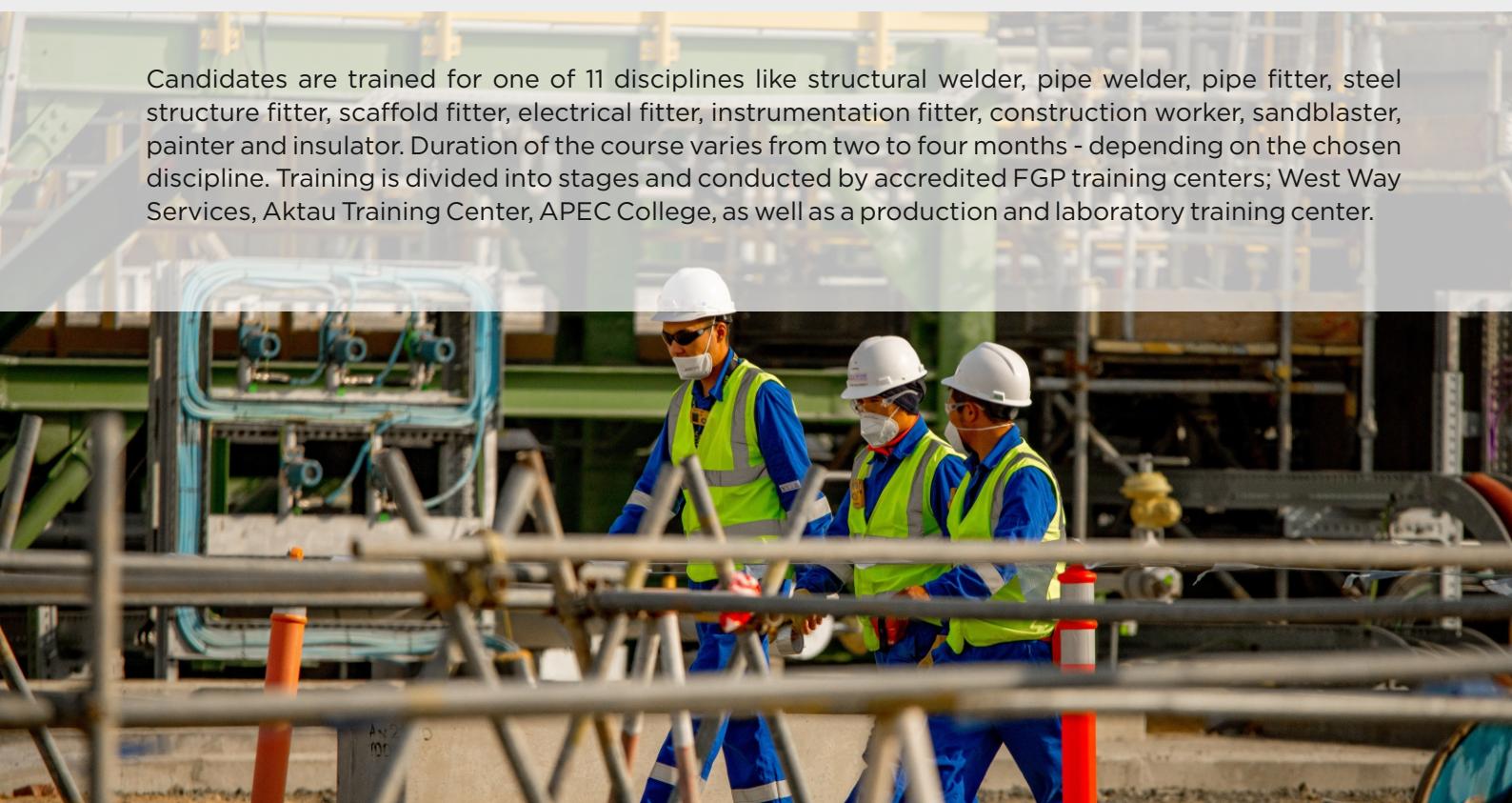
Although the FGP-WPMP project is nearing completion, TCO continues to seek opportunities and actively promote the engagement of local goods, works and services by involving Kazakhstani engineering companies, design institutes, suppliers, manufacturers, construction contractors, and labor resources in all project works to maximize local content rates. In 2021, TCO acquired goods and services of Kazakhstani suppliers worth \$2.3 billion only within the framework of the FGP-WPMP. The project has enabled outstanding results, exceeding planned 32% KC target to 37% actual in 2021.

