



SAFERTY
QUALITY
STABILITY

ANNUAL REPORT

/// 2020

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KEY ACHIEVEMENTS in 2020



Production

INSTALLATION OF NEW PIPELINES PROVIDED AN INCREASE IN THE VOLUME OF STORAGE OF GASOLINES IN THE PRODUCT PARK OF THE PLANT

FROM **38** TO **57** thous. tons

GASOLINE OF EXPORT DIRECTION IS RELEASED AND SHIPPED:

AI-92 **208** thous. tons

DF (winter) **26** thous. tons

NUMBER OF TECHNOLOGICAL UNITS PRIOR

TO THE MODERNIZATION **9**

AFTER THE MODERNIZATION **24**

- On-spot loading rack (OSLR) was put into operation with the transition to 100% light oil products loading;
- With the installation of new pipelines and a manifold at P and OPT, all gasoline streams were removed from the plant's units (some of the flows from AHP, DCR and ORPF were not removed, since it was not envisaged by the project) to the automatic gasoline mixing station (AGMS). Implementation of the project increased the storage volume of gasoline in the plant's tank farm **from 38 to 57 thous. tons**;
- AI-92 gasoline and K4 (Euro-4) and K5 (Euro-5) class fuel for export direction was released and shipped:
 - AI-92 – **208 thous. tons**;
 - DF (winter) – **26 thous. tons**,
 - DF (summer) – **96 thous. tons**.
- A roadmap has been developed and preparatory activities for the production of marine distillate fuel in accordance with GOST 32510-2013 rev. No. 1 (DMX, DMA, DFA, DMZ, DFZ, DMB, DFB brands) have been initiated;
- Atyrau Refinery LLP passed the international **certification of REACH** oriented products for three products: "Paraxylol", "Benzene" and "AI-92 Gasoline".



Technologies

In 2020, Atyrau Refinery introduced measures at the technological units to achieve higher economic performance indicators, improve quality characteristics of the components produced and increase the volume of targeted products to ensure production of high-quality products that meet the K4 and K5 class standards.

At the end of 2020:

- Highest KPI in the history of the plant:
 - refinery yield – **77.2%**;
 - light oil product yield – **59.2%**.
- Excellent light products production indicators:
 - gasoline – **1,053,978 tons**;
 - diesel oil – **1,472,181 tons**;
 - jet fuel JF – **84,086 tons**.
- In 2020, a record volume of petrochemical products was produced – **250,443 tons**.
- Khazar – 38, –32 diesel fuel production. In 2020, we shipped **44.0 thous. tons**.
- Production of 100% clean diesel fuel that meets environmental classes K5 (Euro-5) (sulfur content no more than 10 ppm).
- We have finalized preparatory activities for the production of **Jet A-1** fuel for turbojet engines in accordance with ASTM D 1655 B standard.

EXCELLENT LIGHT PRODUCTION INDICATORS

gasoline

1,053,978 tons

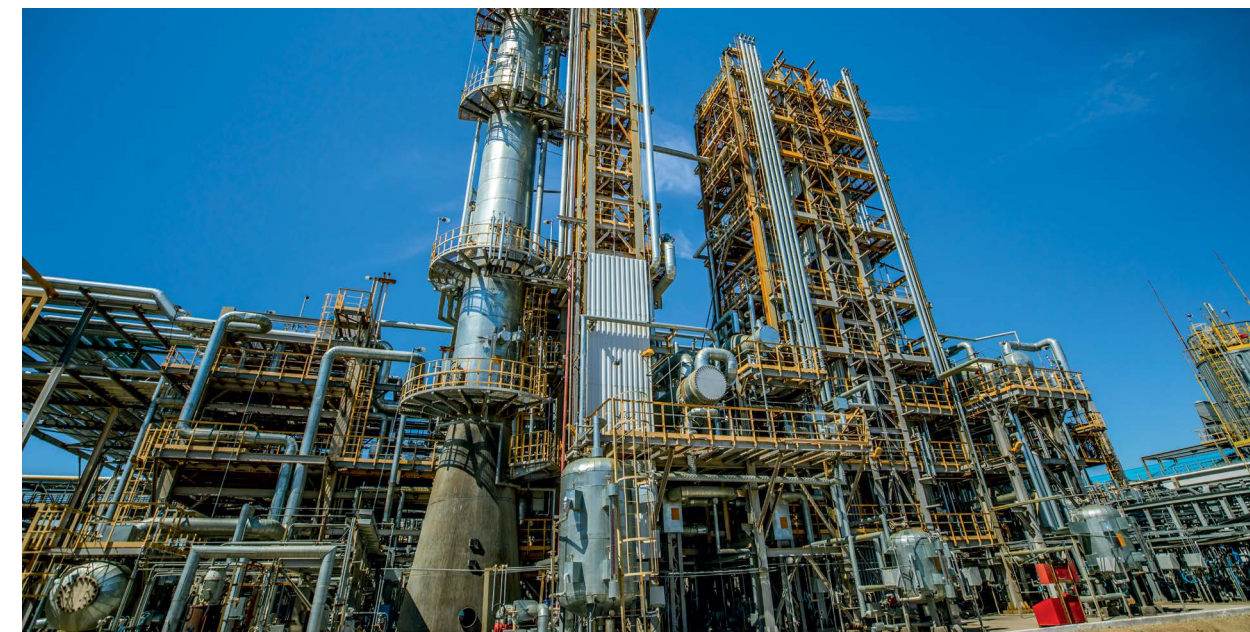
diesel fuel

1,472,181 tons

JET FUEL JF

84,086 tons

REACH certificate is a document issued during the assessment and registration of conformity of chemical substances for the purpose of their free circulation in the territory of the European Union. In accordance with the EU Regulation 1907/2006 dated 18.12.2006, the REACH certificate (Registration, Evaluation and Authorization of Chemicals) is required to improve and optimize the existing legal framework in the field of regulation of production and circulation of chemical products in the EU. Based on the results of REACH certification and registration, Atyrau Refinery LLP received the right to import Paraxylol, Benzene and AI-92 Gasoline to all European Union countries.



Finance

- In January 2020, Atyrau Refinery LLP attracted a concessional loan in tenge at Development Bank of Kazakhstan JSC in the amount of **KZT 46 bln**. The funds were fully directed for partial early repayment of foreign currency loans at the Export-Import Bank of China and Halyk Bank of Kazakhstan JSC.
- In December 2020, the balance of **USD 98 mln** was converted into tenge under the foreign currency loan with Halyk Bank of Kazakhstan JSC.
- Atyrau Refinery transferred **35.3 bln tenge** in taxes to the budget of Atyrau city, with an increase by 21% as compared with 2019.



Social Matters

- Reconstruction of a number of infrastructure facilities of the plant.
- New medical center for the provision of comprehensive, qualified medical care.
- Opening of the Institute of Petrochemical Engineering and Ecology.
- Presenting keys to new apartments to qualified specialists of the plant.
- Opening of the renovated museum of history and labor glory to the 75th anniversary of the enterprise.
- Reconstruction of the central canteen.

KEY EVENTS OF 2020



Atyrau Refinery LLP and MEDIKER company signed the **Contract for Comprehensive Medical Services** for the personnel of Atyrau Refinery LLP.

January

February

Sh. Danbay, Atyrau Refinery LLP's General Director held a solemn ceremony and presented **keys to the apartments** to 13 promising young specialists of the plant.

Atyrau Refinery LLP and S. Utebayev Atyrau University of Oil and Gas signed a memorandum of understanding and cooperation.

We held grand opening of the **Co-working center** for our workers on the basis of the training center of the Atyrau Refinery.



Members of the Finance and Budget Committee of the Mazhilis of the Parliament of the Republic of Kazakhstan visited Atyrau Refinery. The Atyrau Refinery launched the **scheduled shutdown maintenance** of equipment for EDP ADU-2, CGDFHU, HPPP (tit.78) of ORFDW and SRU CSP processing units.

March

April

Sanitary regime has been strengthened at the Atyrau Refinery: disinfection of administrative and household premises and the territory.

Atyrau Refinery employees organized a patriotic challenge – sang the National Anthem of the Republic of Kazakhstan and the famous song “Atameken”.

Petrochemical products – Benzene and Paraxylol produced at the Atyrau Refinery have passed the **international REACH certification**, and we obtained the right to export them to the European Union countries.



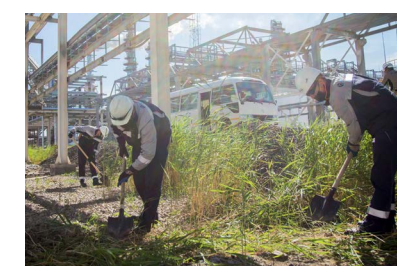
In honor of the 75th anniversary of the Great Victory, held the traditional **“Grateful Descendants”** campaign.

Six administrative and household facilities were put into operation at the Atyrau Refinery after thorough overhaul.

May

June

In honor of the International Children's Day Atyrau Refinery LLP held a traditional children's drawing competition. As part of the clean-up day, more than 700 workers came to **clean the plant's territory**.



During the celebration of the Day of Chemical Industry Workers, a number of veterans of the plant and active workers were awarded.

On July 1, 2020, scheduled shutdown maintenance began at 15 process units of four production facilities: CFDR, AHP, CSP, DCR of the Atyrau Refinery.

The central canteen of the plant was reopened after a major reconstruction.

Alik Aidarbayev, Chairman of the Management Board of KazMunayGas NC JSC, paid a working visit to the Atyrau region.

Opening of a new building of the **medical center**.

July

August

100 families of workers of the Atyrau Refinery received keys to new apartments in the **Victory Park residential complex** of the oil capital.

Akhmetzhan Yessimov, Chairman of the Board of Samruk-Kazyna NWF JSC visited Atyrau Refinery.

Renovated **museum of history and labor glory** was opened at the Atyrau Refinery to the 75th anniversary of the enterprise.





Atyrau Refinery **celebrates its 75th anniversary.**

Public figures of Atyrau city jointly got acquainted with our environmental projects of Atyrau Refinery.

September



A Meeting was held between the General Director of Atyrau Refinery, Sh. Danbay and the leadership of APEC Petrotechnic College.

SOLOMON: a project to improve the rise of production activity entered in phase III.

October



In honor of the Day of Professionals, Atyrau Refinery LLP hosted award ceremony for a number of the plant's workers and veterans.

Zhaiyk-Caspian Aarhus Centre held online conference of technologists of Atyrau Refinery and community leaders of Atyrau city.

Data on the state of the atmospheric air are transmitted on the LED-screen of Atyrau Refinery LLP.

November



Joint project for the opening of the **Institute of Petrochemical Engineering and Ecology** was implemented by S. Utebayev Atyrau University of Oil and Gas and the Atyrau Refinery.

The first system for monitoring the technical condition and automatic diagnostics COMPACS® has been implemented at the catalytic cracking light naphtha esterification unit (TAME) of the Atyrau Refinery.

Atyrau Refinery specialists train their skills using **computer simulator complexes – CPC.**

December

MESSAGE FROM THE CHAIRMAN OF THE BOARD



DANBAY Shukhrat

Chairman of the Board, "Atyrau Refinery" LLP

Dear colleagues,

2020 was a tough year for Kazakhstan. The country's leadership was forced to deploy large-scale measures to combat the COVID-19 coronavirus infection pandemic, and in the spring of last year, the state of emergency was introduced, and quarantines and restrictions on the work of organizations throughout the country remained in various forms until the end of the year. This led to a decrease in the country's business activity and complications in the operation of industrial enterprises. Such measures in the fight against the pandemic were carried out around the world and led to a decrease in the global economy, which negatively affected the demand for the Kazakhstani export products.

Like all sectors of the economy, the oil refining sector has also experienced a number of difficulties. But thanks to the prompt and thoughtful response of the Samruk-Kazyna fund and the national company KazMunayGas, the production potential of the group's enterprises and, most importantly, jobs and salaries were preserved.

During the hard time for the whole country, the Atyrau Refinery team showed fantastic concentration of willpower, solidarity and consciousness. During the strict quarantine, the plant did not stop operating for a minute and worked as usual, fulfilling the production plan of the Ministry of Energy of the RK for the production of socially significant oil products. On top of all, at the very peak of the pandemic, we successfully carried out scheduled maintenance of 15 processing units and launched them on time.

At the end of 2020, the volume of raw materials processing amounted to **5,016 mln tons**. The volume of refining reached **4.5 mln tons**. The highest KPIs in the entire history of the plant were achieved:

the refining yield amounted to **77.2%**, and light oil products yield amounted to **59.2%**. This became possible due to the modernization of the plant's processing units.

In 2020, we practically doubled the production and export shipments of high value-added products – Benzene and Paraxylol. We increased the export volumes of gasoline. Last year, we started to supply our winter **diesel fuel Khazar** with a cold filter plugging point of minus 38°C corresponding to the environmental class K5 to the external market.

Receiving the international **REACH Certificate** which grants the right to import Paraxylol, Benzene and AI-92 Gasoline to all European Union countries was an important event for the plant.

Despite all the difficulties brought by the pandemic, we managed to maintain the enterprise's financial stability in 2020. Not only we fulfilled the plant's obligations to the state budget, but also increased the amount of deductions. At the end of 12 months of 2020, the Atyrau Refinery

*Based on the results of 2020
the crude processing made up **5,016 thousand tons***

paid taxes to the state treasury in the amount of **KZT 40.3 bln.**

2020 was an anniversary year for us – the Atyrau Refinery turned **75 years** old! In honor of this date, and being guided by the care of the personnel, we have performed the reconstruction of a number of facilities of the plant infrastructure. We opened a new medical center, overhauled the central canteen and the plant's museum. All these facilities have modern equipment. **142 plant workers** became the happy owners of new and long-awaited housing. Among them are specialists who, by their effective work, have proved their loyalty to the Atyrau Refinery, and those whom we consider to be the promising future of our plant.

Today, Atyrau Refinery is practically a brand-new plant, where all the best world technologies in the field of oil refining and petrochemistry have been introduced. And a perfect production requires competent, highly qualified personnel. In order to solve the problem of personnel shortage for

our industry, jointly with S. Utebayev Atyrau University of Oil and Gas, we managed to implement a highly anticipated and significant project – we have opened the Institute of Petrochemical Engineering and Ecology. The unique educational center will train specialists in high-demand area for the oil refining and gas chemical industries. And 2021 was declared the Year of Knowledge at the Atyrau Refinery!

2020 was a year of strength tests and a year of positive changes, our professional growth and achievement of target figures. We will not subside with what has been achieved, we have many plans and productive activities ahead of us. First and foremost, we will continue to work on increasing the efficiency of oil production, including high added value products and improving production technology.





SAFETY
QUALITY
STABILITY

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About the Refinery

IN 2020, RECORD
VOLUME OF
PETROCHEMICAL
PRODUCTS

250,443
tons

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/ ABOUT THE REFINERY

Atyrau Refinery LLP is the oldest specialized enterprise in Kazakhstan and an acknowledged leader in its industry.

The enterprise's first workshops were put into operation on September 8, 1945 during the Great Patriotic War. The opening of the plant was exceptionally strategic. The initial refining capacity was 800 thousand tons of oil per year.

Gradually, the plant acquired a vital importance for our country's economy. In the 60s, the course was shaped to further increase the oil refining volume by constructing new units. For a long time, the Atyrau Refinery remained the only enterprise in Kazakhstan to produce transport fuel.

After Kazakhstan gained independence, the Atyrau Refinery went on challenging road of development, transition to the rails of a market economy, increasing profitability, and following world trends in oil refining.

Over the past several years, within the framework of the state industrialization program at the Atyrau Refinery LLP, an extensive work has been done to modernize existing technological installations, build modern oil refining complexes, and form a petrochemical cluster. Reconstruction and modernization allowed the Atyrau Refinery LLP to increase the release of socially significant oil products: high-octane gasoline, clean diesel fuel, aviation fuel by obtaining additional volumes of mixed kerosene-type jet fuel. At the same time, the quality of produced gasoline at the plant was brought to **Euro 4, 5 Standards with benzene content of less than 1%.**

With the purpose of further development of the **petrochemical industry** at the refinery, the key task was solved: the first production of Benzene and Paraxylol in Kazakhstan had been created.

The final stage of the **modernization** – construction of deep oil conversion complex – was carried out by the efforts of an international consortium, which included

Sinopec Engineering (Group), Co. Ltd (China), Marubeni Corporation (Japan) and KazStroyService Oil and Gas Construction Company JSC (Kazakhstan). 104 domestic companies participated in the construction, which was deployed at 55 sites. Totally, 12 processing units and more than 40 off-plot facilities were built under the project. The extensive renovation helped to keep the Atyrau Refinery LLP competitive in the modern fuel market and to minimize the plant's harmful impact on the environment. The strategic goal of the reconstruction – the organization of a modern technical base at the operating enterprise. Today, the plant's products steadily conquer the world's markets.

The foundation of all the enterprise's achievements is the ultimate attention to the quality of the products. From the first days of its existence, the central plant laboratory has been functioning at the Atyrau Refinery, at its disposal today there are more than 680 measuring instruments and over a

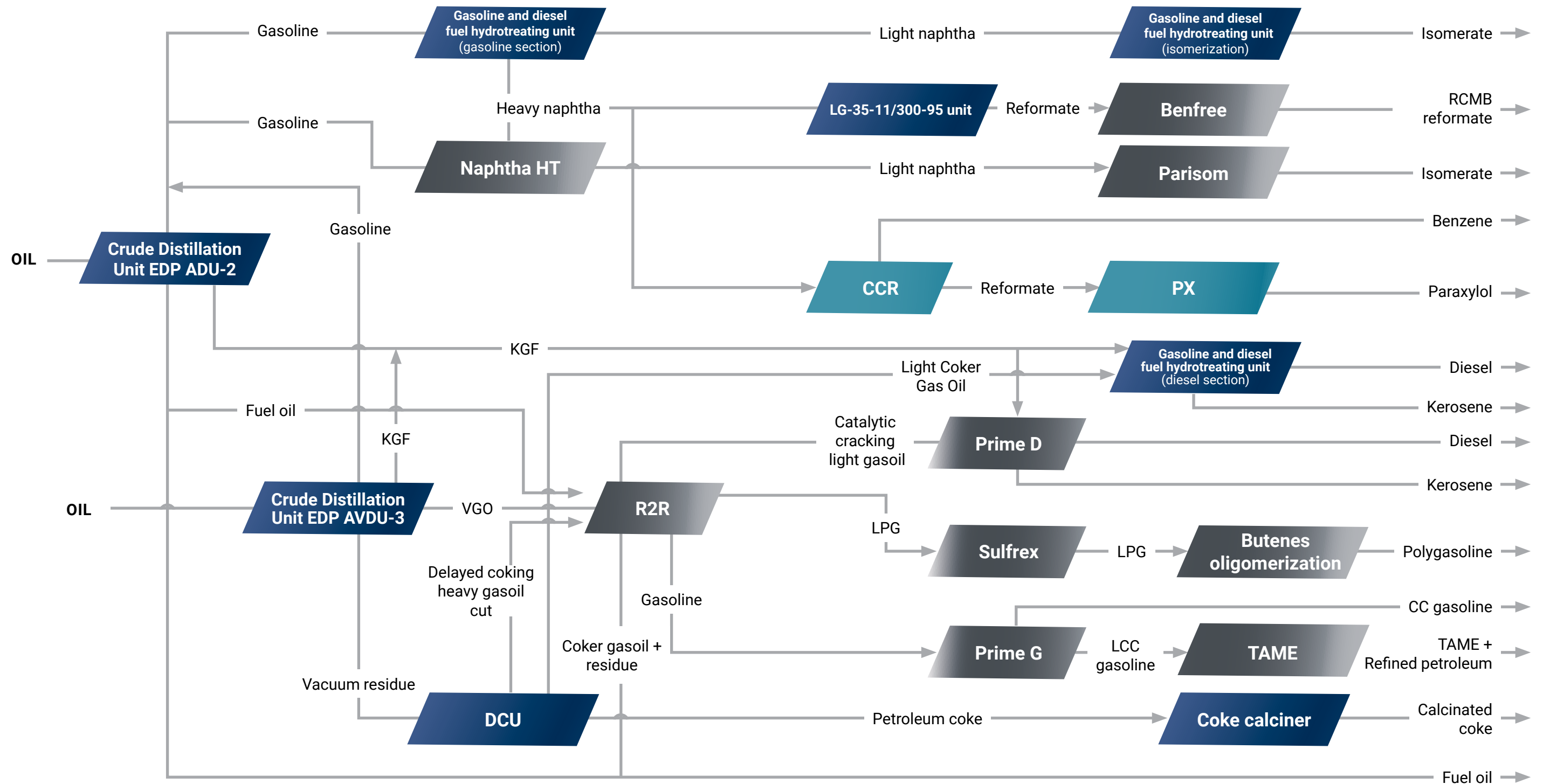
hundred units of test equipment, which makes it possible to conduct about 300 thousand tests for certification of products every day. A quality management system has been introduced in the research center of the Central Laboratory of the Enterprise, which is provided by highly professional personnel who have passed through the training at enterprises of the countries of near and far abroad. In addition, the staff of the plant includes 7 expert auditors for certification of oil products and internal auditors for an integrated management system.

Personnel is the main resource and the main value of Atyrau Refinery LLP. Dedicated to their profession, committed to continuous development, self-sacrificing and deeply involved in the business of the plant, employees are the key to success in all initiatives and projects. Even in spite of the challenges of 2020, our team demonstrates its readiness to continue successful development and follow the latest trends in the downstream segment.