### FGP-WPMP Training and professional development

The FGP-WPMP Training Assurance Team aims to increase the availability of skilled labor which is in demand in the Kazakhstani oil and gas industry. Moreover, the project aims to leave a lasting legacy in the form of skills in engineering, construction, and other technical professions for future projects around Kazakhstan.

During the period from 2019 to 2021, TCO arranged 6 training phases in Mangistau Oblast and 5 training phases in Atyrau Oblast. In 2021 FGP-WPMP workforce has been successfully trained, and 10,000 have been assessed and around 6,000 have been trained. These activities have brought the project to a total of more than 26,000 assessments and around 22,000 trainings to date, a rare achievement in the industry.

Candidates are trained for one of 11 disciplines like structural welder, pipe welder, pipe fitter, steel structure fitter, scaffold fitter, electrical fitter, instrumentation fitter, construction worker, sandblaster, painter and insulator. Duration of the course varies from two to four months - depending on the chosen discipline. Training is divided into stages and conducted by accredited FGP training centers; West Way Services, Aktau Training Center, APEC College, as well as a production and laboratory training center.



## Technologies transfer

One of the hallmarks of the successful development of local content is TCO's Digital Transformation and the active involvement of all company employees in this journey.

In 2021, TCO developed several in-house solutions that leverage its workforce capabilities and the overall production progress. One of them is the Electronic Material Passes application that provides effective tracking of material movement by automating the processes of creation, authorization and confirmation of material passes. Security and Supply Chain Management Warehouse teams are notified in real-time about materials delivery thus reducing possible delays and increasing transparency in materials tracking. Digitalization of these processes increase productivity through reducing manual work and queuing at posts, whilst increasing security by allowing High Security Risk Materials (HSRM) to be monitored from release to installation, recycling or returning.

Our workforce is driving innovations in turnaround maintenance for better planning and utilizing TCO Digital Transformation capabilities to meet high standards, improve work processes and protect the health and safety of our workforce. A great example of these efforts is the 2021 Second-Generation Plant and Sour Gas Injection Turnaround (SGP/SGI TA) that has been successfully completed four days ahead of schedule. As part of the One TCO Connectivity initiative TCO executed a plant wide digital implementation of the private LTE service. Installation of LTE system at SGP has not only enabled Turnaround Progress (TA Pro) application, which digitally reports the status of scheduled activities from the job site, but also created the foundation of SGP digitization: the introduction of IoT, complex digital platforms, and the use of mobile devices (~20 tablets and 50 iPhones) in the production and processing areas. In addition, through digital enablement, TCO addressed issues with facility access, while effectively managing COVID-19 safeguards, to enable at peak 6,400 personnel to start their jobs safely.

In 2021 TCO had the privilege to co-sponsor the “Digital Bridge” forum in Nur-Sultan, where TCO’s General Director, Kevin Lyon, was honored to present the company’s digital transformation journey to President Tokayev. During the presentation, Mr. Lyon was able to highlight how digitalization is supporting TCO’s performance and aligns with the “Digital Kazakhstan” document. We believe that supporting the digital opportunities in the Republic of Kazakhstan by developing and building digital talents will leave a legacy of a capable workforce. We also had an opportunity to co-sponsor and judge the Atyrau Energy Challenge – a competition for startup projects in the oil and gas industry. The Challenge aimed to stimulate the emergence and development of new ideas that contribute to the facilitation of operational processes in the oil and gas industry.





## People strategy

TCO's People Strategy is to "*invest in our people to develop and empower a highly competent workforce that delivers results the right way*".