Efficiency of Operating Processing Units

processing unit	nominal capacity	measurement unit
EDP ADU-2	252.2	tons per hour
EDP AVDU		
AU block	378.8	tons per hour
VU block	227.2	tons per hour
LG-35-11/300-95		
HT block	72.0	m ³ per hour
catalytic reformer block	72.0	m ³ per hour
CCR	126.2	tons per hour
PX	362.0	tons per hour
TNGU	3,300.0	m ³ per hour
DCU	121.0	tons per hour
CCU	23.0	tons per hour
CGDFHU		
HT BS block	81.7	m ³ per hour
isomerisation block	32.0	m ³ per hour
HT & DFD block	198.0	m ³ per hour
SRU	1,460.0	kg per hour
HPPU		
HPP	11,057.0	nmc per hour
HPU	5,612.0	nmc per hour
T 3201	300.0	tons per hour
T 3202	55.9	tons per hour
T 3203	55.2	tons per hour
T 3204	179.0	tons per hour
T 3205	101.0	tons per hour
T 3206	162.0	tons per hour
T 3207	49.0	tons per hour
T 3208	44.0	tons per hour
T 3209 31 block A	88.0	tons per hour
31 B block	33.0	tons per hour
32 block	65.0	tons per hour
33 A block	4.9	tons per hour
33 B block	4.9	tons per hour
T 3210	10.7	tons per hour
T 3211	31.0	tons per hour
T 3212 (HPU)	6.9	tons per hour
T 3212 (HPP)	8,700.0	nmc per hour

“ATYRAU REFINERY” LLP SCHEMATIC DIAGRAM AND FLOWS






Visit of the Chairman of the Management Board of “Samruk-Kazyna”, A. Yessimov, August 2020, with the participation of the Akim of the Atyrau region, M. Dosmukhambetov, the Chairman of the Management Board of NC KazMunayGas JSC, A. Aidarbayev


/ STRATEGY

The development strategy of Atyrau Refinery LLP for 2014–2022 determines the directions of development for the main type of activity, providing for strategic stability and improving the performance indicators of Atyrau Refinery LLP.

Strategic Priorities

- Sustainable development and efficiency increasing of the enterprise to assist the state in stabilizing the domestic market for petroleum products;
- Ensuring industrial and environmental safety of production;
- Social responsibility and human resources development;
- Decisions making in operational and investment activities based on a accurate risk analysis;
- Increasing the Kazakhstan's content and supporting the domestic manufacturers;
- Comprehensive innovation and technological development;
- Consistency and efficiency in decision making and their implementation;
- Improving energy efficiency and development within the vector of the "green economy".

 INCREASE IN THE VOLUME OF OIL REFINING UP TO
5.5 mln tons

 INCREASING THE REFINERY YIELD UP TO
87%

Strategic Goals

- Increasing the efficiency of petroleum products production, including those with high added value, and improving production technology;
- Improving safety at work, labor and environmental protection;
- Improving the efficiency of equipment maintenance.

Strategic Indicators

- Increase in the volume of oil refining up to 5.5 million tons per year;
- Increasing the refinery yield up to 87%;
- Improving the efficiency of the refinery's technological units (reducing process fuel and irretrievable losses).

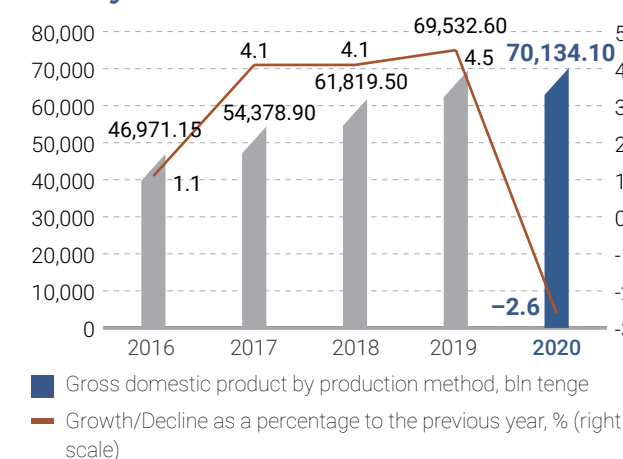
/ ENVIRONMENT OVERVIEW

The coronavirus pandemic and quarantine measures have led to a global economic cutback in 2020. According to the World Bank, the world economy contracted by 4.3%. While, in advanced economies, the decline amounted 5.4%, and in countries with emerging economy – 2.6%.

Kazakhstan has also faced the negative economic impact of the pandemic. The state of emergency and quarantine across the country restricting the work of organizations led to a cutback in business activity. Kazakhstan's GDP

in 2020 declined for the first time in more than 20 years. The decline was 2.6%. In the service sector, the decline was 5.6%, while production showed an increase of 2%.

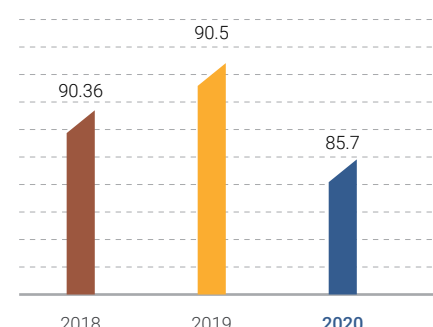
GDP Dynamics



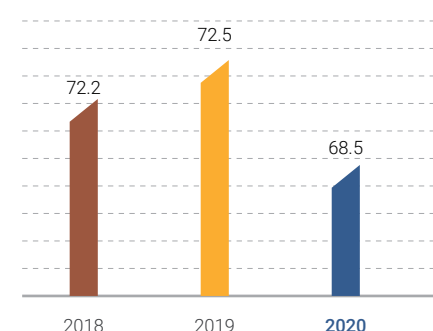
Oil industry of the Republic of Kazakhstan has come under intense pressure. In connection with the economic cutback and the suspension of work in many countries of the world, there was a decrease in oil and petroleum products consumption, a rapid accumulation of reserves began, there was a risk of overloading the world's oil depots, and the price of oil began to fall rapidly. The RK government, like the OPEC + countries, introduced restrictive measures on oil production in 2020, which helped stabilize the market. In 2020, oil production in Kazakhstan decreased from 90.5 mln tons to 85.7 mln tons. During the year, 68.5 mln tons of oil were exported.

Currently, there are three major oil refineries in Kazakhstan (Atyrau, Pavlodar, Shymkent refineries) and more than thirty mini-refineries. By the end of 2020, 11.53 mln tons of oil products were refined. 4.48 mln tons of gasoline, 4.55 mln tons of diesel fuel, 2.1 mln tons of fuel oil, 438 thous. tons of aviation fuel, 1 mln tons of bitumen were produced.

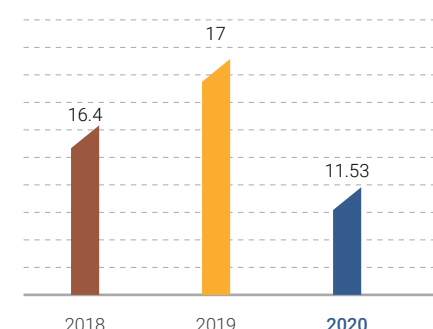
Oil production in Kazakhstan, mln tons



Oil export, mln tons



Refined oil products, mln tons



/ OPERATING RESULTS

At the end of 2020, the volume of raw materials refined at the Atyrau Refinery amounted to **5,016 mln. tons**. The volume of production reached 4.5 mln. tons, approximately 29% of which is diesel fuel, 21% – gasoline and 21% – fuel oil.

With the installation of the DCU heavy gasoil discharge line at the CCU, the refining yeild was increased by an estimated 1.0%.

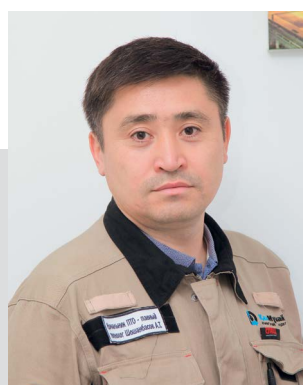
During the current repair, internal devices of the column K-5 were replaced at the EDP AVDU-3 unit. After replacement of the contact devices in the K-5 column of the VU block, the production of vacuum gasoil was brought up to the design parameters (at least 48% of the batch).

Production Dynamics, tons

Product name	2018	2019	2020	Change in %
Production volume, tons	4,742,256	4,790,217	4,370,535	-8.8%
Gasoline Production	1,191,482	1,198,178	1,032,120	-13.9%
RT fuel production	40,878	104,078	77,805	-25.2%
Diesel fuel production	1,458,633	1,547,560	1,456,169	-5.9%
Production of household furnace fuel	128,743	10,754	24,018	123.3%
Benzene production	16,202	26,607	43,786	64.6%
Fuel oil production	1,144,707	1,235,842	1,047,767	-15.2%
Vacuum gasoil production	444,674	344,523	324,454	-5.8%
Coke production	130,666	134,820	127,843	-5.2%
Liquefied gas	165,844	126,951	126,902	0.0%
Sulfur	4,055	4,397	4,999	13.7%
Paraxylol production	16,372	118,644	206,947	74.4%
change in semi-finished products remnants		-62,137	-102,275	

Refining Volume Dynamics, tons

Product name	2018	2019	2020	Change in %
Total refining, tons	5,267,734	5,388,245	5,016,303	-6.9%
including oil				
mangyshlak oil	4,690,113	5,233,791	4,922,102	-6.0%
martyshinsk oil	505,483	92,111	38,670	-58.0%
light oil	25,299	-	-	-
GVP	43,380	53,838	50,120	-6.9%
gas condensate	3,460	8,504	5,411	-36.4%
hydrogen from natural gas H ₂	-	-	5,296	-



SHOSHANBASSOV Adilet
Chief Technologist

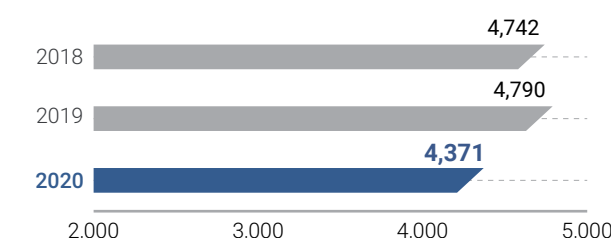
“Despite the epidemiological situation in 2020 and the measures taken to combat the pandemic, the plant operated during the year as usual. We successfully completed the production program and carried out the necessary repairs.

The plant achieved record production indicators. Refining yield reached 77.2%. The yield of light oil products increased to 59.2% in 2020 as compared to 58.1% in 2019.

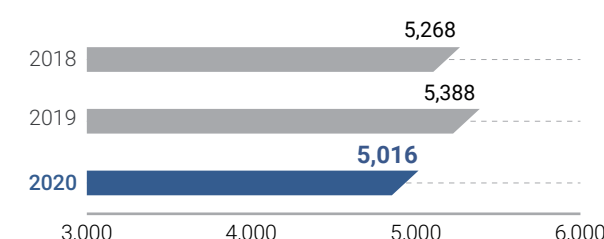
Last year, an automatic on-spot loading unit was put into operation with a transition to 100% loading of light oil products (gasoline, diesel fuel and RT brand jet fuel).

The installation of new pipelines made it possible to ensure the withdrawal of all gasoline flows from the plant's units to the automatic gasoline mixing station (AGMS). As a result, the volume of gasoline storage in the plant's tank farm increased from 38 to 57 thous. tons.

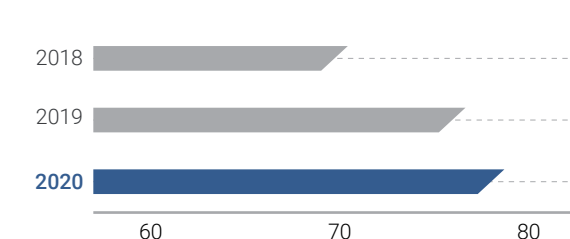
Production volume, thous. tons



Total refining, thous. tons



Refining depth



In 2020, we substantially increased the export of gasoline and diesel fuel, which became possible due to the domestic market saturation. The growing capacities of the plant increase the country's export potential and contribute to the economy diversification.

We performed preparatory work for the release of JET-1 jet fuel. The plant is now ready to manufacture and ship a new product.

Last year, Atyrau Refinery passed the REACH oriented products international certification for three products Paraxylol, Benzene and AI-92 Gasoline. Thanks to this, we were granted the right to import these products to all European Union countries, which will contribute to the further growth of exports.

In 2021, we will focus on completing the production program and achieving the target refining volumes. Our task is to provide the domestic market with the necessary oil products and continue to increase the shipment of the Kazakhstan's products for export.”

Business Process Development

RLG International

As a result of the implementation of the joint project of the Atyrau Refinery and RLG International, the operational efficiency of oil products production at the refinery increased massively in 2019–2020. Significant improvements have occurred in various aspects of

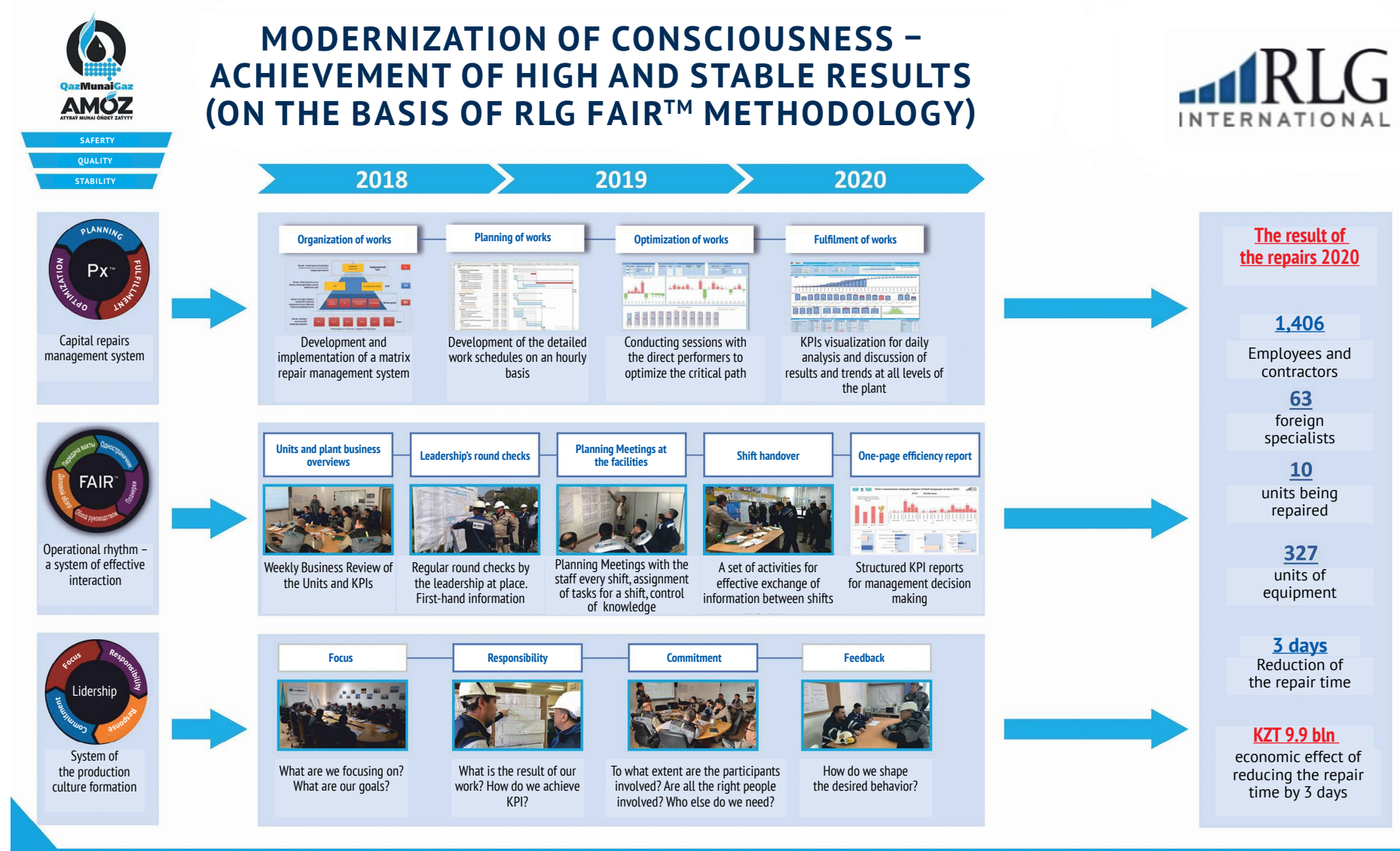
the main activities of the enterprise, in particular, fulfillment of planned indicators, reduction of unplanned downtime, involvement of personnel in solving production problems and other criteria for perfect production.

Operational efficiency is one of the main criteria for quality work which reflects the best ratio between the final results of the enterprise and the resources spent on their achievement. The corresponding project started at Atyrau Refinery in 2019 and was finished in January 2021. Its results are a reduction in deviations of the final indicators of the production plan from the fact at the main highly profitable production units of the plant by 23% and a decrease in the number of incidents: from 36 in 2019 to 25 in 2020.

Formation of the production efficiency management system and production culture at the Atyrau Refinery increased by 38% in measurable terms and the continuous improvement of production indicators hit 63%. In terms of maintaining the Px™ methodology introduced in 2018 – preparation and conduct of major overhauls, we have reached stability of the process: the volumetric and capital-intensive major overhaul carried out in 2020 at the Atyrau Refinery was completed 3 days ahead of schedule.

In the course of the project, we developed and implemented a mechanism for monitoring the shift KPIs of the units, optimized the operational rhythm of interaction in production by discussing plans and achievements every shift with the involvement of production personnel, created an algorithm for accepting and transferring a shift with the development of checklists that clearly regulate the process of information exchange during inter-shift.

At the beginning of 2021, Atyrau Refinery launched the third joint project with RLG International, aimed at introducing the Mx™ (Perfect Maintenance) maintenance system.



Digital Reliability

In December 2020, the first system for monitoring the technical condition and automatic diagnostics COMPACS® was implemented at the catalytic cracking light naphtha esterification unit (TAME) of the Atyrau Refinery. It is part of the program for managing the digital reliability of production assets of the KMG Group aimed at improving the safety and operational readiness of technological facilities, the efficiency of maintenance and repair processes.

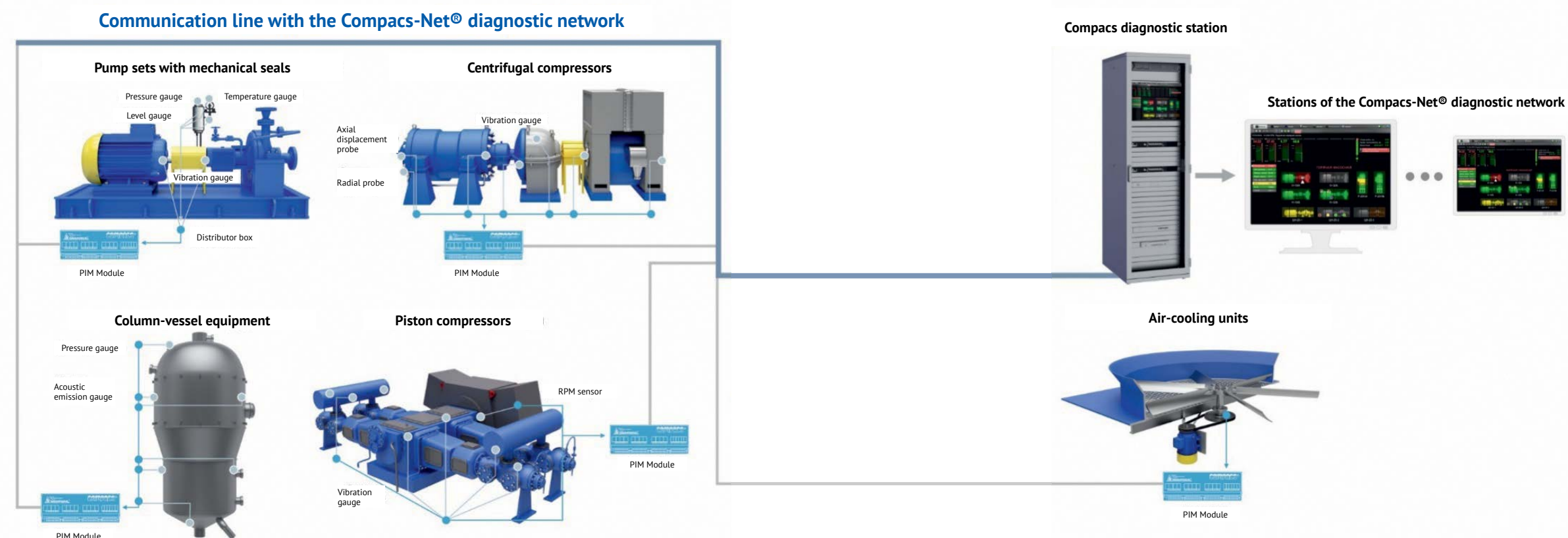
The **COMPACS® system** is the world's only hardware and software complex, which artificial intelligence provides real-time early automatic diagnostics of malfunctions and a forecast of the technical condition of the main technological equipment of refineries and petrochemical plants. The system ensures **100% elimination** of accidents and unscheduled downtime of technological complexes due to sudden equipment failures, a significant reduction in the duration of scheduled shutdown repairs by more than 30%, an increase in personnel discipline and responsibility, as well as a

reduction in maintenance and repair costs compared to the scheduled preventive repair system (SPR).

The system's distributed hardware platform consists of intelligent measuring modules and sensors of various physical quantities that measure, amplify, convert and transmit signals from sensors on the units to a diagnostic station located in the control room of the processing unit.

The introduction of intelligent technology at the catalytic cracking light naphtha esterification unit

is the start of the plant's five-year Program for the transfer of dynamic and main static equipment to operation according to the actual technical condition. The Atyrau Refinery will deploy the **Compacs-Net® diagnostic network** in the first quarter of 2021 and 4 more technological complexes will be equipped with similar systems. Implementation of this Program is a key link in the project for the implementation of risk-oriented digital technologies for managing the reliability and operational efficiency of subsidiaries of the KazMunayGas NC JSC Group.



Performance Excellence Project

Atyrau Refinery jointly with **HSB Solomon Associates** continues to implement the Performance Excellence Process (PEP) project aimed at significantly improving production performance in energy efficiency, reducing hydrocarbon losses and increasing the product yield of processing units. The project is vital for the plant because it is aimed at qualitative improvements not only in the business, but also in the production culture at the Atyrau Refinery.

Solomon is a recognized leader in benchmarking fuel and energy enterprises and creating sustainable improvements at refineries with extensive expertise in implementing similar projects at refineries around the globe.

Cooperation within the PEP project between Solomon and the Atyrau Refinery involves 3 phases.

For the **first phase**, the plant collected a significant amount of data from the target areas and submitted it to Solomon for analysis.

Further, one-on-one meetings took place with 10% of the Atyrau Refinery employees on the topics of understanding the working practices prevailing at the plant, comparing them with the best industry experience for assessing and subsequent developing specific recommendations for improvements.

In the **second phase**, Solomon developed a series of proposals that are prioritized based on the specific situation at the Refinery.

In 2020, the project entered the third phase – direct implementation of Solomon's recommendations at the Atyrau Refinery. In particular, an action plan for implementation of the recommendations is being determined, and additional proposals are being collected. Responsible persons and leaders of the implementation teams have already been appointed. Thus, **Sergei Shumilov, chief energy efficiency and IMS specialist with 25 years of experience**, was appointed the leader of the team for implementation of changes in energy efficiency. **Ibrayim Kairliyev, head of the technical department**, is the leader of the team for implementation of changes in terms of reducing hydrocarbon losses. **Nail Khakimov, Deputy Head of the technical department**, headed the team for implementation of changes in product release.

The project's prospects look impressive. Provided that all recommendations are fully and correctly applied, we can achieve significant effect: energy consumption will decrease by 20% compared to the level of 2018, losses of hydrocarbons – up to 0.50% by weight, the yield of target products will increase substantially.

But more importantly, the project is aimed at changing the production culture of the plant workers, improving behavioral functions, namely, the formation of an “accountable owner” mentality, when the team becomes the owner of the processes interested in the best performance of functions and activities. Deep involvement should run through the entire business chain and lead to the creation of cross-functional teams from different areas of production, who will regularly discuss the current status of production tasks, work out aspects that need to be improved, and develop steps to achieve the best end result.



/ FINANCIAL AND ECONOMIC RESULTS OF THE YEAR



MendeBayev Timur

Director of the Department of Economics and Finance

“2020 was a rather difficult year for the plant, as well as for the most enterprises. On the one hand, fighting against the global pandemic, which demanded the introduction of restrictive measures in work for the protection of the workers and the plant, which meant a reduction in many habitual operations and processes, produced an impact upon us, as well as all production enterprises. In the conditions of the pandemic and closed borders, the plant was able to make repairs of a catalytic cracking unit. Cracking is a key installation, which provides components for many other units and, in general, ensures the depth of processing.

For petrochemistry a catalytic cracking unit is also a key production. Cracking provides the production of the so-called “stable gasoline”, which later enters as the raw material passes to the naphtha selective hydrogenation unit, this unit purifies naphtha by hydrogen, and the refined naphtha feeds the Aromatics Production Complex (hereinafter referred to as APC), which produces benzene and paraxylene.

Talking of the volume of oil refining, the refinery processed 5,016 thousand tons. The volume of processing is the main aspect when we talk about the income level of the enterprise. As far as the financial management is concerned, it is impossible to ignore the Company’s efforts to stabilize the financial position, minimize the foreign exchange risks and a successful loan refinancing operation.

One of the most important priorities at this stage for the enterprise is the correct management of cash flows, obligations in order to prevent cash gaps and an increased

foreign exchange risk. Talking of the obligations, we mean the loans from the foreign financial institutions in several USD bln, raised for the modernization.

To understand the order of numbers, we can say that the plant pays creditors about USD 400 million annually – this is the interest and the main debt. So, in 2020 the plant paid off to the creditors USD 404 million as part of the service obligations.

In recent years, we have been actively working to reduce an increase in the volume of the foreign currency loans. It is important to note that in 2018, the share of foreign exchange liabilities made up 95%.

We finished 2019 by reducing this share down to 84%, and at the end of 2020, we managed to reduce it down to 73%. Decrease in the foreign exchange liabilities reduces the foreign exchange risks and costs, associated with the exchange rate differences, which is an important contribution to the further financial stability of the plant, since the Company earns in KZT, and pays for loans in foreign currency. Especially taking into account the fact that over the past 7 years, the average annual “depreciation” of KZT against US dollar made up 16.5%.

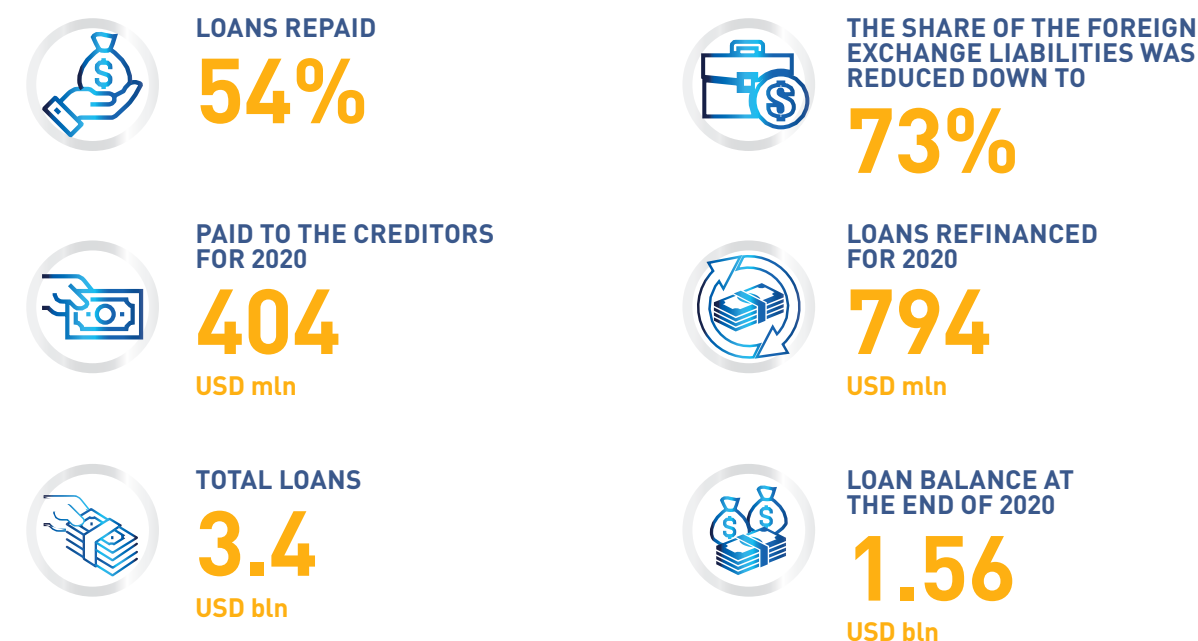
Besides, as part of improving the financial situation the enterprise, we are working on refinancing borrowing on more favorable terms, currently available. In 2019, we carried out refinancing operations for USD 452 million, in 2020 the amount of the refinancing operations made in aggregate USD 794 million. All this was preceded by a great deal of work, made by us together with the parent company KMG. The great support at every stage made it possible for us to achieve this result.

In 2020, we have begun work for attracting money from the European Bank for Reconstruction and Development to finance the “Tazalyq” Project. The Project is aimed

at modernizing the mechanical treatment facilities and reclamation of the evaporation ponds. All this will allow the plant to reduce the level of impact on the environment in the process of operating activities. The EBRD is very attentive to the choice of projects and to companies to be funded, and attracting such a respectable institutional lender speaks of the high importance of our Project in the understanding of the EBRD, as well as the corresponding level of our enterprise for a possibility of the interaction with the international financial institution of this rank. Signing a Loan Agreement will take place in June 2021.

The plant remains one of the key taxpayers in the region and, thus, makes an important contribution to the development of the region and life of the city. Even in the difficult circumstances of the last year, when many enterprises reduced their tax payments, the plant paid **KZT 42.3 billion** in total to the local and Republican budgets, as well as under the social obligations of NJSC “GK Government for citizens”. Talking of the particulars, the tax payments of the Atyrau Refinery after modernization make up **more than 20%** of all tax revenues of the city of Atyrau. This is comparable to the specific weight of the Atyrau city’s tax revenues from such giants of the Kazakh oil and gas industries as TCO and NCOC, despite the fact that these Companies significantly surpass the plant in terms of the scope of activities, turnover, size and magnitude of income.

According to the instruction of the Management Board of “Samruk-Kazyna” JSC, by the end of 2021, it is required to reduce the share of the foreign currency loans down to 80%. Already in 2020, ahead of the schedule, we have achieved the reduction of the foreign exchange liabilities down to 73%. In many ways it made possible thanks to the assistance of the executive body of the plant, as well as the support and expertise of Tiyesov Daniyar, the Chairman of the Supervisory Board of the Atyrau Refinery, and its members, Melnik Victoria and Dandybayeva Zhanara. Our goal for 2021 is to reduce this figure down to 55%.”



Income statement

Key indicators of the income statement, KZT mln

Indicator	2020	2019
Revenue	207,554	200,386
Prime cost	(117,777)	(104,878)
Gross profit	89,777	95,508
General and administrative expenses	(3,882)	(3,400)
Other operating income	3,380	7,518
Other operating expenses	(56,205)	(130)
Operating income	33,070	99,496
Finance income	12,100	8,517
Finance Expenses	(63,048)	(65,301)
Loss/profit before tax	(17,878)	42,712
Income tax savings/(expenses)	489	(10,906)
(Loss)/profit for the year	(17,389)	31,806

The main reason why the plant has a “net loss” is a negative exchange rate difference. It arises due to the fact that the “lion’s share” of liabilities, that is, loans, which we took in due time for modernization, are in USD dollars.

If you look at the results of 2019, you can see from the Table that we had

a “net income”. This also happened due to an uncontrollable factor, that is, at that time, the positive dynamics of changes in the USD dollar rate against KZT.

In order for the plant to gain a net profit every year, we need to reduce the foreign exchange liabilities as much as possible.

On the plant's contribution to the budget of Kazakhstan and Atyrau

Against the background of a general decline in the production volume, associated with the coronavirus pandemic, the Atyrau refinery increased tax payments to the state treasury at the end of 2020. During this period, the plant sent **KZT 40.3 billion** as payments to the local and Republican budgets, of which KZT 5 billion to the Republican budget, and KZT 35.3 billion to the local one. This is by **KZT 3.6 billion**, or **10% more** as compared with the same period in 2019 and by KZT 10 billion (32%) more than in the corresponding period of 2018.

The growth of tax payments was facilitated by the efforts of the plant's staff to prevent a

significant decrease in the processing volume due to the general slowdown in the pace of industry due to the pandemic.

The management of the plant took a number of anti-crisis decisions, which made it possible to prevent a decrease in tax payments, moreover, to show an increase in payments in relation to the previous year.

An increase in the excise tax on gasoline from January 1, 2020 and the amount of property tax played also a certain role in the increase in tax payments.

The city-forming enterprise of the Atyrau Refinery continues to be one of the largest taxpayers of Atyrau oblast, providing one fifth of the income of the city of Atyrau.

Statement of the financial condition

Key indicators of the statement of financial position, KZT mln

Indicator	2020	2019
Assets	767,334	867,817
including:		
Non-current (long-term) assets	717,092	746,095
Current (short-term) assets	50,242	121,722
Equity	19,141	31,316
Liabilities	748,193	836,501
including:		
Non-current liabilities	502,958	570,630
Current liabilities	245,235	265,871

The total assets of the plant (this property, raw materials and materials, money on the bank accounts, etc.) at the end of 2020 amounted to KZT 767.3 billion, 93% of these assets are long-term (mainly property), the remaining 7% are short-term. The decrease in the long-term assets in 2020 by 4% is due to depreciation. The decrease in the short-term assets by 59% by 2019 was due to a decrease in the volume of the borrowed loans in 2020. Besides, in 2019, funds were received from the sales of the bonds, issued by the Atyrau Refinery at the Astana International Financial Center (AIFC).

Changes in **the Equity** are associated with the exchange rate loss on foreign currency loans due to an increase in the USD dollar exchange rate.

At the end of 2020, the Liabilities were reduced by 11% and made up KZT 748.2 billion, of which 67%, or KZT 503 billion, are the long-term loans, attracted for the reconstruction projects. The short-term loans decreased by 8% due to a decrease in the debt to the suppliers for the provided services, goods, work.



/ COMMERCIAL ACTIVITY

Lightening the “foreign exchange burden”, we are moving towards better financial results

In order to finance strategic investment projects for the modernization of the construction of the Aromatic hydrocarbons production Complex and Advanced Oil Refining Complex with the participation of the Chinese and Japanese suppliers the Atyrau Refinery attracted loans in USD dollars in 2010–2012 from **Development Bank of Kazakhstan JSC, the Export-Import Bank of China, the Japan Bank for International Cooperation and MUFG Bank Ltd.** After the completion of the development of the borrowed funds within the frames of the construction projects, the Atyrau Refinery continues a number of extensive projects for refinancing and restructuring the foreign currency loans.

In 2020, the Atyrau Refinery carried out a successful large financial transaction – obtaining a loan in KZT from Development Bank of Kazakhstan JSC on preferential terms. These funds were used for partial early repayment of the loan of the Export-Import Bank of China, amounting to USD 110 million, and for partial early repayment of the loan of Halyk Bank of Kazakhstan JSC, amounting to USD 8 million. Jointly, the both deals allowed the Atyrau Refinery

to save more than **USD 14 million** due to the lower corporate income tax expenses. Moreover, the positive effects included a decrease in the Chinese funding in the AORC Project and the further funding through the Kazakhstan’s financial institutions.

The successful closing of the transactions was preceded by a lot of work in terms of interaction with the management of NC KazMunayGas JSC, Development Bank of Kazakhstan JSC, Halyk Bank of Kazakhstan JSC and the Export-Import Bank of China.

In May 2020, the Atyrau Refinery extended the term of the short-term revolving credit line of Halyk Bank of Kazakhstan JSC until the end of 2024.

The positive effects from the transaction: ensuring the liquidity of the funds.

In December 2020, the Atyrau Refinery converted into KZT the currency balance in the amount of USD 98 million on a loan from Halyk Bank of Kazakhstan JSC. The positive effects of the transaction: savings of the debt servicing costs, reduction of the foreign exchange risk.

Our products continue to be in demand at the global market. At the end of 2020, 208,269 tons of AI-92 gasoline and 121,499 tons of diesel fuels were shipped for export in the volume, corresponding to the classes K-4, K-5 (an analogue of EURO-4, 5). Due to the high quality of the petroleum products, the Atyrau Refinery has a possibility to export them to the countries of the European Union. In 2020, for the first time, the shipment of diesel fuel for export began. The main directions are the Netherlands, Uzbekistan, Tajikistan, Kyrgyzstan. Also, a record shipment of petrochemicals was carried out – **254,291 tons**. This is higher by more than **75%** than that indicator in 2019.

In 2020, 44,298 tons of benzene and 209,994 tons of paraxylene were shipped. Atyrau Refinery LLP is the only producer of benzene and paraxylene in Kazakhstan.

This petroleum product is a valuable raw material for petrochemicals and is also export-oriented.

In 2019, we began to develop a new product, which had not been produced in Kazakhstan before – **Khazar-38 diesel fuel**, which had the highest low-temperature performance and corresponded to the quality of the Arctic diesel fuel. In total, 31,950 tons of this product were shipped in 2020. The first recipients of the product for their own needs were Tengizchevroil and NCOC.

Export dynamics, tons

Petroleum products	2018	2019	2020	rev. %
Gasoline	–	66.428	208.270	214
Diesel fuel	–	–	121.500	–
Coke	133.402	123.126	130.275	6
Vacum. gas oil	443.445	330.945	321.536	3
Fuel oil	1,014,918	1,081,915	858,626	
Furnace fuel	111.224	–	–	–
Total	1,721,722	1,746,959	1,894,497	8

Petroleum products	2018	2019	2020	rev. %
Benzene	13.875	26.278	44.298	69
Paraxylene	4.858	118.267	209,992	78



KAZIM Diyar

Managing Director for Logistics
and Customer Relations

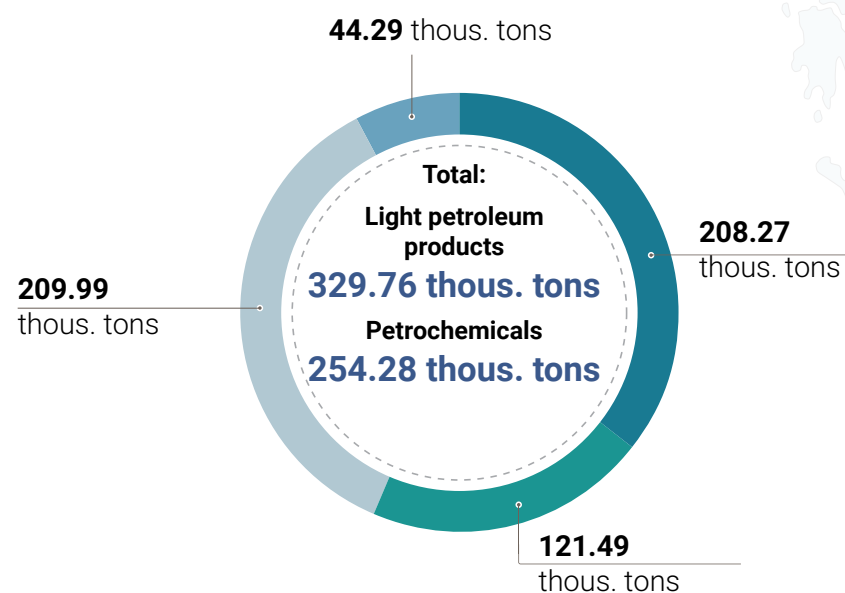
“An important task for us is to build productive relationships with regular customers – oil suppliers, under whose contracts the ready processed products are shipped. Our goal is also to avoid overstocking and ensure efficient shipments. We analyze the domestic market with the purpose of assessing and meeting the Kazakhstan’s needs, primarily in light oil products, such as gasoline and diesel fuel, and we provide export of the Kazakhstan’s products to the foreign markets.

Petrochemical products are exclusively for export, since they are not used in the Kazakhstan’s production. Last year there has been a significant increase in the export volumes. This growth is associated with the high quality of the ARP products and an increased demand for them abroad. The new directions for the shipment of petrochemicals have been opened: in addition to Russia and China, our products are now supplied to Belarus.

From the data, provided in the report, you also see a sharp increase in the export of light oil products in 2020. During a pandemic and the introduction of a quarantine the demand for fuel has significantly decreased in Kazakhstan. In this regard, we were provided with an increased export quota. This is a temporary growth. Satisfying the needs of the domestic market remains our primary goal.”



EXPORT OF PETROCHEMICALS AND LIGHT PETROLEUM PRODUCTS for 2020 (thousand tons)



- AI-92 K4/K5
- DT-K4/K5
- Paraxylol
- Benzene

Name	Comparative cost in USD in 2019	Comparative cost in USD in 2020
Paraxylol	510	266
Benzene	520	355

Light petroleum products – AI-92, K4/K5, DT-K4/K5

Petrochemicals – paraxylol, benzene

94.34

NETHERLANDS

4.05

BELARUS

35.36

RUSSIA

46.15

GEORGIA

214.88

CHINA

189.27

TAJIKISTAN

Atyrau Refinery LLP is the only manufacturer of paraxylene in the territory of Kazakhstan. This petroleum product is an export-oriented petrochemical feedstock, increasing the level of economic diversification.

/ BUSINESS INITIATIVES

Business initiatives are the Atyrau Refinery's new vector for the development. These are new projects that should improve the plant's activities and bring it to a new level. Out of 11 business initiatives, two projects have already been implemented. The remaining nine will be implemented over the next few years.

Implemented Projects

1. Perfect Production



Target: improve operational efficiency. Creation of an effective system of interaction between the refinery management, line managers and production personnel (Operational Rhythm™).

Effects achieved:

- Increase in the operational efficiency indicators;
- Improvement of planning and management of the production program;
- Improvement of the production work;
- Improving the level of the enterprise management.

2. Spiral Planning



The production optimization system based on Spiral software was implemented in 2018–2019 as part of the digital transformation program. The system allows high-precision planning, taking into account the volumes of loads, the yield of oil products, the consumption of additives,

catalysts, reagents, and calculating the best version of the production plan.

↓ **Effect:** reduction of variable operating costs.

At the Implementation Stage

1. Automated System of Technical Accounting of Energy Resources

KMG Automation
A KazMunaiGas and Schneider Electric Joint Venture Partnership

Target: reduction of the electricity consumption by organizing an effective technical metering system, using meters and power quality control devices. Implementation of a system for collecting and analyzing data on energy consumption and quality parameters of the state of electrical networks based on the Schneider Electric software package.

↓ **Effect:** savings will amount to 5% of consumed electricity due to increased efficiency of electricity use in Refinery's technological processes.

Project deadline – 2021.

2. Advanced Technological Process Control System (ATPCS) Implementation

Honeywell

Project Target – increase of the yield of light oil products and reduce energy consumption. Improving the consistency of quality indicators and overall operational efficiency.