### We focus on:

- The strategic staffing planning for the near and long term. Our primary focus during this process is hiring and developing Kazakhstani citizens.
- People and Talent Management strategies that help us to attract, retain and develop talent, and continuously grow the organizational capabilities needed for the future, and reinforce collaborative and team behaviors.
- Enhancing employee experience that aligns the needs of our workforce with business objectives, such as rewarding long-term service, high-performance, promoting well-being and a continual learning culture.
- Developing the leadership capabilities of our workforce and managing our succession plans.
- Promoting diversity and inclusion at all levels of the organization. TCO relies on the uniqueness of each individual's talents, experiences, and ideas to drive the Company's success.
- Fostering the One TCO culture consistent with the TCO Way. The culture that is built on a common purpose, teamwork, respect, and feedback – and rooted in inclusion, trust and empowerment which is essential for everyone to reach their full potential and be their best in the workplace.

The following pillars drive intentional actions in support of People Strategy execution.

Resourcing Strategy - to ensure the right number of people with the right skills and competencies in the right roles, at the right time and at the right cost.

TCO identifies present and future talent and critical/key competencies needed to execute business strategies, identify, and quantify gaps, and prioritize activities.

TCO creates and utilizes a holistic and strategic approach to attract, develop, and retain talent with or capable of, acquiring the knowledge, skills and behaviors needed to meet current and long-term business needs.

TCO's recruitment process is open, transparent and leverages advanced technologies. We utilize an external website to post our vacancies to ensure that all potential candidates have equal access to apply. We not only hire experienced specialists, but also talented graduates of higher education institutions, based on the needs of the company.

## Workforce development and trainings

Learning & Development Programs - to enhance individual and team performance TCO delivers fit-for-purpose organizational development interventions and best-in-class learning and development solutions for the business.



**TCO places the highest priority on the safety of its personnel. All TCO employees and contractors attend mandatory safety training to perform work without any injury or accidents.**

To ensure that new employees achieve the necessary work efficiency in the shortest possible time TCO utilizes an Onboarding Program mandatory for all direct company and agency employees.

To accelerate technical and professional competency development, the TCO Horizons program is successfully utilized for Petro Technical functions, while supporting functions are covered by tailored programs that meet the needs of these departments. Programs include a combination of technical training & learning, mentoring, job assignments and competency assessment where each of these elements reinforces the other.

One of the fundamental aspects in the development and support of highly competent workforce is the development of leadership qualities which is carried out through the Leadership Development Program. The Program is based on the 'We Lead' competency model and includes learning programs for various organizational levels, mentoring, coaching services, and New Leader Assimilation Process.

Language Courses (Kazakh and English) are an integral part of TCO employee training and development programs, to maintain effective communication at the workplace and to conduct business both locally and globally.

## Succession Planning and Nationalization

TCO implements strategic programs and processes to ensure that at any time the Organization has "a robust bench strength" with the ability, knowledge, skills, leadership behaviors and experiences necessary to step into key leadership and key technical positions. Since 2007, 407 TCO national employees have been appointed to positions of managers, middle managers, and key engineering positions, replacing expatriate employees.

**Temporary International and Domestic Development Assignments** – TCO provides talented TCO national employees with an opportunity to gain work experience in TCO's Partner Organizations, predominantly in Chevron and ensure assignees' exposure to diverse experiences and development of unique competencies, knowledge of international standards, technologies, and best practices. International and Domestic Assignments support such processes as succession planning and nationalization. In total, 360 TCO national employees have been on temporary international and domestic assignments since 1999.

**Career Development Planning** – TCO provides employees with the right career growth opportunities to accelerate leadership and technical competency development, including management and execution of targeted/specific assignments for high-potential employees, Future Leaders, and Successors, as well as continual review and focused discussions on TCO's talent pool and their progress against approved career development plans.

In addition, the Company invests in education of its employees, providing them with financial assistance in obtaining post-graduate degree. Since 2009, 219 employees have taken advantage of this program, 31 of them currently continue their study.