The content of light oil products in fuel oil has been reduced by 0.2%, as well as the influence of the human factor on the technological system.

Effect: as a result of the ATPCS implementation at the EDP ADU-2 unit, the spread in the technological process decreased by 67% for gasoline, and 73% for diesel.

In 2020, the ATPCS will be implemented at EDP ADVU-3, in subsequent years – at AHP and DCRU.

Project deadline – 2025.

3. Implementation of Engineering Models Based on Hysys Software



Target: creation of a tool for an optimized technological mode of the units.

Hysys can help to accurately predict the performance of the plant's units, separate assemblies and apparatuses. As of today, 2 Hysys software licenses have been purchased and installed. The plant personnel passed the training. The optimization planning department has started modeling the primary settings. A licensing agreement was

concluded, and in the future, we will sign an agreement with Aspen Tech for modeling secondary refining processes in the Hysys system.

↓ **Effect:** yield improvement. Reduction: of electricity by 0.1%, steam by 0.2%, reagents by 0.5%, catalysts by 0.3%.

Project deadline – 2022.

4. Burns and Losses Reduction Program

Target: improvement of the operational and energy efficiency of the Refinery's processes.

Repair and restoration measures, capital projects and modernization are envisaged. Optimization of technological processes and units, heat flows; cleaning, repair and replacement of tank pontoons; replacement of liquid fuel with

gaseous one. Purchase of equipment for assessing and detecting leaks from processing units, replacement of technically outdated furnace burners.

↓ **Effect:** reduction of burns by 1.88%, losses by 1.35%.

Project deadline – 2024.

5. Lean 6 Sigma – Lean Production



Target: creation of a culture of continuous improvement and optimization of processes.

Solving complex issues through a project-based approach based on the use of statistical methods of analysis to identify factors that have a major impact on the process. Does not require investment of funds.

↓ **Effect:** reduction of operating costs.

Project deadline – ongoing.

6. Computer Simulators



Computer simulation complex fully simulates the workplace of the enterprise operators. Thanks to modern software, the simulator accurately reproduces a specific production process and is focused on the range of tasks performed by operators. The civil aviation pilots are trained at similar simulators.

CSC of Atyrau Refinery was created by **Honeywell** – the world's application software developer. The simulators are installed in equipped classrooms. The educational process is carried

out under the supervision of instructors. In 2020, the development and implementation of 4 units of the plant was completed: catalytic cracking, CCR, PX. By 2022, we plan to introduce Parisom, Prime-D, Sulfrex, Naphtha HT.

Effect: improving the qualifications of the plant personnel.

Project deadline – 2022.

7. 3D General Plan



Target: creation of high-precision digital general plan using laser scanning method.

Digital 3D general plan is a three-dimensional model of a real enterprise, which includes all its facilities and communications. It is based on an information model, which includes the amount of required data and documents, as well as equipment parameters for

their subsequent accounting in MRO. The digital twin of the plant is based on Aveva Net software. As of today, 56% of the plant's units have been digitized. The plant personnel are training to work with the system.

Effect: obtaining a modern tool for accessing plant data.

Project deadline – 2021.

8. Energy Efficiency Increasing Program

Target: reduction of energy consumption.

As a result of this program for 2016–2020, 15 out of 20 planned measures were implemented, about 6% of the total consumption of fuel and energy resources was saved.

↓ **Effect:** reduction of energy consumption by 9%.

Project deadline – 2021.

9. Equipment Maintenance and Repair



Target: transition to an extended life between overhauls, equipment reliability.

Effect: stable operation of units, increase of oil refining volume, production of oil products by reducing the time for repairs.

Project deadline – 2022.

/ 7 NEW PROJECTS

The plant is working within the framework of a full-on renovation of the existing off-site facilities.

7 main projects have been implemented: Arman, Bailanys, 5S, Zheti Kazyna, Jaña Jol, Tazalyq, and BILIM.



ARMAN Project

The main tasks of the project: formation of a space of effective communications, activation of the creative activity of employees, motivation of people to achieve improvements and full disclosure of their potential, increase employee loyalty to the enterprise, increase labor productivity, attract and retain valuable employees, develop and implement a single corporate standard.

DMITRIY Khvan

Director of the Administrative Department

Graduated from the Almaty Management University with a degree Master of Business Administration. Diploma themework “Workspace Management”.



“The project is aimed at improving social and living conditions for the plant workers, creating the most comfortable business environment.

Correct organization of workplaces, in terms of improved interior, adequate setting of engineering communications systems, equipping with modern and high-quality furniture and office equipment is the most important aspect of the enterprise's business environment. And creation of favorable living conditions has a positive effect on improving the condition of workers during working hours. That way we increase the efficiency of work processes, contributing to the solution of the main task of the company – implementation of the production plan.”

ARMAN Project in 2020	Opening of Digital Museum of History and Labor Glory with an area of 166 m ²
	Opening of medical center on the basis of the medical unit of Atyrau RefineryLLP
	Redevelopment of the central control room with a total area of 53.2 m ² completed
	Reconstruction of 14 control rooms completed
	Opening of coworking center at Atyrau Refinery LLP with a total area of 281 m ²
	Introductory briefing and OHS rooms of Atyrau Refinery LLP were opened with a total area of 131.2 m ²
	Renovation of the building DOMTSiKO at Atyrau Refinery LLP with a total area of 246.7 m ² completed

Medical Center

As part of implementation of a long-term project of public-private partnership between Atyrau Refinery LLP and MEDIKER, we opened a medical center created on the basis of the former health unit.

All conditions have been created for the provision of comprehensive and qualified medical care. As a result of the reconstruction, the medical institution has been expanded, has modern equipment, and the staff has been supplemented with narrow-profile specialties.

Taking into account the current coronavirus pandemic situation, an isolation zone with a separate entrance has been created at the medical center, where workers will immediately be delivered in case of symptoms of COVID-19.

We purchased medical equipment: **Chammed ENT workstation, devices for electromagnetic and laser therapy, oxygen concentrator**

apparatus, ALV apparatus. There is a portable apparatus with an oxygen concentrator, which will help stabilize patients condition before the arrival of the ambulance team, and a ALV apparatus is installed in the pre-doctor room.

A drug dispensing point has been opened, where the plant workers will be able to receive the necessary medicines on prescription within the guaranteed volume of free medical care.

One of the advantages of the medical center is the formation of a unified medical information system that will provide fast service to the plant workers.

Medical services covered 1,762 plant workers and 2,554 family members of the Company's employees.



Opening of Coworking Center

Realizing that the efficiency and effectiveness of work processes is ensured by motivated and qualified personnel, we arranged a space in the areas of unused premises for personnel development and self-training. On the basis of the implemented iSpring platform, personnel training, progress tracking and analysis of results are carried out. Via a mobile application, employees have the opportunity to train around the clock. The platform has access to a variety of personal and professional development webinars, an electronic library and other training programs.

Museum of History and Labor Glory

In honor of the 75th anniversary of the enterprise, renovated Museum of History and Labor Glory was opened.

The museum building was fully modernized and all communications were replaced. A new exhibition space has been created with a modern design of halls, multimedia equipment that allows interactive excursions with updated content and exhibits.

In the reconstructed spacious building, the logic and sequence of the sections of the exposition have been preserved: from the construction of the plant during the Great Patriotic War to the present time.

In the historic hall, great attention is paid to the establishment of the enterprise.

Special information stands allow seeing all stages of the history and directions of the enterprise's work, labor successes and achievements of previous years.

The modern hall tells about the modernization of the enterprise, production safety, environmental and social projects. Tours here can also be conducted in an interactive format. Thanks to the electronic terminals installed in the historical and modern halls, you can get information about the veterans of the Great Patriotic War and the plant's labor, about the projects being implemented at the Atyrau Refinery, and the social policy. The scale of economic activity of the Atyrau Refinery is evidenced by the light map on which the directions of cooperation with the countries are presented, and the stand "Products of the Plant".

The photo gallery exhibits unique photos; there is also a capsule with a message to the future generation

and a countdown of the time until the 100th anniversary of the Atyrau Refinery.

Completed Reconstruction of 14 Control Rooms

We understand that the premises where the shift personnel involved in maintaining the technological regime of modern units spend most of their working time plays an important role in the employees' mood and they should feel comfortable in the workplace and have all the conditions for free expression, communication and generating ideas. Taking into account that the production personnel is the locomotive of the enterprise's technological chain, it was necessary to plan the work premises in such a way that they combine the space for work, rest, eating. Besides, the repair of the walls and ceilings in all control rooms there are arranged rooms for eating. They are equipped



New PAH control room

with modern furniture and household appliances. All communications are replaced indoors, the exhaust ventilation system and split systems are installed. It should be noted that the capital repair of the control rooms is carried out according to a single design within the frames of the ARMAN Project.

Completed Modernization of Dispatch Center

As part of the project's implementation, modernization of the dispatch center with an area of 53.2 m² was carried out, the main task of which is centralized coordination of the activities of all processing units of the plant. Response speed and resources of the outdated equipment of

the former dispatch room did not correspond to the level of technical equipment of modern technological complexes of the enterprise. Plus, the required capacities of the new center assumed the expansion of the space and equipping the systems for visualization of the work processes of the most important local elements of the technology.

Opening of Introductory briefing and OHS Rooms

We opened the rooms to conduct initial briefing for guests, visitors and employees of contracting entities.

In the medium term, we planned to replicate the ARMAN project to the remaining facilities of the plant.



Dispatch Center



Jana Jol

Jana Jol is an in-plant road reconstruction project. As part of the project, in 2020, the AZS parking lot for 119 cars and a bus stop were reconstructed. We also reconstructed the Set Base parking lot for 434 cars.



5S

5S – standardization of the workplaces. 5S is a system for organizing a workspace (office) developed in Japan, which creates optimal conditions for performing operations, maintaining order, cleanliness, tidiness, saving time and energy. 5S is a lean manufacturing tool that has been successfully introduced at Atyrau Refinery LLP.



Jeti Qazyna

Jeti Qazyna is a project aimed at creating a workwear center and a centralized archive. All stages of the receipt of clothes and shoes at the central warehouse, their release to workers, washing, dry cleaning, fitting and disposal are digitalized. So that way, workers are promptly provided with the necessary PPE for the organization of safe working conditions in the workplace.

In 2019, within the framework of the Jeti Qazyna project, the plant fully reconstructed one of the floors of the plant's Training Center and put into operation a new centralized archive room. With the new archive the documentation was systematized and properly recorded, conditions were created for prompt search and familiarization with the required documentation, the risk of loss of archival documents was eliminated, their security and fire safety were ensured.



BILANYS

This is a project aimed at modernization of telecommunications networks. The main works were completed in December 2019, the speed of the data transmission network was increased. Managed switches and new access points (Wi-Fi) were set. A backup core of ATS was created, new IP-telephones and video conference connection were introduced. A new digital ATS was installed to support II-telephony.



TAZALYQ

The project provides for modernization of the wastewater treatment plant, introduction of modern technological processes and control systems for the consumption of harmful substances. Thanks to the Tazalyq project, 70% of the treated wastewater can be reused at the plant.

The project which started in 2019, will run until 2026. Main works: construction of a precipitator block with gratings and sand traps, construction of an equalizer block, construction of a flotation unit, construction of a sludge treatment block, reconstruction of aeration tanks, construction of a membrane bioreactor block.



BILIM

The project is aimed at selection, training, preparation and development of personnel. This project includes 13 individual programs: electronic recruiting, an employee development program in the first year of his work, industrial technical training, staff level of professional knowledge control, a computer training class, the General MBA program, the Lean 6 Sigma program, English club, Zhas Maman program, dual training, employee pool, development of the Chemical technology of organic substances sub-faculty. Online courses for plant employees have been implemented.

Business process reengineering

As part of the implementation of the Business Process Reengineering Program of Atyrau Refinery LLP for the period of 2014–2018, the staff of the auxiliary production facilities of Atyrau Refinery LLP were gradually withdrawn in the amount of 1,151 staff units. More than 20 outsourcing companies, including **Neftestroyservis LTD LLP, Enertek LLP, KAZTURBOREMONT Service Center LLP, Gold Sunray LLP, Mediker LLP, FAO “Ort sondirushi”**, within the frames of the concluded Contracts, timely and efficiently provide the following types of services:

- operation, maintenance and current repair of the electrical equipment and electrical networks;
- repair and maintenance of the instrumentation and automation, thermal automation

and measurements, process control systems;

- ensuring the uninterrupted operation of the technological and dynamic equipment, maintenance (revision) and current repairs of the main, auxiliary and heat power equipment, metal structures, buildings and structures;
- comprehensive maintenance of the water supply and sewerage facilities;
- provision of transport with service vehicles and special equipment;
- provision of fire protection and fulfillment of the emergency rescue operations at the facilities;
- medical examination of the personnel, maintenance of IT systems, development of design estimates, provision of access control etc.

/ PROCUREMENT PRACTICES

Procurement activities in the Company are carried out in accordance with the following standards:

- According to the procurement management standard of the Joint-Stock Company National Welfare Fund “Samruk-Kazyna” and organizations, fifty or more percent of voting shares (participation interests) of which are directly or indirectly owned by Samruk-Kazyna JSC on the basis of ownership or trust management.
- Procedure for procurement by “Samruk-Kazyna” National Welfare Fund Joint-Stock Company and organizations of fifty or more percent of voting shares (participation interests) of which directly or indirectly belong to Samruk-Kazyna JSC on the basis of ownership or trust management.

The procurement process includes:

1. formation, consolidation and approval of procurement plans;
2. selection of a supplier of goods, works and services;
3. conclusion and performance of a procurement contract;
4. formation and submission of reports on the procurement activities of the enterprise.

Suppliers of the enterprise were both residents and non-residents of the Republic of Kazakhstan, including domestic producers supplying goods, performing works and rendering services to ensure the uninterrupted production of the Refinery.




Seidualiyev Kanat

Director of the Procurement Department

“In 2020, despite the announced state of emergency and quarantine, associated with the coronavirus pandemic, the Company managed to provide the necessary goods, works and services for the production.

Appropriate measures to support the Kazakhstani workers were included in the Procurement Management Standard. When participating in a tender of up to KZT 500 mln, excluding VAT, the potential suppliers provided a letter of guarantee for the preservation of the existing jobs for the citizens of the Republic of Kazakhstan in the territory of the Republic of Kazakhstan for the term of the Procurement Agreement. In case of a tender for more than KZT500 million (VAT exclusive) a warranty letter was submitted to preserve the existing and creation of new jobs for the citizens of the Republic of Kazakhstan.

Measures were taken to support the domestic entrepreneurs. During the state of emergency, the suppliers, which refused to fulfill their obligations due to the quarantine measures, were not included in the List of Unreliable Potential Suppliers.

During the procurement procedures, special attention was paid to supporting the domestic producers and increasing the share of local content in the purchased goods. In this regard, in the presence of two or more domestic producers, the priority “Among the producers of the Holding” was set during the procurement procedures.

We also paid attention to the procurement of goods according to the list of “Economics of Simple Things” and the machine-building, chemical and pulp and paper industries.

In the IV quarter of 2020, a training workshop was organized for employees of the division responsible for procurement and administrators of business programs on the regulatory documents of Samruk-Kazyna JSC and on the functions of the EPIS. Additionally, the Procurer Portal of KazMunayGas NC JSC is monitored on an ongoing basis. This work is carried out in order to reduce and avoid procurement irregularities.

In 2020, the share of local content in goods amounted to 26%, for works and services, the share of local content amounted to 69%. The low share of local content in goods is due to the commissioning of new AHP and DCRU complexes the equipment of which were exclusively imported.”


AHP Operators



Sustainable Development

69 Personnel Management

90 Environmental Protection

SAFETY

QUALITY

STABILITY

OPERATIONAL PROFIT
for 2020
33,069.62 mln
KZT

The Atyrau Refinery implements the principles of sustainable development in its activities in accordance with the Guidelines for the management system in the field of sustainable development in the group of companies of KazMunayGas NC JSC.

The mission of our parent company, KazMunayGas NC JSC, is to ensure maximum benefits for the Republic of Kazakhstan from participation in development of the national oil and gas industry. KMG adheres to the principles of the United Nations Global Compact¹ and integrates the UN Sustainable Development Goals (hereinafter – SDGs²) in its activities, and also follows the 2028 KMG Development Strategy.

Accordingly, KazMunayGas NC JSC has defined sustainable development in its 2028 Development Strategy as one of the strategic goals which is aimed at integrating the principles of sustainable development into key business processes, operational activities and decision-making processes.

Atyrau Refinery is also guided by the Concept of Sustainable Development of KazMunayGas NC JSC, which defines a single basis for sustainable development as an integral part of corporate governance at KMG, and also systematizes activities in the field of corporate social responsibility.



Atyrau Refinery is aware of the relevance of its impact on the economy, the environment and the society and strives for long-term value growth, ensures its sustainable development while honoring the interests of stakeholders.

Sustainable development aspects and principles are integrated into the business processes of the Company, in particular, into the decision-making processes. In the process of making any business decisions, the Company ensures consistency of its long-term sustainable development economic, environmental and social goals which include, among other things, the growth of the long-term value of the plant.

Sustainable development of the Company has three components: economic, environmental and social.

Economic component directs the Company's activities towards growth of long-term value, ensuring interests of the Participants, increasing efficiency of processes, increasing investments in creation and development of advanced technologies and increasing labor productivity.

Ecological component ensures minimization of the impact on biological and physical natural systems, optimal use of limited resources, use of environmentally friendly, energy- and material-saving technologies, creation of environmentally sound products, minimization of waste generation, as well as waste recycling and disposal.

Sustainable Development Aspects and Principles integrated into the business processes of the Company, in particularly, in decision-making processes. In the process of making any business decisions, the plant provides the consistency of their economic, environmental and social goals for sustainable development in long term, which includes an increase in the long-term value of the plant.

¹ UN GC Principles: <https://www.unglobalcompact.org/what-is-gc/mission/principles>

² Link to 17 SDGs: <https://www.un.org/sustainabledevelopment/ru/sustainable-development-goals/>

/ PERSONNEL MANAGEMENT

Social component is focused on social responsibility principles, which include: ensuring labor safety and preserving the health of employees, fair remuneration and respect for the rights of employees, personal growth of personnel, implementation of social programs for personnel, creation of new jobs, sponsorship.

Effective interaction with stakeholders through the implementation of a system of planned and sequential activities is one of the key factors for achieving the Company's goals.

The Company's interaction with stakeholders is based on the following principles:

- respect and consideration of interests, opinions and preferences of stakeholders;
- timely and regular informing of stakeholders;
- responsible fulfillment of obligations assumed.

Sustainable development management system must be integrated across the entire Company in such a way as to balance short-term and long-term interests and take into account economic, environmental and social aspects in the decision-making process. In accordance with the Samruk-Kazyna's Reference Model, the introduction of sustainable development into key processes is ensured through their integration in three areas:

- Strategic integration – inclusion of sustainable development into planning processes.
- Operational integration – all corporate decisions are made by the management of the Atyrau Refinery based on the criteria of compliance with sustainable development principles and goals.
- Cultural integration – changing the mindset of the Company's employees.

The organizational structure of the Atyrau Refinery is constantly improving, taking into account the requirements and standards of the KMG corporate governance. Competence and authority of the structural divisions are clearly delineated and fixed in the Provisions, job descriptions and internal instructions for work management.

In order to reduce the negative impact on business, due to the COVID-19 pandemic, an optimization of the business processes was carried out, with the reduction in the number of the administrative and managerial staff.

Number of personnel, people



At the end of 2020 **1,682 employees** work at the Atyrau Refinery. Middle the age of the workers is **38.9 years**, including administrative efficient management personnel – 41 years old, production staff – 38.7 years. Youth under the age of 30 years – 388 people, which is 23% of the total number of the plant employees.

Personnel structure at the end of 2020

Indicator	Total (people)	Structure by gender		Structure by age		
		male	female	up to 30 years	30–50 years	over 50 years
Total number of personnel	1,682	76%	24%	23%	57%	20%
Board	5	60%	40%	0%	40%	60%
Administrative and management personnel	124	31%	69%	11%	66%	23%
In leadership roles	55	44%	56%	4%	65%	31%
Specialists	69	20%	80%	22%	62%	16%
Production personnel	1,558	79%	21%	24%	56%	20%
In leadership roles	144	84%	16%	8%	67%	24%
Workers	1,414	79%	21%	26%	55%	19%



Zhailasheva Assel
Head of the HR Division

“2020 has become a strategically important milestone for us in solving the primary task of attracting and retention of the qualified personnel in production. Gradually, step by step, we overcame the tendency of the perception of the plant by the workers as a starting platform for the further employment in other large companies in the region. And today we can say that we have brought up a qualitatively new core team of young people, ambitious and promising specialists for whom the Atyrau Refinery has become a symbol of growth, safety, quality, stability and strong corporate culture.

These are the main steps for 2020:

- ▶ implementation of a large-scale BILIM Project, consisting of 13 plant personnel development programs;
- ▶ procurement and implementation of the unique computer training complexes of Honeywell Company – simulators of three technological plant installations for practical training of the employees to control them, including in an emergency situation;
- ▶ Launch of a platform for online training of the plant employees iSpring Learn, which is loaded with 50 training courses to help you improve your professional skills. Each course includes a video tutorial and tests. Access to materials is open 24 hours a day;
- ▶ Opening of the Institute of Petrochemical Engineering and Ecology on the basis of S. Utebaev Atyrau University of Oil and Gas, where the future personnel of the Atyrau Refinery are being forged. New laboratories are available to the students with professional equipment, computer training classes and other necessary tools for high-quality professional training;
- ▶ introduction of an electronic recruiting system, providing transparent and efficient recruiting processes. Data collection, testing, interview, responses based on the interview results and so on – everything in electronic format.

In addition, we continue to improve social conditions at the factory.

In 2020, a new medical center was opened on the basis of the health unit, which is equipped with the necessary equipment (even ALV) and medical personnel, including highly specialized experts. Now our workers have access to comprehensive medical care.

We reconstructed the Central Canteen to improve working conditions and installed new equipment, such as an electronic registration system with electronic passes.

2020 due the coronavirus pandemic made us focus on employee welfare even more than usual. Our task was to ensure the safety of our employees, to support them, and to keep the production facilities operating. About 90% of the administrative and managerial personnel switched to remote work. The plant has provided the necessary sanitary standards, developed new work schedules, and limited reception of visitors. At the expense of the company, PCR testing and computed tomography were carried out.

All the measures taken provided stable activities of the production management for the plant to preserve economic stability of the state during the specified period.

We add that in 2020 the Social stability index, reaching 85%. This speaks of the fact that the employees generally positively assess the actions of the management in the HR sector.

The result of the work done was that the fluidity of the professional staff at the plant decreased by 37% in 2020 as compared with 2019. This is our little victory, and we will continue to move on in the same direction.

In 2021, our main focus will still be the development of personnel training and knowledge assessment with 100% coverage of the Refinery's workers.”

Changes in the Remuneration System

In order to increase the material interest of employees, increase the efficiency of production and economic activities, as well as strengthen labor and production discipline, we have introduced changes to the system of monthly/quarterly bonuses. The Bonus Committee, a collegial and advisory body, has been created and functions on a regular basis, the main task of which is to assess implementation of the planned key efficiency indicators (hereinafter – KPEs) of the structural units. All approved indicators reflect the efficiency of a particular structural unit and are an indicator of the collective work of the unit.

Moreover, the work of each employee is assessed according to the individual parameters of the fulfillment of the set goals, compliance with requirements of internal regulatory documents, etc. Key indicators of heads (managing director, director of a department, head of production, division, service) are cascaded from the objectives

of the approved key performance indicators (KPIs) of executives – members of the executive body of the Company.

At the end of 2020, the growth of the average monthly wage in Atyrau Refinery LLP was 10% as compared with 2019, which is by 45.9% higher than the indicators for the Atyrau region.

In order to keep the remuneration system competitive in comparison with the main employers in the labor market of Kazakhstan, to motivate and incentivize employees for work results, personal achievements and contribution to the Company's activities, an increase in official salaries/monthly tariff rates is envisaged from 1 January, 2021.

Based on the funds provided for in the budget, based on the results of assessing the staff performance for 2020, a wage program for 2021 was formed with the individual parameters for increasing the tariff rates/official salaries of the employees.

New types of salary markup

Markup type	amount	Share of the total production personnel, %
for the complexity of unit servicing	7%, 15%	57%
for work on the control panel	7%	8%
project markup (for the period of project development and implementation)	up to 20%	
market markup (for attracting and retaining staff)	up to 30%	



Dostanova Gulnar

Head of the Division of Labor Organization and Remuneration

“Since 2019, Atyrau Refinery LLP, together with NC KazMunayGas JSC and with the involvement of the project group of PetroKazakhstan Overseas Services Inc. (hereinafter – PKOSI), began the development of a new pay system, based on the graded system. The choice of the project group was not accidental. A similar graded remuneration system exists at a related enterprise – PetroKazakhstan Oil Products LLP (PKOP), a subsidiary of PKOSI.

The main goal of the Project is to implement a wages structure, which will be competitive at the local level and will allow the Partnership to attract, retain employees and provide internally fair wages.

During the Project implementation:

- all positions of Atyrau Refinery LLP were assigned by grades;
- an analysis of the wage market in the energy sector of West Kazakhstan was carried out;
- the structure of wages was formed;
- each grade is assigned a level in the pay structure.

Since January 1, 2020, the stage of introducing the new wage system has begun.

The grading system made it possible to establish both internal and external fairness in remuneration, depending on the complexity of the work performed and the employee's contribution to achieving the strategic goals of the enterprise.

Due to changes in the remuneration system, the growth of official salaries/monthly tariff rates to the level of 2019 amounted to:

- workers – **16%**;
- production managers and specialists – up to **39%**;
- administrative and management personnel – up to **7%**.”

Provision of social benefits, compensations and guarantees

At the end of 2020, all employees of the Company are covered by the Collective Employment Agreement. In accordance with the Collective Employment Agreement and the Rules for provision of social support to employees of Atyrau Refinery LLP in order to create appropriate social conditions for working with maximum dedication, affecting production efficiency, a guaranteed social package is provided for employees, which includes a list of benefits and social payments:

- annual one-time health improvement allowance for labor leave;
- one-time payment upon termination of an employment contract if it is impossible to continue working for health reasons;
- one-time payment upon termination of an employment contract upon reaching retirement age;
- voluntary medical insurance;
- material assistance for arranging a funeral in connection with the death of an employee/ employee's close relatives;
- material assistance to the family of an employee who died as a result of an industrial accident;
- material assistance in connection with conclusion of a primary marriage by an employee;
- material assistance in connection with the birth (adoption) of a child;

- material assistance for anniversaries (50, 60 years);
- additional payment to the allowance for temporary incapacity when the employee is on sick leave for more than one month in a row;
- material assistance in other cases by decision of the Board of Atyrau Refinery LLP;
- payment of maternity leave based on the average salary minus the amount of social benefits in case of loss of income due to pregnancy and childbirth;
- payment of social and educational leaves;
- meal allowance for employees;
- partial compensation for the cost of summer vacations for employees' children;
- monthly partial compensation to employees with preschool children;
- one-time material assistance to employees with school-age children;
- partial compensation of rental expenses for specialists in the rotation program, invited workers;
- housing program.

Social package for 1 employee at the end of 2020 amounted to KZT 1,243.19 thousand, which is by 8.1% higher than that of the same period in 2019.

Along with measures for social support of employees, social benefits and payments to non-working pensioners – former employees of the Atyrau Refinery are also provided.



As part of measures to prevent COVID-19 coronavirus infection, we signed an agreement with the Olymp Clinical Diagnostic Center to provide services for the detection of COVID-19 virus RNA from biological material by PCR test. On the basis of the agreement, all employees switching back from the remote mode of work, as well as those returning to work from annual labor leave pass PCR tests to determine

antibodies to COVID-19 and express tests at the expense of Atyrau Refinery LLP.

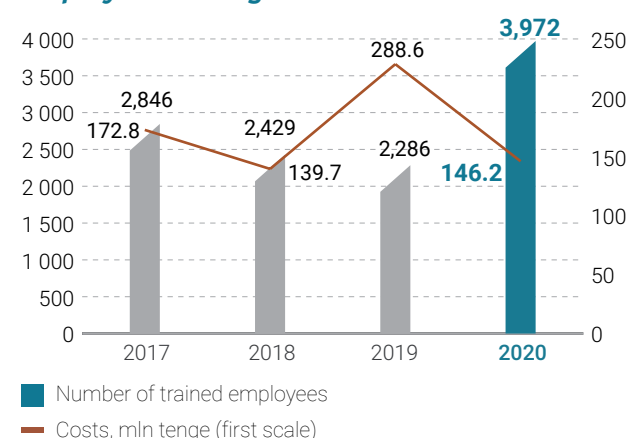
In order to ensure the availability of medical care for employees who have suffered or are suffering from acute infectious diseases, we concluded an agreement with Orion Medicals LLP for computed tomography (CT) of the lungs at the expense of the Atyrau Refinery.

Professional Growth

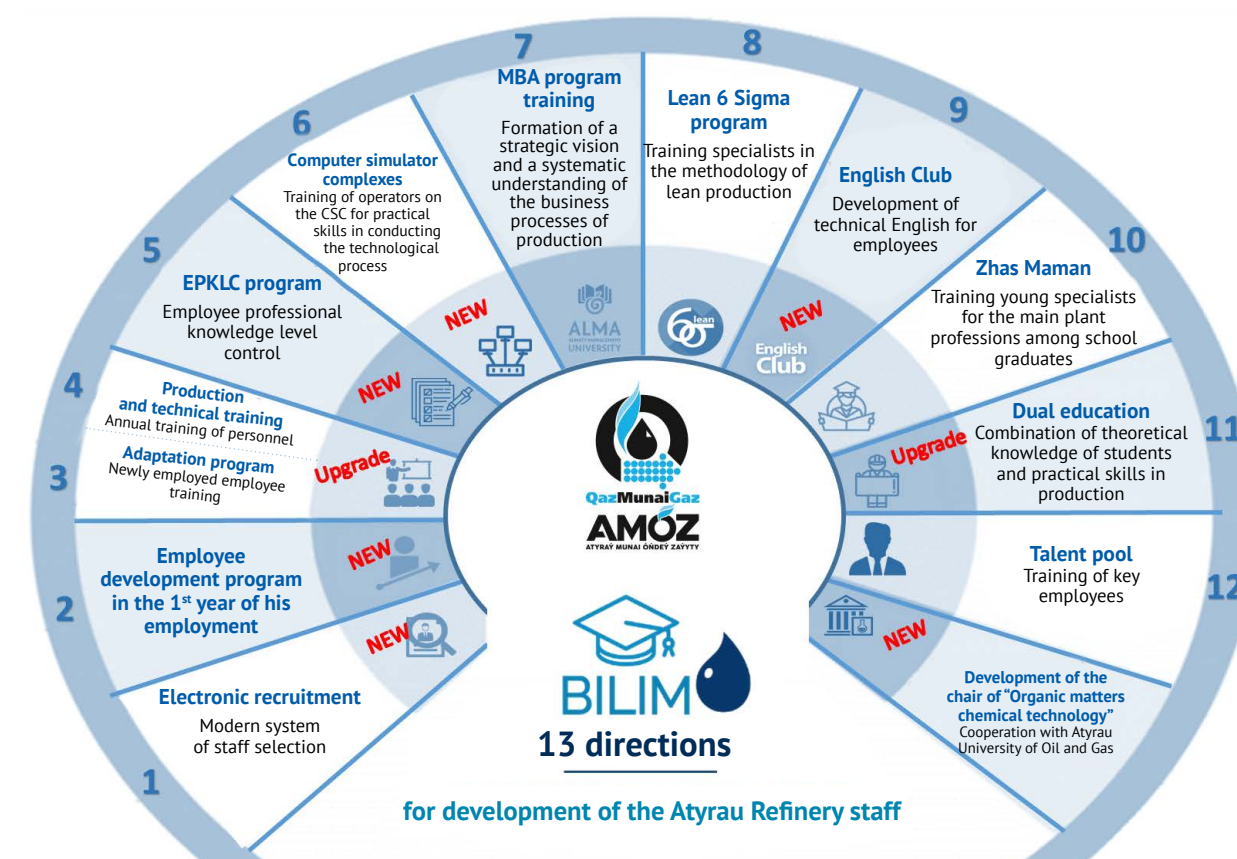
In 2020, the total number of people who took part in training seminars, continuing education, training and retraining courses amounted to 3,972 people. Of these, 3,539 people were trained in compulsory training programs, that is, on average, one employee was trained in 3 (three) programs, mainly online.

In 2020 an orientation program for newly employed personnel was updated to help them to adapt to the work conditions at the enterprise. Currently, the adaptation program is being implemented online in the form of video tutorials and presentations. Knowledge assessment is carried out by testing.

Employee training indicators



BILIM project covers 13 Atyrau Refinery staff development programs, of which the most ambitious, courageous and innovative are Lean 6 Sigma, “Zhas Maman”, cooperation with universities, dual training and control level of professional knowledge (CLPK)



Lean 6 Sigma

In order to regulate business processes and reduce all types of defects and losses through the sequential implementation of projects to eliminate the root causes of defects based on quantitative research, the Lean 6 Sigma project has been implemented at the enterprise since 2016.

Under the program for implementation of the Lean 6 Sigma project at Atyrau Refinery LLP in 2020, in addition to those already

trained, 5 “green belt” people underwent theoretical training.

Currently, a total of 36 people were trained in the level of “green belts”, 10 people of which have raised their level to “black belts”. In 2020, 3 specialists began training as “black belt masters”.

10 people were trained under the HYSYS program “Modeling of technological processes”.

Zhas Maman Program

In 2020, at the expense of the enterprise and under the Zhas Maman program:

- I.M. Gubkin Russian State University of Oil and Gas – 7 people;
- Ufa State Petroleum Technological University – 2 people.

continued their education in the main plant's specialties.

As part of the ZHAS MAMAN program development and in order to motivate the best students of the S. Utebayev University of Oil and Gas of Atyrau city and their future employment, the program for awarding Atyrau Refinery LLP scholarship has been resumed. In 2020, **8 students of S. Utebayev University of Oil and Gas** passed competitive selection for the plant's scholarships.

Cooperation with Universities

In order to train specialists to work at the plant's technological units in the main specialties of the chemical and technological profile, Atyrau Refinery LLP continues cooperation with 9 leading technical universities and three higher educational establishments in the cities of Atyrau, Almaty, Astana, Uralsk and Shymkent.

Within the framework of social partnership, the following activities are held online:

- the plant managers participate in meetings of the School Boards of educational institutions;

- specialists of Atyrau Refinery LLP participate in the coordination of the subjects of term and diploma papers (projects) of students, and also participate in the qualification commissions for taking exams and presenting final qualification works (diploma projects);
- specialists of Atyrau Refinery LLP take part in online conferences, Open Days, Job Fairs and other similar events aimed at expanding cooperation;
- professors and masters of industrial training undergo training in the subdivisions of the plant.

DUAL EDUCATION Program

We implement dual training program to train young specialists in production conditions.

Students are provided with workwear, personal respiratory protection, mentors from among experienced

and highly qualified workers are assigned to them, compensation costs are paid on the basis of a time sheet in the amount of 1 minimum salary (KZT 42,500 per month).

However, since March 2020, due to the COVID-19 pandemic, the practical training of dual education students has been suspended.

If the epidemiological situation improves, we will continue training young specialists in the dual training system.

In 2020, we signed the 15 year-term Agreement on mutual cooperation with the NJSC S. Utebayev Atyrau University of Oil and Gas. Within the framework of this agreement, we established the Institute of Petrochemical Engineering and Ecology on the basis of the university.

Our Institute covers the following educational programs:

- Chemical Technology of Organic Substances;
- Machinery and Equipment of Oil and Gas Industry;
- Life Safety and Environmental Protection.

EPKLC PROCESS – Employee Professional Knowledge Level Control

Employee Professional Knowledge Level Control (EPKLC) is held quarterly. It helps to identify and compare the previous and current level of knowledge, to ensure growth, or stop in place or lag in certain parameters.

In 2020, 3 stages of testing were carried out as part of the EPKLC process. According to the results of

each stage, high and low indicators of the level of professional knowledge of the personnel were identified. To eliminate the identified insufficient knowledge of employees, mentors from among the internal coaches who have undergone mentoring training and highly qualified specialists of the partnership are assigned to all employees in the “red zone”.

Development zones	2019(fact)	2020(fact)	2021(target)
85–100% (green zone)	12%	28%	40%
50–85% (yellow zone)	70%	70%	60%
0–50% (red zone)	18%	2%	0%

AMOZ.ispringlearn online learning portal (AMOZ Learn)

In order to train and develop the employees of Atyrau Refinery LLP, online training portal iSpring Learn was launched, where the following was downloaded:

- Video courses of on-boarding program;
- 37 self-development courses;
- Multimedia training complex for primary oil refining (EDP ADU-2, EDP AVDU);
- Courses on the Atyrau Refinery projects;
- 100 books for self-development;
- Technical regulations for all units of the plant.

CSC – Computer Simulator Complex

The CSC acceptance test was completed in cooperation with Honeywell in 2020. As a result, a full-featured computer simulator was implemented for a similar DCS for catalytic cracking (RFCC), catalytic reforming (CCR) and aromatic hydrocarbons (PX) units. The civil aviation pilots are trained at similar simulators.

The key goal of the computerized simulator complex is to minimize production failures associated with human factors.

Talent Pool Program

One of the priority directions of the Atyrau Refinery's Personnel policy is the talent pool training, which includes the search and identification of young and promising leaders in order to train managers of a new format with the required professional competencies.

Training in the computer simulator complex consists of a program for practical work and theoretical training. Operators of the control panel, operators of processing units, operators of pumping and compressor installations are trained.

In 2020, 43 employees of catalytic cracking and 30 employees of catalytic reforming were trained on the simulator.

Trainings for all reservists are carried out with the participation of the best Kazakhstani coaches and are aimed at developing personal and business competencies and professional skills.

In 2020 the training of 20 promising employees who make up the talent pool of the enterprise under the General MBA Master of Business Administration program in the Atyrau branch of the Almaty Management University was

continued. 3 specialists are trained under the Master of Business Administration (EMBA) program Energy Leadership at the I.M. Gubkin Russian State University of Oil and Gas.

Social Stability Rating

At the end of 2020, the Social Stability Index amounted to 85%. Compared to 2019, the index grew by 11 p.p. Growth of the index is the result of a change in the engagement index by +20 p.p., the social calmness index by +24 p.p.

Social Stability Index



Countering the Pandemic

In the spring of 2020, the Atyrau Refinery strengthened safety and preventive measures in order to prevent the plant workers from contracting coronavirus infection.

Receptions of visitors by deputy general directors, managing directors and heads of structural divisions have been limited, and the number of meetings and cultural events has been reduced. A moratorium has been declared on business trips outside Kazakhstan for employees of the Atyrau Refinery and outsourcing companies staying on the territory of the plant. Off-site training courses and seminars are prohibited until specific guidelines are received. All trainings of the plant's employees in sports complexes have also been suspended.

The daily meetings chaired by the General Director and his deputies were conducted via telephone and video conferencing. The heads of production services and outsourcing companies carried out explanatory work among the workers.

We purchased medical masks, antimicrobial hand gels, disinfectants. Sanitary facilities, meal rooms, control rooms and other places of constant presence of

people are provided with disinfectant dispensers. The frequency of wet cleaning with the use of disinfectants in all buildings and premises has been increased. Vehicles involved in the delivery of personnel are also treated with disinfectants.

From 17 March, 2020, a flexible working time regime for daytime, engineering and technical and administrative personnel has been introduced with the condition that the length of the working day is maintained as provided for by the employment contract. 228 people were transferred to the remote regime of work.

Movement of workers across the territory of the plant between structural divisions is limited. Responsible employees have been appointed in each structural unit to transfer information on paper.

We installed thermal imagers at the checkpoints of the plant and purchased 20 remote thermometers. We also created the "sanitary filter".

The plant's health unit has developed an action plan in case of finding symptoms of coronavirus infection in workers.

Support for young professionals

For many years, the Atyrau Refinery faced an acute problem of staff turnover. It was a talent pool for large industrial enterprises in the region. Dozens of trained workers from among the qualified specialists were leaving the plant. To solve this problem, it was necessary to apply cardinal solutions.

Following the intended goal of reducing the outflow of specialists, the Atyrau Refinery in 2020 began implementing projects for the social support of the qualified specialists, on whom the successful development and prosperity of the plant depended. In particular, a corporate housing program was successfully implemented, the addressee of

which were the employees who made a significant contribution to the development of the Atyrau Refinery and promising specialists in new industries.

Thus, **101** employees of the plant received the keys to new apartments in the **Victory Park residential complex** in the oil capital. The house where the new settlers have arrived belongs to the "comfort +" category of housing. It is located in the most picturesque and environmentally friendly part of the city on the embankment of the Ural River, in the Victory Park area. Comfortable 1-4-room apartments have an area of 49.96 to 124.34 square meters and are completed on a turnkey basis.



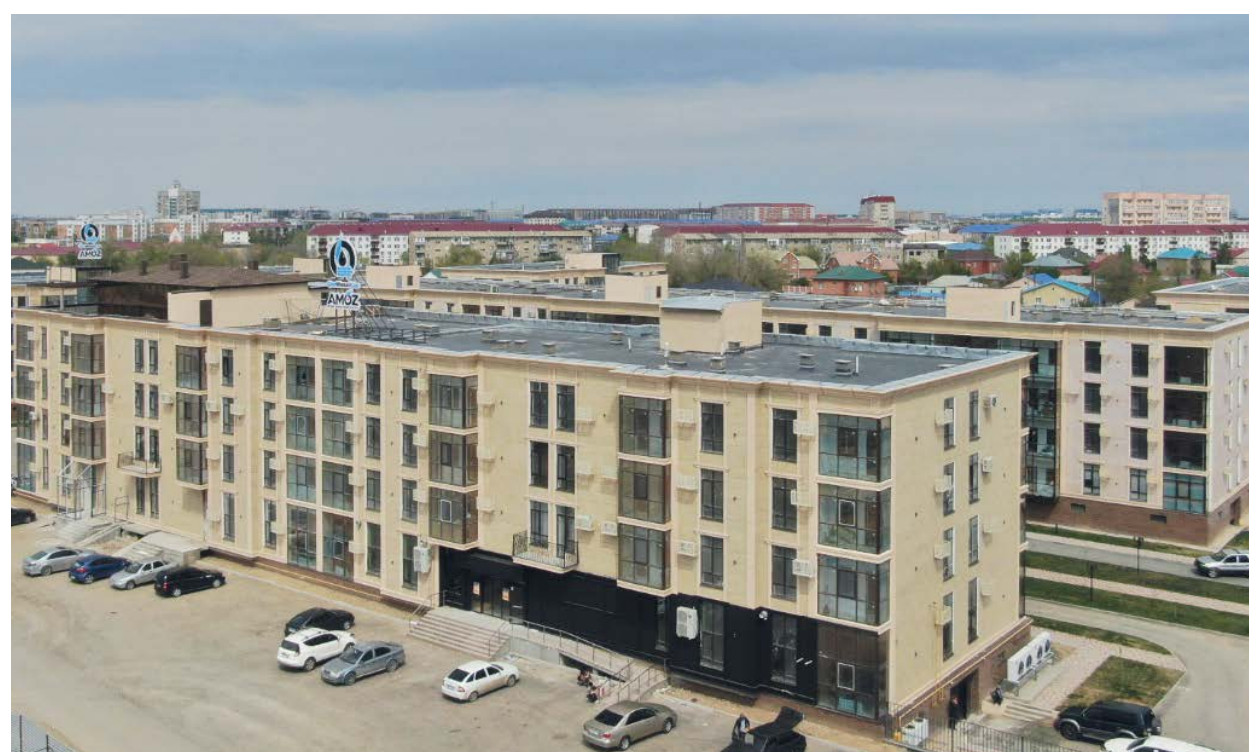
Implementation of the housing program

Received apartments in the RC «Victory Park»	Received housing loans	Received apartments from the secondary fund	Total
101 persons	28 persons	13 persons	142

A quality infrastructure for recreation and a healthy lifestyle has been created in the territory of the residential complex. An underground parking is provided in the yard.