In general, since 2008, the Company has invested over \$86 million in the development of national employees.



## Social package

**Retention Strategies** – TCO offers a robust social package and a wide range of development opportunities to attract, motivate, and retain talent.

TCO's renumeration system is based on principles of unity, credibility, competitiveness and contributes to an increase of individual productivity (payment based on Performance Management Process (PMP) results).

An employee bonus system is aimed at achieving common goals, motivates employees to improve the efficiency of the overall work, and consists of short-term and long-term bonus payments. In addition, the company has a number of additional benefits for employees, such as the provision of paid social leave, the payment of health benefits when granting annual leave, etc.

## **TCO Recognition and Awards Program**

The TCO R&A Program is designed to reinforce positive behaviors, enhance employee experience, and express appreciation for significant results achieved by employees towards contributing to the Company's success. Recognizing things done right, saying thanks for a job well done and letting employees know their efforts are appreciated goes a long way towards promoting and encouraging repeated outstanding efforts and fostering a positive work environment.

## **Medical insurance**

In accordance with the legislation of the Republic of Kazakhstan, TCO provides mandatory insurance for employees.

Voluntary medical insurance for TCO employees in Kazakhstan and their family members is provided by insurance companies of the Republic of Kazakhstan.

## **Healthy Lifestyle and Sports Programs**

In order to promote a healthy lifestyle, all TCO employees have the opportunity to use the services of fitness and wellness centers, the cost of which is reimbursed by the company.

In addition to this, the internal Health and Wellness program "Kemel" helps and encourages employees to achieve personal health and wellness goals. Kemel is a Kazakh word for "to strive for perfection". This program is built around three pillars: Healthy life, Active life, Leisure life.

Over the last year, the Kemel Group has held 67 online events and tournaments involving more than 10,000 participants. These included *Daily workouts*, *800 Kcal Program*, *Kemel Chess Tournaments*, *Wellness webinars*, *Wellness Consultant Program*, *Fitness Tips*, *Intellectual game "Quantum"*, *Recipe Contest*, *TCO Talent Show*, *Drawing competition*, *Online concerts dedicated to Nauryz holiday*, *Oil and Gas Industry workers Day*.

## **Medical Services**

Employees working on a rotational basis can use the services of a medical clinic located on the territory of Tengiz. The clinic is equipped with modern medical equipment.

## **Long Service Award Program**

Annually, as part of the "Long Service Award" Program, an employee who has reached a work anniversary at TCO (5 years and more) receives a gift and an icon with the TCO logo. In 2021, 431 TCO employees were rewarded as part of this program.

## Housing Loan Assistance Program

For many years, TCO has been implementing a housing loan assistance program by issuing interest-free loans to purchase housing and improve housing conditions. In 2020 - 2021, more than 278 housing loans have been issued.

## Kindergarten «Miras-Atyrau» for Children of TCO employees

TCO funded the construction of the Miras Atyrau Kindergarten in 2014, which provides daycare for children of TCO employees living in Atyrau. The curriculum of the kindergarten was developed by the newest programs and methodologies of Nursultan Nazarbayev Education Foundation.

## Zhas Urpak Program

The program aims to provide financial assistance to the children of the company employees in obtaining higher education in national and foreign universities and colleges.

Since 1998, TCO has allocated \$7.3 million as financial assistance in obtaining higher education. In the 2020-2021 academic year, 86 students took part in the program.

## Partial Reimbursement of expenses on children's holiday travel program

TCO reimburses the employees' expenses on holiday travel with children.





# 2021

Randstad Employer  
Brand Research

## Тенгизшевройл

самый привлекательный работодатель  
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### Workforce diversity and inclusion

It is important for the company that its employees demonstrate diversity and inclusion, partnership, integrity and trust, high performance, and are committed to protecting people and the environment. Therefore, as part of the annual performance management process, great attention is paid to how each employee's results were achieved, and what behaviors they demonstrated throughout the year.