In addition, the Atyrau Refinery offers the young professionals, which are 30% of the factory workers, an interest-free loan for the purchase of housing. ForteBank acted as the Atyrau Refinery's partner in the implementation of this program. In 2020, **28** people received housing loans totaling KZT 402.8 million. **13** people bought apartments from the secondary stock.

Thanks to the adopted housing program, **142** plant workers are provided with their own apartments in Atyrau. The efforts of the Atyrau Refinery to provide the workers with the most comfortable living and working conditions resonate with the plant workers, which makes it possible not only to retain our own, but also to attract new qualified specialists from other large oil and gas enterprises in the region. By the way, the number of employees who left the plant on its own initiative, decreased by **37%** in 2020 as compared with 2019.



Opening of the Institute of Petrochemical Engineering and Ecology

In October 2020, an Agreement on mutual cooperation was signed with the S. Utebayev Atyrau University of Oil and Gas for 15 years, which implies compulsory training of the qualified specialists on the basis of modern teaching tools, techniques and information technologies within the frames of the educational programs for professions, relevant to the Atyrau Refinery.

Within the frames of cooperation with the financial support of the Atyrau Refinery, classrooms and laboratories with a total area of 3,300 sq. m were renovated. Moreover, the material and technical base of the former Department of Chemistry and Chemical Technology, the 3rd and 4th floors of one of the buildings of the university were completely modernized (renovation of the lecture halls and chemical laboratories, furnishing with furniture and equipment).



The solemn opening of the Institute of petrochemical engineering and ecology on the basis of S. Utebayev Atyrau University of Oil and Gas took place on **December 15, 2020**



The institute trains bachelors and masters in the following educational programs:

- “Chemical technology of organic substances”;
- “Machinery and equipment for Oil and Gas Industry”;
- “Safety of life and environmental protection”.

12 new laboratories, equipped with modern equipment for the development of practical skills by the students in the application of physical and chemical methods of analysis in the processes of studying oil, gas and their products, were opened. In particular, the company AVC Group with the support of Atyrau Refinery LLP plans to equip one laboratory with high-precision gas analyzers.

The Atyrau Refinery equipped the Institute with the unique **computer simulator complexes (CPC)** – the prototypes of the catalytic reforming installation of **Axens Company**, which makes it possible to train the specialists in the field of oil refining for all three refineries of the Republic of Kazakhstan. There are no analogues of these simulators in the Universities of Kazakhstan.

Besides, **Honeywell** provided the Institute with one more computer simulator complex for the basic processes and apparatuses of chemical technology and installations **EDP AVDU**.

Under the patronage of the Atyrau Refinery, the Institute has become a unique educational center for training engineers in the demanded specialties of the oil refining and gas chemical industries. Offline and online lectures for the students are delivered by the professors of **I. Gubkin Russian State University, St. Petersburg State University, Ufa State Scientific Technical University** and leading process engineers of the Atyrau Refinery. Local teachers in the frames of the specially designed programs will undergo internships at the Atyrau Refinery.

One of the advantages of studying in this Institute is an employment prospect for its graduates, namely by Atyrau Refinery.



Labor Union



Amanturlin Galimzhan

Chairman of Branch of the Public Association “Industrial Labor Union of Employees in the Chemical, Petrochemical and Related Industries”
Labor union organization of Atyrau Refinery LLP

“Ensuring social stability is the main task of the primary labor union organization of Atyrau Refinery LLP. The labor union work of the enterprise is directed by the Labor Union Committee. The Labor Union Committee of the plant is a branch of the public association of the Labor Union of employees in the chemical, petrochemical and related industries. There are 3,078 people registered, including 655 retirees and members of the labor union of outsourcing companies. In each production and division, and outsourcing companies there is a Workshop Committee headed by the Chairman.

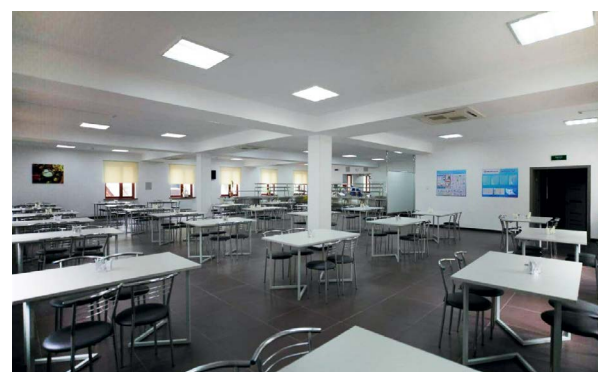
The main document for the protection of social, labor and professional rights and interests of the members of the Labor Union is the Collective Agreement between the administration of the plant and the labor collective. One of the main aspects of the Collective Agreement is to maintain a decent level of wages. Despite the difficult period in 2020, the wages were paid to employees in full and on time. There is no wage arrears to the employees”.

A conciliation commission on labor disputes has been established and operates at the plant.

The Labor Union Committee allocates the necessary funds from the labor union budget to provide material assistance to workers in dire need and retirees – former workers of the plant in agreement with the Board. Constant assistance is provided to the women’s council, the council of veterans, the council on youth affairs, for the implementation of activities for the development of mass physical culture and sports, health-improving work, the development of the creative potential of workers, the encouragement of participants in amateur performances. The Board and the Labor Union Committee actively cooperate in matters of protecting the health of workers, ensuring safety, improving working conditions. At the Labor Union Committee, technical inspectors for labor protection are actively working.

In 2020, the Labor Union, together with the Atyrau Refinery, carried out significant work to create favorable working conditions for all plant employees. In particular, the Central Canteen was repaired, parking lots and internal plant roads were asphalted, and workshop premises were repaired.

Besides, the “Hall of History and Labor Glory of the Atyrau Oil Refinery” was modernized.



During the pandemic, the labor union organization donated two artificial lung ventilation devices (ALV) to the plant medical center to support the efforts of the plant management to ensure the health of the employees.

Portable ALV have 4 kg oxygen cylinders. One of them was installed in the isolation zone, and the other in the ambulance. The modernized medical center was visited by the Chairman of the Industrial labor Union of Chemical, Petrochemical and Related Industries K. Primkulov and praised the work of the plant’s management and the labor Union to create decent working conditions for the plant employees and protect their health.

In 2020, at the suggestion of the labor Union, for the first time, 20 veterans of the plant were awarded the “Enbek ardageri” medal, and 50 veterans were awarded an anniversary medal in honor of the 75th anniversary of the plant.



K. Primkulov's visit to the medical center



G. Amanturlin presents the medal “Enbek ardageri” to Yu. Shkodin

/ ENVIRONMENTAL PROTECTION



Mursaliyeva Zhanna

Head of the Environmental Protection Division

“Atyrau Refinery is an environmentally oriented company and our main goal was and remains to prevent unplanned and unauthorized emissions into the atmosphere, with wastewater, as well as production and consumption waste. We adhere to a policy of rational use of natural resources, including controlled water use, electricity, separate collection and disposal of waste. In its paperwork management, the plant minimizes hard-copy document workflow by switching to electronic workflow, thereby participating in the preservation of forests. In our production process we always comply with the norms and requirements of environmental legislation.

Over the past year 2020, in connection with the adoption of the new Environmental Code of the RK, the plant carried out work to assess the compliance of its production activities with the newly introduced environmental requirements.

As part of development of a technical reference book on BAT in 2020, IGTIPC (Center for Green Technologies), together with national and international experts, on behalf of the Ministry of Ecology, Geology and Natural Resources of the RK (MEG NR RK) conducted a comprehensive technological audit of the plant. According to the preliminary audit data, the Atyrau Refinery’s technologies correspond to the BAT RF and EU reference books.

We filled in the plant data in a web application to obtain an expert assessment of the enterprise’s technological processes for compliance with the principles of Kazakhstani BAT.

In order to continuously monitor the quality of pollutant emissions from the production facilities of the Atyrau Refinery, a pre-project survey was carried out in 2019 to introduce an automatic monitoring system (AMS) at the main sources. In 2020, we started developing a project for the introduction of AMS for emissions of pollutants at the main sources, and this year we are planning to complete these works.

It should be noted that the Atyrau Refinery has an environmental monitoring system, which includes four automatic air quality control stations located on the border of the plant’s sanitary protection zone, which determine the main pollutants in the air. These automatic stations conduct 24/7 observations on the content of pollutants in the atmospheric air for the following indicators: hydrogen sulfide, carbon monoxide, nitrogen oxides, sulfur dioxide, hydrocarbons. In 2021, we are planning to equip the eco-posts with gas analyzers for benzene, toluene, paraxylol and ethylbenzene. Reports are transmitted hourly to the server of the RSE Kazhydromet with subsequent integration into the AirKz application and broadcasting of data on the LED screens of the city and the plant to inform the population. The Atyrau Refinery carries out all

of its emissions into the environment in accordance with a permit for emissions into the environment issued by the Committee for Environmental Regulation and Control of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, and accordingly makes tax payments.

Furthermore, we pay attention to the issues of landscaping and planting of the territory adjacent to the Refinery. Today, the total area of landscaping and planting of the sanitary protection zone of the Refinery is 224 hectares, 126,270 trees and shrubs have been planted. We replant the zoned seedlings annually in the amount of about 12 thous. pieces.

We concluded a long-term contract (5 years) with a specialized organization for maintenance of green spaces of the sanitary protection zone for a total of KZT 968,263 thousand.

The Refinery also plans to improve and plant trees on the territory on the western side of the plant with an area of 32 hectares, which was vacated after the resettlement of residents. This territory has been cleared of garbage, the remaining buildings have been dismantled, and the area has been planned.

To improve the environmental situation in Atyrau city in 2021, the plant is implementing the TAZALYQ program, within the framework of which measures are provided for modernization of mechanical treatment facilities and reclamation of evaporation fields (Rotten Draw Pond)."



Management Philosophy

The Atyrau Refinery knows the importance and establishes the work and development of systems in the field of labor and environmental protection, quality management, energy efficiency and energy saving.

The priority areas in the field of environmental protection of the Atyrau Refinery are:

- management of emissions of pollutants and greenhouse gases;
- water resources management;
- improving energy efficiency;
- production and consumption waste management.

We achieve this goal by introducing, maintaining in working order and constantly improving the following **control systems**:

- quality management systems in accordance with ISO 9001:2015 standard;
- environmental management systems in accordance with ISO 14001:2015 standard;
- occupational health and safety management systems in accordance with OHSAS 18001:2007 standard;
- energy management systems in accordance with ISO 50001:2011 standard.

Continuous improvement of management systems is ensured by regular monitoring of these systems, the need for periodic revision of

the documented procedure, as well as receiving feedback from all stakeholders.

The Atyrau Refinery has the following obligations:

- Compliance with laws and other regulations applicable to the plant's operations, as well as international standards in the field of quality management, health and safety, environmental protection, energy efficiency and energy conservation.
- Ensuring the availability of information for measurement purposes of the integrated management system.
- Ensuring the highest possible measurement of effectiveness of the existing integrated management system in order to monitor and improve it, as well as the associated availability of reporting and controlling information.
- Providing employees and contractors with a safe working environment and forming a responsible attitude among employees towards quality management, environmental protection, energy efficiency and labor protection.
- Compliance and fulfillment of consumer requirements for the quality of the oil refining process with high responsibility.
- Control and prevention of environmental pollution,

minimization of harmful effects, taking into account social and economic factors.

- Identifying, eliminating or controlling and minimizing potential health and safety risks to workers, contractors and the public.
- Supporting the procurement of energy efficient and environmentally friendly goods and energy efficient works and services.
- Improving the effectiveness of monitoring on quality control, labor protection, energy efficiency and environmental aspects to identify problems and further setting goals and objectives, and their achievement to ensure the sustainable development of the Company.

- Control and analysis of the enterprise's activities with the aim of continuous improvement of systems in the field of quality, health protection, labor safety, energy efficiency and energy saving, environmental protection.

In order to improve the environmental situation in Atyrau, the Atyrau Refinery is implementing the **TAZALYQ project**, the main task of which is to minimize the environmental impact from the plant's activities. The project will have a significant environmental effect by bringing the quality of wastewater treatment up to standard indicators. Plus, the project provides for the reclamation of the existing evaporation fields with restoration



Visit of the Minister of Ecology M. Mirzagaliyev

of the soil cover and laying of a pipeline instead of an open channel for normatively treated wastewater. Thereby, the negative impact of production on Atyrau's groundwater, flora, fauna and atmospheric air will be minimized.

The Atyrau Refinery aims for continuous improvement of the environmental management system, actively interacts on environmental issues with all stakeholders, annually publishes information on all environmental aspects, thereby constantly reaffirming its commitment to openness and responsibility to society.

Investments

To effectively manage environmental risks, the Atyrau Refinery is constantly improving approaches to environmental management and allocates the necessary resources for environmental protection, in particular, environmental costs, including payment of taxes for regulatory emissions, costs of environmental protection measures, insurance, compensation measures in the field of environmental protection.

Thanks to the use of modern technologies, emissions of pollutants into the atmosphere in 2020 with a limit of 20,123 tons amounted to 11,958 tons, discharges of

pollutants with wastewater – 12,020 tons with a limit of 23,231 tons. To reduce the fuel gas consumption and the corresponding emissions, the Atyrau Refinery will replace technically obsolete burners at a number of primary oil refining units.

In 2020, on behalf of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan (MEGNR of the Republic of Kazakhstan), as part of the development of a technical guide on BAT at the plant, a **comprehensive technological audit** was carried out by the International Center for Green Technologies and Investment Projects (ICGTIP) together with the national and international experts. The audit carried out preliminary confirmed that the plant's technologies correspond to the best practices in the environmental field.

The Atyrau Refinery operates an **environmental monitoring system based on four automatic monitoring stations** that monitor the content of **hydrogen sulfide, nitrogen and carbon oxides, sulfur dioxide and hydrocarbons** in the atmosphere. Also, from 2021, additional **analyzers** have been installed that will monitor the concentration of **benzene, xylol, toluene, ethylbenzenes**. Environmental monitoring reports are transmitted hourly to the server of the **RSE Kazhydromet, LED screens** in Atyrau city and at the plant.

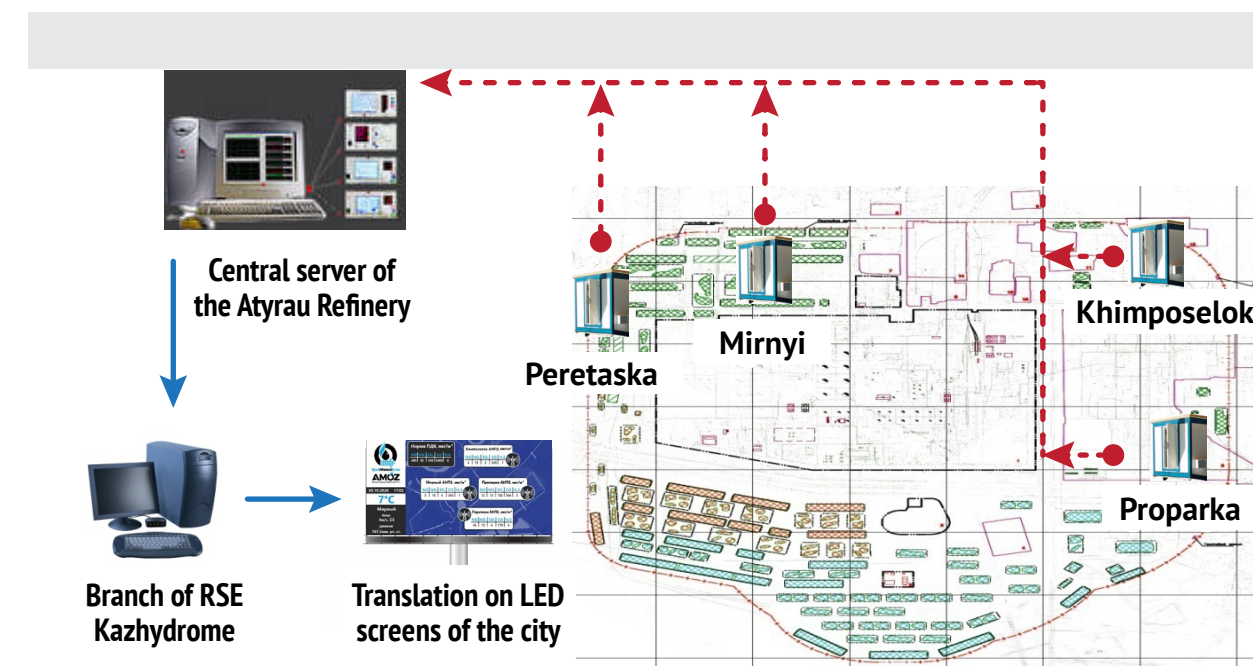
Last year, the Atyrau Refinery team performed additional landscaping of more than 1 hectare of the urban area of Zhastar Street, followed by planting maintenance. Also, the plant serves **224 hectares** of previously planted areas. In addition, Memorandum "On performing works on landscaping Atyrau city between

the akimat of the Atyrau region and Atyrau Refinery LLP is going to be signed, according to which the parties agree on landscaping a land plot with an area of 1,420.9 hectares, including 860 hectares of the territory of the Rotten Draw Pond evaporation pond of the plant.

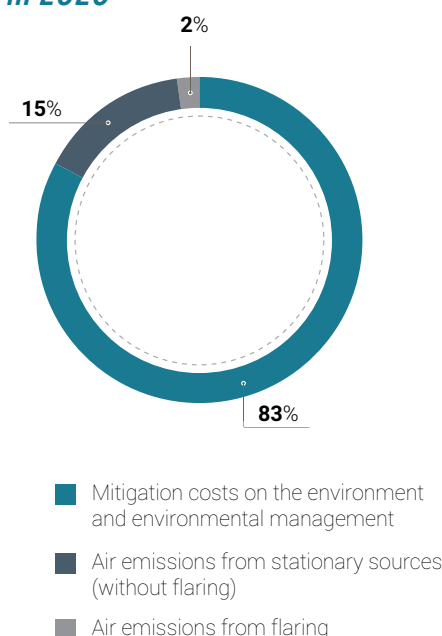
Expenditure on Environmental Payments in 2020

Expenditure category	Amount, mln tenge
Air emissions from flame combustion	5.0
Air emissions from stationary sources (without flame combustion)	305.2
Waste disposal	2.0
Water contamination	41.5
Expenses for reducing environmental impact and environmental management	1,729.5
Total	2,083.2

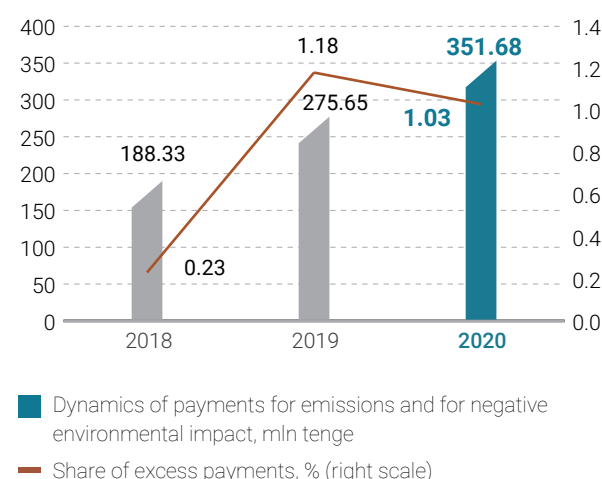
Layout of environmental monitoring stations



Structure of Environmental Payments in 2020



Dynamics of Payments for Emissions



Emissions of Pollutants

We understand the impact of our activities on the atmosphere and the environment. In this regard, we are focused on developing strategies for reducing and controlling air emissions and exploring the possibilities of introducing innovative technologies and projects. We are committed to meeting national and international environmental emissions regulations.

In 2020, the Emissions Management Policy was developed at Atyrau Refinery LLP, the purpose of which is to ensure effective management of emissions to minimize the impact on the environment.

Emission management is based on 7 “climatic” principles:

1. Carrying out activities in strict accordance with the legislation, requirements and other obligations of the enterprise.
2. Compliance with established emission standards and limits for pollutant emissions, quotas for greenhouse gas emissions.
3. Clear distribution of roles and responsibilities, increasing competence, training and awareness.
4. Carrying out regular accounting, inventory and monitoring of emissions.

5. Implementation of measures to reduce greenhouse gas emissions and reduce the carbon footprint.
6. Carbon asset management.
7. Continuous improvement of emissions management activities.

In 2019, the Atyrau Refinery adjusted the draft standards for maximum permissible emissions of pollutants (MPE) for 2019–2028 with a positive conclusion from the Department of Ecology of the Atyrau region. Based on the **positive opinion** of the Ministry of Ecology, Geology and Natural Resources of the RK, the Refinery obtained a permit for emissions into the environment for 2019–2020. The essential principle of Atyrau Refinery LLP is strict observance of emission standards and limits for pollutant emissions specified in the permit for emissions into the environment.

In the course of recent years, the Refinery has performed a number of modernizations and renovations. In 2011–2018, the plant implemented the Deep Oil Refining Complex (DORC) project included in the list of investment strategic projects of the RK, carried out in accordance with the state program of industrial and innovative development, the Industrialization Map for 2015–2019 and the Strategic Plan of the Ministry of

Energy of the RK. The project made it possible to significantly increase the capacity and the depth of oil refining by processing fuel oil into valuable gasoline, jet and diesel fuel. As part of the DORC, we also built a catalytic cracking unit. **Wet scrubber system** is used to clean flue gases in the catalytic cracking unit, which works on the principle of saturation, absorption, condensation and filtration. Special devices and sprayers are used to reduce the content of contaminants.

All plant pollutant emissions are measurable and controllable.

Atyrau Refinery LLP emissions go through three control stages:

Stage 1 – State Control

Emissions of Atyrau Refinery LLP are produced in a strictly defined proportion in accordance with the permission for emissions into the environment issued to the plant by the Committee for Environmental Regulation and Control of the Ministry of Ecology, Geology and Natural Resources of the RK. Atyrau Refinery LLP strives to minimize the environmental impact and never reach the maximum set volumes of gross emissions of pollutants.

Stage 2 – In-house Monitoring

Atyrau Refinery LLP has four automatic air quality control stations located in the points of the plant's neighborhood with settlements or protection zones. These automatic stations carry out 24/7 observations, and transmit data to RSE Kazhydromet every day.

Stage 3 – Industrial Environmental Control

As part of the IEC, atmosphere air is monitored at the industrial site of the plant, at the borders of the plant's sanitary protection zone, at the landfill of solid industrial waste of the plant, in the evaporation

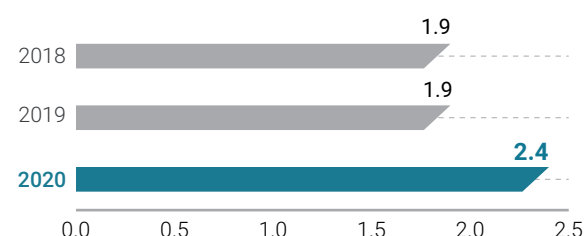
fields of the left-bank part of Atyrau for the presence of nitrogen dioxide, sulfur dioxide, hydrogen sulfide, soot and other pollutants. The IEC data is sent quarterly in the form of a report to the Department of Ecology of the Atyrau region and published at the portal of the Unified Information System for Environmental Protection.

In connection with bringing the AORC and Aromatics Complex to the design capacity, the specific emissions of sulfur oxide and nitrogen at the enterprise increased, as can be seen from the data below. At the same time, the plant complies with the standards of maximum permissible emissions, established in the environmental permit.

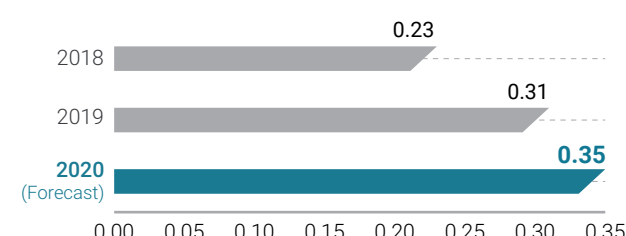
Dynamics of Pollutant Emissions, thous. tons

Pollutant	2018	2019	2020
Sulfur oxides SO _x	0.5	0.5	0.6
Nitrogen oxides NO _x	3.8	3.8	4.8

Specific pollutants Emissions into the atmosphere, tons/1000 tons of refined oil



Specific greenhouse gases Emissions into the atmosphere, thous. tons/thous. tons of refined oil



Greenhouse Gas Emissions

Atyrau Refinery developed the Greenhouse Gas Emissions Reduction Program 2016–2020.

The Program ensures:

- Reduction of emissions by introducing energy management programs and systems.
- Measures to reduce emissions at selected units.

The Atyrau Refinery regularly carries out activities aimed at improving energy efficiency, which, in turn, leads to greenhouse gas emissions reduction. Since the volume of greenhouse gas emissions directly depends on the volume of consumed fuel, raw materials and other materials, most of the measures taken to improve energy efficiency, directly or indirectly, lead to reduction in greenhouse gas emissions.

Dynamics of Greenhouse Gas Emissions

Indicator	2018	2019	2020 (Forecast)
Gross direct emissions of greenhouse gases, thous. tons of CO₂-eq., including:	1,205.851	1,655.069	1,777.798
carbon dioxide (CO ₂), thous. tons	1,194.223	1,640.138	1,760.425
methane (CH ₄), thous. tons	10.907	14.095	16.478
nitrogen oxide (N ₂ O), thous. tons	0.721	0.836	0.895

Climate Change

Atyrau Refinery is an industrial enterprise, the main function of which is the processing of oil into gasoline, aviation kerosene, fuel oil, diesel fuel, petroleum coke and petrochemical feedstock. Oil is refined at processing units: primary oil refining (AD – atmospheric distillation, AVD – atmospheric-vacuum distillation), catalytic reforming, catalytic cracking, hydrotreating, isoselectoforming, dewaxing, bitumen production, etc. The main equipment of the units are: tube furnaces, rectification columns, heat exchangers.

The oil refining industry is an important link in the unified fuel and energy complex of the country, which determines the efficiency of the use of petroleum raw materials.

Oil refineries are the largest consumers of fuel and energy resources, including boiler and furnace fuel, heat and electricity. The efficiency and rationality of their use in oil refining processes are largely determined by the operation of the plant's technological equipment. Maintaining the proper and efficient operation of plant equipment, work to ensure safety

and trouble-free operation is an important element of the Company's work to reduce the impact on climate change.

Water Resources Management

Atyrau Refinery is aware of the value of water for human life and health, for society and our production activities, and strives for the rational use of water resources.

In 2019, the Company developed the Regulation on Water Resources Management.

Basic principles for water resources management for Atyrau Refinery:

1. We are aware of the highest value of water for human life and health, for society and our production activities, and we unconditionally accept the importance of a careful and rational attitude to the country's water resources.
2. We strive not only to comply with requirements of the legislation of the Republic of Kazakhstan, but also to comply with international standards and best practices, as well as to take into account the views of all stakeholders in the region.
3. We will not allow exceeding the norms of water consumption from the Ural river.

4. We will not allow exceeding the standards of wastewater disposal.
5. We strive to improve the quality of wastewater treatment in units and wastewater treatment facilitates for maximum possible reuse and reduction of discharge volumes.
6. We strive to use closed water circulation systems for water supply.
7. We strive to reduce the intake of fresh water as much as possible through the introduction of water circulation and water-saving technologies.
8. We strive not to use potable quality water for production purposes.
9. We strive for one hundred percent metering of water intake and wastewater disposal.
10. We are conducting enhanced control to prevent leaks and discharges of treated wastewater for the rational use of water resources.

The total amount of taken water in 2020 was 6.9 mln m³. The main source is surface water. The total discharge of water last year amounted to 4.6 mln m³. Discharge is carried out only into evaporation ponds (accumulators), on filtration fields.

For the production needs of the plant in order to cool the technological

equipment and installations of the plant, the surface water is taken from the river Ural. In accordance with the water legislation of the Republic of Kazakhstan, the plant

is issued in the prescribed manner a permit for water use, as well as tax payments are made for the use of the water resources.

Total Amount of Withdrawn Water by Sources, thous. m³

Indicator	2018	2019	2020
Water withdrawn volumes (surface water)	7,190.78	7,105.4	6,867.7
<i>Municipal and other water supply systems (purchase of drinking water from PSE Atyrau Oblysy Su Arnasy)</i>	160.48	145.55	129.909

Waste Management

The Company has developed "Waste Management for Consumption Production for 2019–2028" program. The program regulates the activities for planning, implementation, monitoring and analysis of measures for the management of production and consumption waste. The program is aimed at improving the efficiency of procedures for assessing changes in the volume and composition of waste in order to develop an operational policy for minimizing waste using economic or other mechanisms to make positive changes in the patterns of production and consumption by:

- improvement of production processes, including through low-waste technologies introduction;
- reuse of waste or their transfer to individuals and legal entities interested in their use;

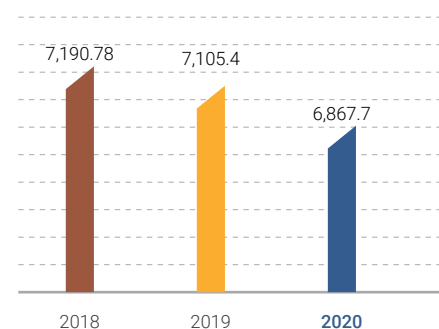
- recycling, disposal or neutralization of waste using the best available technologies.

The Company's goal is to gradually reduce the volume and (or) the level of hazardous properties of accumulated and generated waste, as well as waste in the process of circulation. The tasks are set to achieve this goal by the most effective and economically sound methods, with forecasting achievable volumes (stages) of work within the planning period.

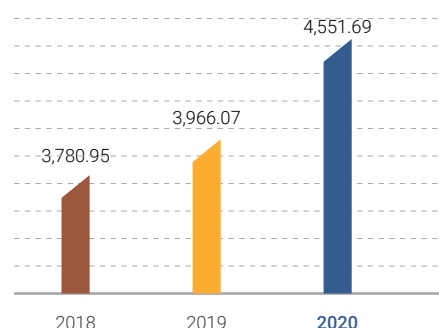
The tasks are aimed at reducing the volume of generated and accumulated waste, taking into account:

- introduction at the enterprise of the world's best available technologies for waste recycling and treatment;

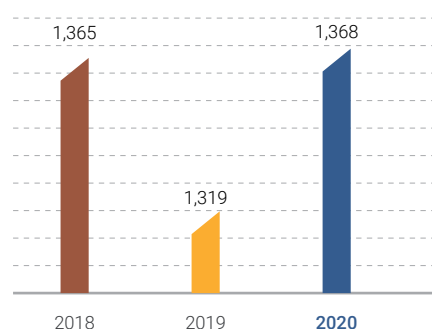
Water intake volumes, thous. m³



Wastewater discharges, thous. m³



Specific Water Consumption for the Plant's Own Needs, m³/1000 tons of refined oil



- minimization of the volume of waste disposed of to landfills;
- reclamation of waste disposal sites, minimization of the negative impact of landfills on the environment.

Atyrau Refinery has its own landfill for burial of solid industrial waste (biological sludge, activated carbon, destroyed ceramic balls) located to the east of Atyrau city at a distance of 1.9 km. The landfill is located 7.9 km north-east of the plant's territory.

During operation of the oil refinery, the resulting industrial wastes of III and IV hazard class – biological sludge, activated carbon, ceramic balls – are taken to its own landfill, the rest of resulting waste is removed by specialized companies under a contract.

In 2020, recycling, removal and waste processing was carried out by BSG LLP, Abadan Group LLP, Atyrau Vital Global Mote LLP, Enertek LLP, Eco-Technics LLP, Spetsavtobaza LLP.

The increase in the volume of industrial waste in 2020 is due to the work for cleaning the tanks of sewage treatment plants, in which oil sludge has been accumulated over the past few years. In connection with the work for the reconstruction of the wastewater treatment plant, the plant is carrying out the work on its dismantling and cleaning the territory (the Tazalyq Project), which also affected the volume of removed and disposed of waste.

Total Volume of Waste Generation, tons

Indicator	2018	2019	2020
Waste generation volume, including:	15,045.06	32,937.080	54,753.1
biological sludge	69.3	80.5	91.7
oil slime	605.9	19,819.443	35,131.338
solid domestic waste	1,673.66	1,055.5325	1,256.59
lime sludge	1,564.0	2438	3,013.850
construction garbage	6,070.48	6,760	7,665.84
spent catalysts	80	2,685.767	6,722.00
other waste	4,981.72	97.84	871.8

Waste Management Methods, tons

Indicator	Hazardous waste generated
Formed during the reporting year	54,753.105
Reused at the enterprise	1,638
Redesigned at the enterprise's unit	2,2819.998
Placed and buried at the waste disposal facilities of the enterprise	92.70
Transferred to specialized contracting organizations	52,122.865
Located at the enterprise at the end of 2020	-



Environmental Impact Assessment

In accordance with requirements of the environmental legislation of the Republic of Kazakhstan, at the planning stage of each project, we perform environmental impact assessment (EIA) to determine the environmental and other consequences of options, managerial and economic decisions taken, and develop recommendations for improving the environment.

Furthermore, at the design stage of each project, we hold public hearings with the participation of stakeholders' representatives: administrative, state and regulatory bodies, research organizations, public associations, local residents and the media. We provide access to all stakeholders to draft EIA, receive and register notes and suggestions.

On 5 November, 2020, we held public hearings in the form of open meetings on the "Reconstruction of the channel of normatively treated wastewater and reclamation of evaporation fields of Atyrau Oil Refinery LLP" project.

Industrial Environmental Monitoring

The Atyrau Refinery performs industrial environmental control – this is a system of measures carried out by natural resource user to monitor the state of the environment and its changes under the influence of economic and other activities, verification of the implementation of plans and measures for protection and improvement of the environment, reproduction and rational use of natural resources, compliance with legislation on environmental protection, standards for its quality and environmental

requirements, including production monitoring, accounting, reporting, documenting the results, as well as measures to eliminate identified inconsistencies in the field of environmental protection.

Industrial environmental monitoring of the enterprise's economic activities is carried out on the basis of the **Industrial Environmental Control Program (IEC)**, as well as schedules for analytical control of atmosphere air and waste water.

The IEC program covers the following types of monitoring:

- state of atmosphere air at the industrial site, the sanitary protection zone (SPZ), the plant's landfill for solid industrial waste, the evaporation field of the left-bank part of Atyrau;
- condition of industrial emissions from chimneys of technological furnaces and boilers of the plant;
- quality of the waste water discharged from the plant;
- condition of underground water from the observation wells of the plant located at the industrial site, the landfill of the plant's solid industrial waste, the flare unit, the evaporation field, the loading rack for light oil products;
- condition of soil and vegetation at the industrial site, the evaporation field of the left-bank part of Atyrau, the landfill of solid industrial waste of the plant;

- radiation safety on the territory of the industrial site, the SPZ, in the area of the evaporation field of the left-bank part of Atyrau, the industrial waste disposal site and in the utility and administrative premises of the plant;
- production control of physical factors (noise and vibration) at the border of the plant's SPZ.

Industrial environmental monitoring is carried out in accordance with the industrial environmental program on a quarterly basis, then a report is drawn up in accordance with the environmental legislation of the Republic of Kazakhstan and submitted to the Department of Ecology in the Atyrau region, the report is also entered into the Unified Information System of Environmental Protection of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan.

According to the results of 2020, during the monitoring, excess of maximum permissible concentrations was not recorded.



Public hearings

Energy Efficiency

As part of the Energy Efficiency Program for 2016–2020, we are planning to carry out 20 activities aimed at reducing the consumption of fuel and energy resources (FER). The expected decrease in FER amounted to 8.78%.

Based on the results of the work, 15 program activities were carried out over five years, which made it possible to save from 2016 to 2020, about 15% of fuel and energy resources (FER), with an increasing effect, of the total energy consumption of the base year, which

amounted to about 40,698 trf, or 974.4 million tenge. In terms of natural fuel, this made it possible to save about 25,436 tons of natural gas and reduce emissions of harmful substances into the atmosphere:

- H₂S – 0.129 tons;
- CO – 298.1 tons;
- NO₂ – 59.1 tons;
- NO – 9.6 tons;
- Total – 366.89 tons.

Some of the activities were not carried out for objective reasons, related primarily to the risks affecting the safety of the technological processes and financial costs.

Energy Capacity Indicator Dynamics

Indicator	2018	2019	2020
Total consumption of fuel and energy resources, trf	1,006,610.6	1,182,404.6	1,290,670.6
Oil refining volume, thous. tons	5,267.734	5 388.2	5 016.3
Energy Capacity of oil refining, trf/1000 tons of refined oil	191.1	219.4	257.3

Energy consumption

Energy type	Measurement Unit	Energy consumption, physical units			Energy consumption, tons of reference fuel (trf)		
		2018	2019	2020	2018	2019	2020
Natural gas	thous. cubic m	147,699.4	172,323.1	157,874.7	169,854.31	198,171.57	181,555.91
Heat energy	Gcal	1,177,593	1,044,863	1,049,175	168,395.799	149,415.41	150,032.03
Electricity	MWh	722,983.5	781,842.9	787,722.7	88,926.9705	96,166.677	96,889.892
Boiler and furnace fuels	t	19,049	29,579	27,574.38	24,954.19	38,748.49	36,122.438
Gas fuel	t	346,549.8	437,439.03	516,293.97	554,479.32	699,902.45	826,070.35
Total		1,006,610.59	1,182,404.6	1,290,670.6			



Shumilov Sergei

Chief Energy Efficiency Specialist

“Atyrau Refinery pays great attention to efficient use of fuel and energy resources – this is an important factor of the plant’s impact on the environment, both in terms of the level of resource consumption and in terms of emissions of pollutants. It is also a factor of operational efficiency that influences economic performance.

The plant, particularly, is implementing a program to reduce burns and losses for 2019–2025. The program initiated by the plant’s specialists provides for repair and restoration activities, capital projects and modernization. In 2020, we carried out commissioning tests in the plant’s furnaces. As a result of only organizational measures, due to the control of the oxygen content in the furnaces, we managed to save 10 thousand tons of fuel per year, or 0.2% from oil refining.

General structure of the fuel and energy resources consumed by the plant: 70% is accounted for by fuel, 20% by heating energy, and 10% by electricity. Therefore, reduction of fuel consumption, which is mainly used in oil fire heating furnaces, is the key element in ensuring energy efficiency.

We are going to introduce an energy efficiency program for 2021–2025 in the new year. In particular, already this year we are planning to prepare a feasibility study for the technology of a rigid tar supply scheme. By reducing the need for heating tar, we are aiming to save about 8 thousand tons of fuel. But this is just one project of an extensive program of activities for the next five-year term. Energy efficiency issues will remain to be the focus of the Refinery’s management”.



Corporate Governance

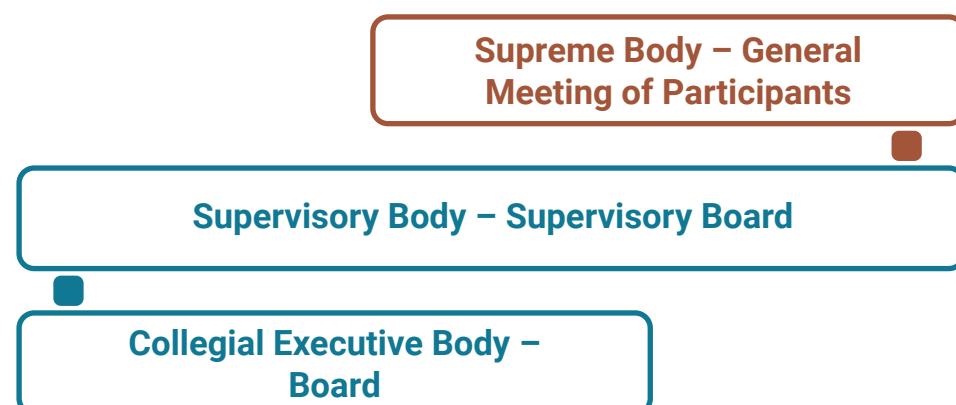
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MOTOR GASOLINE PRODUCTION IN
2020

1,053,978 tons

SAFETY
QUALITY
STABILITY

/ MANAGEMENT STRUCTURE



/ GENERAL MEETING OF PARTICIPANTS

Over the reporting year 2020, the General Meeting of Participants of Atyrau Refinery LLP considered 8 issues at 6 meetings:

on changing the composition of the Board (on early termination and election of members of the Board)	1
on approval of certain internal rules	2
on approval of financial statements and the distribution of net income of Atyrau Refinery LLP for 2019	1
on alienation of stakes in the authorized capital of other legal entities	1
on approval of transactions for the amount over KZT 8,000,000,000	3

/ SUPERVISORY BOARD

The Supervisory Board of Atyrau Refinery LLP organizes its activities in accordance with the legislation of the Republic of Kazakhstan, the Charter, internal documents of the Company and other documents approved by the General Meeting of Founders.

The objectives of the SB are to control activities of the executive body of the Atyrau Refinery, ensure the realization of interests and protection the rights of participants.

Key functions of the SB of Atyrau Refinery:

- determination of the priority development directions of the Atyrau Refinery and establishment of the main guidelines for activity of the Atyrau Refinery in the long run;
- settlement of corporate conflicts;
- other functions stipulated by the Charter and documents approved by the GMP of Atyrau Refinery.

The SB's competence is determined by the legislation of the RK and the Charter of Atyrau Refinery. The Supervisory Board is not entitled to make decisions that contradict the decisions of the GMP.

Key competencies of the SB of Atyrau Refinery:

- approval of the Business Plan, Annual Budget, adjustments and monitoring of their implementation;
- preliminary approval of the annual financial statements;
- approval of the total number of employees of the Atyrau Refinery;
- approval of the general risk appetite of the Atyrau Refinery;
- approval of motivational key performance indicators for members of the Board of Atyrau Refinery and their target values;
- determination of the size of official salaries and wage conditions, bonuses, payment of awards and social support of the Atyrau Refinery's executive officers;
- conclusion of transactions, the value of which is 25 percent or more of the total value of the Atyrau Refinery's assets;
- increase in financial liabilities of the Atyrau Refinery (loans, financial assistance, guarantees) by an amount of more than KZT 500,000,000 (five hundred million).