TCO has a multinational workforce, and we are proud of our inclusive work environment that respects the uniqueness and diversity of cultures of our employees, and values their individual talents, ideas, and contributions. Diversity and Inclusion are core values in the TCO Way, and we believe that each of our employees brings tremendous value to the workplace through the diversity of their experiences, nationalities, ethnicities, genders, ages, education and socioeconomic backgrounds, religious and political beliefs, and individual personalities.

### Employee Networks

TCO's Cultural Diversity Network (CDN), XYZ Network and Women's Employee Network (WEN) create additional opportunities for our employees to learn, develop and transfer knowledge and experience. The TCO CDN fosters an environment of cultural inclusion and harmony between TCO's diverse cultures, focusing on highlighting our commonalities while understanding and respecting our differences. The Atyrau chapter of XYZ was founded in 2013 and includes TCO and Chevron Pipeline Plant employees. The Atyrau chapter of XYZ currently has over 700 members. The mission of the XYZ Network is to connect generations, provide a platform for experience and ideas exchange with peers, learn business processes and generate innovative ideas. The WEN has been established in 2013 at TCO and pursues a goal to empower, inspire and develop TCO workforce by advancing opportunities for increasing awareness among the TCO society on challenges and opportunities women face at the workplace.

Over the last year, TCO Networks held around 100 online events for more than 10,000 participants, recorded numerous podcasts with TCO leaders and experts, organized online concerts by uniting employees from different locations to support them during the pandemic, delivered charity events and volunteered to aid elderly, low income families, children's centers, COVID personal protection equipment for vulnerable society members; as well as organized master classes for educational organizations across Atyrau region.

Beyond that, TCO networks provide an environment for personal self-fulfillment of employees, experience exchange, professional development, charity, and many more to positively impact on company culture as well as local community!

## Digital culture

One of the great initiatives implemented as part of the enterprise Digital Organizational Capability plan is the Digital Scholar Program. Chevron is partnering with the Massachusetts Institute of Technology (MIT) and Rice University to create one-year Master of Science (MS) degree programs for Chevron and TCO employees, focused on engineering, management, and digital technology. This program gives our employees the opportunity to complete advanced study programs and obtain new data analytics and other technical skills to help lead TCO in an industry that is heavily applying digital tools and concepts. As a result, our first two program scholars successfully graduated from MIT and Rice in 2021 and started to work in two critical positions in the company. Moreover, TCO has sponsored two more employees who are currently pursuing a master's degree within the program and two more candidates have been selected to the program starting in August 2022.

In 2021, TCO boosted two important initiatives: a Data Science Expansion program and TCO Digital Pioneers Program. The first program is an effort to find ways of quickly scaling data science delivery and Organizational Capability growth, while resource constrained. This program empowered TCO Subject Matter Experts (SMEs) to gain new business insights using Machine Learning and proved alternative methodologies to deeply intertwine business SMEs within the data science workflow, driving faster speed of delivery. The second program identified talented TCO employees who are ready to learn new skills leveraging MS power tools and build self-service digital capabilities. More than 150 colleagues became Digital Pioneers, brought their innovative ideas to coaches and were able to develop solutions for their departments' needs. In addition to that, TCO conducted two successful Hack-a-thons on PowerApps and Robotic Process Automation with more than 35 contestants. These initiatives proved that any employee, regardless of their training or discipline, can connect to TCO's digital eco-system to increase digital fluency and create technology solutions to solve business problems and accelerate digital portfolios to deliver value at TCO.

To drive awareness and sustain knowledge exchange on digitalization, TCO continued to hold Digital Business Exchange events, where we invite external speakers who address digitalization trends across the Oil & Gas industry and go-digital projects of other companies, as well as internal business leaders who talk about digital projects at TCO and share their real-life experiences. 2021 was very fruitful in terms of guest speakers. TCO was honored to have the Vice Minister of Energy of the Republic of Kazakhstan speak about Digitalization in Kazakhstan, the Director of Transformation and digitalization department in National Company “KazMunayGas” and special guests from North Caspian Operating Company who shared about Digital Transformation in their companies.



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