Responsibility of Members of the Supervisory Board:

- The Supervisory Board is responsible to the GMP of Atyrau Refinery.
- SB members are responsible for losses caused by actions (inaction) as a result of improper implementation by the SB of control over the activities of the executive body of Atyrau Refinery, in the manner prescribed by the legislation of the Republic of Kazakhstan.
- SB members may be held liable at the request of the GMP, while they are jointly and severally responsible for losses caused by their joint implementation of improper control over the activities of the executive body of Atyrau Refinery.

- SB members can be jointly and severally held liable to third parties subsidiary with Atyrau Refinery for losses incurred by these persons as a result of insolvency (bankruptcy) of Atyrau Refinery caused by improper control over the activities of the executive body of the Atyrau Refinery.

Payment of remuneration to the SB members (representatives of KazMunayGas NC JSC) is not provided.

The General Meeting of Participants of Atyrau Refinery LLP determine election and early termination of powers of the Chairman and members of the Supervisory Board, the number of members, the term of office of the Supervisory Board.

/ COMPOSITION OF THE SUPERVISORY BOARD OF ATYRAU REFINERY LLP

Tiyessov Daniyar

Chairman of the Supervisory Board of Atyrau Refinery LLP

Deputy Chairman of the Managing Board for Oil Refining and Marketing of KazMunayGas NC JSC



Date of birth: 6 December, 1970

Education: in 2002 graduated from the Atyrau Institute of Oil and Gas with a degree in Technological Engineer. In 1991 graduated from the East Kazakhstan State University with the qualification “Lawyer”.

Work experience:

Began his labor activity in 1994 as a manager of the Manas SE, then worked as a manager in Bata LLP and as an executive director in Abyz LLP.

Since 1999 – assistant to the First Vice President, Secretary of the Board of Directors of Atyrau Refinery OJSC. In the same year, starts working at Kazakhoil NOC CJSC as Chief Manager, Deputy General Manager of the Group for Project Management for Reconstruction of OJSC Atyrau Refinery, Head of the Control Sector for current activities, chief specialist of the sector corporate governance and monitoring of the current activities of the project management department of Atyrau Refinery.

In 2002, was appointed as the Deputy Director of the Oil, Gas and Petrochemistry Department, then – Deputy Director of the Petrochemistry Development Department of KazMunayGas NC CJSC.

From 2003 to 2006 he worked as the head of the capital construction department, the general director of the Directorate of the enterprise under construction, the financial director of the Directorate of the enterprise under construction Atyrau Refinery LLP.

In 2006, he was appointed as Deputy General Director for Production of KazMunayGas Trading House JSC.

From 2009 to 2013 – Deputy Chairman of the Managing Board for Refining and Petrochemicals, Managing Director for Oil Refining and Marketing, Advisor at KazMunayGas NC JSC.

In 2013, he became Deputy Chairman of the Managing Board for Oil Refining and Marketing of KazMunayGas NC JSC – General Director of JSC KazMunayGas – Refining and Marketing.

Since August 2016 – Senior Vice President of KazMunayGas NC JSC.

Since January 2018 – Executive Vice President for Oil Transportation, Refining and Marketing of KazMunayGas NC JSC.

Since February 2019 – Deputy Chairman of the Managing Board for Oil Refining and Marketing of KazMunayGas NC JSC.

From July 2020 – Deputy Chairman of the Board in Oil Refining and Petroleum Chemistry of “KazMunaiGas” JSC.

Awards: Awarded with the medal “Qurmet”, medals “20 years of the Constitution of the Republic of Kazakhstan” and “25 years of Independence of the Republic of Kazakhstan”, the Certificate of Merit and the Certificate of Honor of KazMunayGas NC JSC; a diploma of the Chairman of the Board of JSC NWF Samruk-Kazyna “For demonstrated leadership in promoting the goals of transformation” and a jubilee medal for the 20th anniversary of the civil protection service of the Emergency Situations Committee of the Ministry of Internal Affairs of the Republic of Kazakhstan, Awarded with medal of the Ministry of Energy of RoK “For contribution to the development of oil and gas industry”.



Melnik Viktoriya

Member of the Supervisory Board of Atyrau Refinery LLP

Chief specialist of the Operations Management Sector of the Oil Refining and Petrochemistry Department of KazMunayGas NC JSC



Date of birth: 27 July, 1985

Education: in 2008 graduated from the F.M. Dostoevsky Omsk State University with a degree in Finance and Credit, Exchange Business with the qualification “Economist”.

Work experience:

Began her career in 2005 as an economist of the 2nd category of the planning and economic department of KSP Steel Manufacturing Company LLP.

In 2010–2011, worked at RT Refinery Company LLP, which was engaged in the sale of oil and oil products, as a manager of the economic analysis and budgeting service.

In 2012–2014 – Deputy Director of the Department of Economic Analysis and Business Planning at Eurasia Munai Impex LLP, a subsidiary of JSC KazMunayGas Refining and Marketing.

From 2014 to 2016 – General Manager, Head of the Financial Analysis and Business Planning Service of KazMunayGas-Aero LLP, engaged in the sale of aviation fuel, fueling of aircrafts.

In 2015–2016, worked as Deputy Director of the Department for Investment Planning and Tariff Regulation of JSC KazMunayGas Refining and Marketing.

In 2016–2017 – Chief Manager of the Oil Refining Department of KazMunayGas NC JSC, Deputy Director of the Department for Project Management of Modernization of KazMunayGas NC JSC Refinery.

From August 2017 to July 2020 – Head of the Operations Management Division of the Oil Refining Department of KazMunayGas NC JSC.

Since July 2020 – Chief Specialist of the Operations Management Sector of the Department of Oil Refining and Petrochemistry of KazMunayGas NC JSC.

Awards: awarded with Certificates of Honor and medals of Pavlodar Oil Chemistry Refinery LLP, CASPI BITUM JV LLP, KazMunayGas NC JSC – Processing and Marketing, KazMunayGas NC JSC.



Dandybayeva Zhanara

*Member of the Supervisory Board
of Atyrau Refinery LLP*

*Chief Specialist of the Debt Attraction Sector of
the Corporate Finance Department
of KazMunayGas NC JSC*



Date of birth: 20 May, 1978

Education: In 1999 graduated from the Faculty of Economics of the Kostanay Agricultural Institute, qualification “Economist-financier”. In 2002 she graduated from the International Academy of Business in Almaty, receiving an academic degree of Master of Science in the specialty “Economics and Management in the Social Sphere and Industries”.

Work experience:

Began her career in 1999 as a specialist in the field of research of geophysical services of the marketing department of JSC Kazakhstankaspiyshelf.

From 2000 to 2002 she worked in the service company GIS-Center LLP as a project manager.

From 2002 to 2011, she worked at KazMunayGas Trading House JSC in the following positions: Chief Manager of the Development Department, Department of Oil Products Sales and Retail Network Development, Department of Corporate Development and Investment Management, Chief Manager and Deputy Director of the Corporate Development Department and Financing.

From 2011 to 2013, she worked as a category 1 manager of the oil refining and petrochemistry department, a category 1 manager and an expert in the oil refining and petrochemical development department of KazMunayGas NC JSC.

From 2013 to 2016, she worked at JSC KazMunayGas – Refining and Marketing as Deputy Director of the Corporate Finance Department.

In 2016–2017, she held the positions of the chief manager of the refinery modernization management department, the head of the treasury and corporate finance department of the economy and finance department of the TPM Division of KazMunayGas NC JSC.

From December 2017 to July 2020, she has been working as Deputy Director of the Corporate Finance Department of KazMunayGas NC JSC.

Since July 2020 – Chief Specialist of the Debt Attraction Sector of the Corporate Finance Department of KazMunayGas NC JSC.

Awards: awarded with Certificates of Honor and medals KazMunayGas Trading House JSC, Atyrau Refinery LLP, KazMunayGas-RM JSC, KazMunayGas NC JSC.



/ ACTIVITIES OF THE SUPERVISORY BOARD

In 2020, the Supervisory Board held 11 meetings: considered 24 issues, 22 of which were considered at in-person meetings.

Issues considered by the Supervisory Board in 2020

HR issues	<ul style="list-style-type: none"> approval of the total number of employees of the Atyrau Refinery early termination of powers, appointment of a new secretary of the Supervisory Board of Atyrau Refinery from 09.10.20
Financial issues	<ul style="list-style-type: none"> preliminary approval of the annual financial statements of the Atyrau Refinery for 2019 approval of the adjusted Business Plan of Atyrau Refinery for 2020–2024, including the budget for 2020, taking into account cost optimization and changes in macroeconomic indicators approval of the Business Plan of the Atyrau Refinery for 2021–2025, approval of the budget of the Atyrau Refinery for 2021
Strategic issues	<ul style="list-style-type: none"> preliminary approval of the issue “On alienation by Atyrau Refinery of 50% of the share in the authorized capital of Liquefied Petroleum Gas Tank Farm LLP” coordination of the conclusion of Agreements of the Atyrau Refinery on cooperation in the production and supply of liquefied petroleum gas, production of components for pure high-octane gasoline and purified propylene

Issues of assessing the EO and SBS effectiveness	<ul style="list-style-type: none"> approval of actual values and final performance of corporate KPIs and executive officers of Atyrau Refinery, maps of motivational key performance indicators of executives of Atyrau Refinery for 2019 approval of corporate KPIs of Atyrau Refinery, a map of motivational KPIs of the General Director (Chairman of the Board) of Atyrau Refinery for 2020, as well as maps of motivational key performance indicators of members of the Board of Atyrau Refinery and their target values for 2020 determination of the size and payment of remuneration to the General Director (Chairman of the Board) and members of the Board of Atyrau Refinery following the results of work in 2019 approval of assessment of the fulfillment of the goals of the secretary of the Supervisory Board of Atyrau Refinery and the payment of bonuses based on the results of the 1st-3rd quarters of 2020 approval of the goal setting of the secretary of the Supervisory Board of Atyrau Refinery for 2020
Approval of internal documents	<ul style="list-style-type: none"> approval of the Rules for training and advanced training of employees of the Atyrau Refinery approval of the Program of social support for the Atyrau Refinery personnel to be laid off as part of the implementation of the Headcount Optimization Project approval of the Rules for formation and organization of work with the talent pool of the Atyrau Refinery approval of the Rules of competitive selection for the occupation of vacant positions/blue-collar jobs of the Atyrau Refinery approval of the Tax Accounting Policy of Atyrau Refinery
Issues related to the SB activities	<ul style="list-style-type: none"> approval of the Work Plan of the Supervisory Board of Atyrau Refinery for 2020 consideration of the Report on the activities of the Supervisory Board of the Atyrau Refinery for 2019 review of implementation of decisions taken at the meetings of the Supervisory Board of the Atyrau Refinery in 2019, and assessment of the results of their implementation

/ BOARD

The Board of Atyrau Refinery LLP is a collegial executive body that manages its current activities, implements decisions of the General Meeting of Participants and the Supervisory Board of Atyrau Refinery LLP. In its activities, the Board is guided by the norms of legislation of the Republic of Kazakhstan, the Charter, internal documents of the Atyrau Refinery LLP.

The chairman and members of the Board are obliged to ensure the integrity of the accounting and financial reporting systems, including the conduct of an independent audit, taking the necessary measures to prevent damage. The chairman and members of the Board of the Atyrau Refinery are prohibited from entering into transactions with the Atyrau

Refinery without the consent of the GMP, aimed at obtaining property benefits from it (including agreements of donation, loan, gratuitous use, purchase and sale, etc.). Receiving remuneration from both Atyrau Refinery LLP and third parties for transactions concluded by Atyrau Refinery LLP and third parties, to act on behalf of or in the interests of third parties in their relations with Atyrau Refinery LLP.

The competence of the Board includes all issues of ensuring the activities of Atyrau Refinery LLP, which are not related to the competence of other bodies of the Partnership, determined by legislation, the Charter or rules and other documents adopted by the General Meeting.

The Board makes decisions:

- on the conclusion of Atyrau Refinery LLP transactions, with the exception of transactions referred by legislation and/or the Charter of the Partnership to the competence of other bodies of the Partnership;
- makes decisions on increasing the financial liabilities of Atyrau Refinery LLP (loans, credits, financial assistance, guarantees) by an amount ranging from 1 to 10 percent of its equity capital;
- approves the annual financial statements;
- coordinates and directs the work of branches and representative offices of the Partnership;
- ensures the development and submission for approval of the Supervisory Board of

TOTAL IN 2020

HELD	CONSIDERED
23	160
Meetings	issues

the Accounting Policy and Tax Accounting Policy of Atyrau Refinery LLP, promptly notifying the Supervisory Board of the status of key risks of the Partnership;

- prepares for consideration by the GMP and SB of Atyrau Refinery LLP documents on issues, the adoption of decisions on which is within their competence, acting in the interests of Atyrau Refinery LLP reasonably and in good faith.



/ COMPOSITION OF THE BOARD



Danbay Shukhrat
General Director
(Chairman of the Board)

Shukhrat Danbay was born in 1963 in Kentau city of South Kazakhstan region. Graduated from Kainar University with a degree in International Economic Relations, the Russian Academy of National Economy and Public Administration under the President of the Russian Federation (Moscow) with a degree in Business Administration. From February 26, 2018 to October 26, 2019, he underwent professional retraining at the I.M. Gubkin Russian State University of Oil and Gas and received an Executive Master of Business Administration degree in the Energy Leadership program.

Over the years, he headed large commercial structures for the supply and refining of oil: (general director of Gelios LLP, general director of Fuel Energy Complex of Kazakhstan LLP), he held the positions of Deputy General Director of Pavlodar Petrochemical Plant LLP for Economics and Finance, Executive Director of the Oil Refining and Petrochemicals Unit of KazMunayGas NC JSC, from September 2009 to November 2017 – General Director of Pavlodar Oil Chemistry Refinery LLP, since June 2018 from February 15, 2019, he was Managing Director for Oil Refining at KazMunayGas NC JSC.

He is the author of a number of articles and publications on the organization and functioning of commercial settlement at enterprises in a market economy.

Sh.A. Danbay conducts a great public work: he is the president of the Boxing Federation of the Atyrau region NGO, was the president of the Boxing Federation of the Pavlodar region NGO, a member of the Bureau of the Political Council of the Pavlodar regional branch of the Nur Otan party, a deputy of Pavlodar regional Maslikhat of V, VI convocations.

Awarded with the Medals “Qurmet” and “Parasat”, the Certificate of Honor

of the Chairman of the Senate of the Parliament of the Republic of Kazakhstan, the Certificate of Honor of the Federation of Labor Unions, medals: KAZENERGY, “Kazakhstan Respublikasynyn Tauelsizdigine 20 Zhyl”, “Kazakhstan Respublikasynyn Tauelsizdigine 25 Zhyl”, “For merits in the patriotic education of youth”, “Kaiyrymdylygy ushin SAUAP”, in honor of the 75th anniversary of the Pavlodar region, in honor of the 35th anniversary of the plant, in honor of the 45th anniversary of KazGiproNefteTrans Engineering Company LLP (KGNT), “For loyalty to the cause”; badges “For the merit to the region” and “Kazakhstan politsiyasy 25 zhyl”, Honorary resident of Pavlodar city.





Suleimenov Erkin

*First Deputy General Director for Production – Chief Engineer,
Member of the Board of Atyrau Refinery LLP*

Was born on 18 April, 1972 in the Mangystau region.

Education:

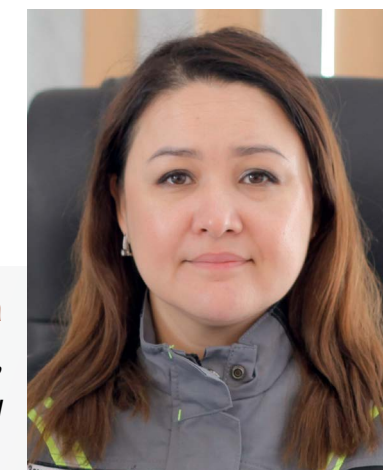
In 1994 he graduated from the Atyrau Institute of Oil and Gas with a degree in Engineer-Chemist-Technologist, in 2001 – with a degree in Engineer-Economist. In 2016 he received a master's degree in business administration from the Almaty Management University non-governmental educational institution.

Professional activities:

He began his career as an operator of a technological unit at Atyrau Refinery LLP, over the years he held the positions of Head of plant units, Deputy Head of a workshop, Head of a technical department, Chief Technologist-Head of a technical department, Director of oil refining department, Deputy Chief Engineer for technology and production, Deputy Chief Engineer for Technology, Director of the Department for Reliability and Mechanical Integrity of Production Assets, Managing Director for Technology, First Deputy General Director for Production.

In August 2019, he was appointed First Deputy General Director for Production – Chief Engineer of Atyrau Refinery LLP.

In 2021 he was elected as a Deputy of the Atyrau city Maslikhat.



Akanova Luiza

*Deputy General Director for Corporate Functions,
Member of the Board*

Was born on 25 February, 1976

Education:

Kazakh State Academy of Management, faculty: Accounting and Auditing, major: Economics.

Professional activities:

Luiza began her career in August 1997 at the National Securities Commission of the RK from the position of a leading specialist, then she was transferred to the position of chief specialist and head of the sector of the Securities Market Regulation Department.

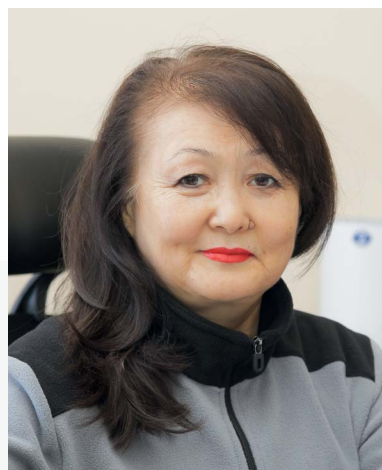
In 2001–2004, she worked at the National Bank of the RK and the Agency of the RK for Regulation and Supervision of the Financial Market and Financial

Organizations as a Chief Specialist of the Department for Supervision of Securities Market Entities and Accumulative Pension Funds.

In November 2004, she was hired as the Chief Manager of the Asset Management Department of KazMunayGas NC JSC and then held the positions of Deputy Director and Director of the Asset Management Department.

In October 2013, she was invited to the position of Director of the Asset Management Department of KazMunayGas – Refining and Marketing JSC.

Since September 2016, she held the position of Director of the Refining and Marketing Business Directorate at KazMunayGas NC JSC.



Sadvokassova Ardak
Chief Accountant,
Member of the Board

Date of birth: 3 June, 1961.

Education:

Karaganda State University (1983).

Professional activities:

Chief Tax Inspector of the VAT Department, Head of taxation sector of non-state enterprises of the Tax Committee of the Soviet district of Karaganda city (1984–1998); Leading Tax Specialist, Intergas Central Asia CJSC (1998–2000); Leading Tax Specialist, Kar-Tel LLP (2000–2001); Deputy Chief Accountant of Intergas Central Asia CJSC (2001–2003); Chief Accountant of KazstroyService

NGSK JSC (2003–2006); Chief Accountant of Intergas Central Asia CJSC (2006–2012); Chief Accountant, Advisor to the General Director of Petroleum Operating LLP (2012–2016), Inspector for Social Facilities of Kipros LLP (June 2016 – October 2016); Head of the IFRS reporting department of the Accounting Department of the Commercial Bank Moskommertsbank JSC (2016–2018); Head of the accounting department of the “Transformation of Key Business Functions and ERP implementation” project of KazMunayGas NC JSC (2018 – July 2018).



Dzhumagaliyev Berik
Director of the Legal Support Department,
Member of the Board

Date of birth: 11 September, 1963.

Education:

Karaganda State University (Law Faculty). Major: Law Science.

Professional activities:

Inspector for the work of administrative bodies of the Karaganda Executive Committee (1987–1988); Legal Adviser to the Michurinsk Agro-Industrial Firm – Technical School (1988–1990); Legal Adviser, Chief Engineer, Deputy Director of the Fruit and Vegetable Base (1990–1993); Financial Director, Marketing of New Technologies Company, Moscow (1993); Senior Economist of the Foreign Exchange Operations Department of the Russian Coal and Raw Materials Joint Bank (Russobank), Moscow (1993); Deputy Head of the Karaganda Department of Alem Bank

Kazakhstan (1993–1994); Deputy Head of the Contractual and Legal Department, Head of the Contractual and Legal Department, Deputy Head of the Department for Work with Branches of Kazkommertsbank OJSC (1994–1997); Director of the Legal Department of BankTuranAlem CJSC (1997–1998); Deputy Director of Kazakhstan Legal Group LLP (1998–1999); Senior Specialist of the 6th Division, Head of the Department of the Committee for State Material Reserves of the MEIT RK (1999); Deputy Director of Kazakhstan Legal Group LLP (1999–2000); Director of the Legal Department, Vice President of Astana Holding Corporation (2000–2003); Vice President of Subsidiary Caspi Neft JSC (2003–2005); Partner of DSM Management Company LLP (2006–2009); Deputy Head of the Representative Office of Baltikums Bank AS (Latvia) (2011–2012); Director for Legal Affairs of Tranco JSC (2017–2018).

/ REMUNERATION FOR MEMBERS OF THE BOARD

The total amount of remuneration to the members of the Board at the end of 2020 amounted to 125,098,803 tenge, which includes the amount of salaries and all types of incentives in cash paid by Atyrau Refinery LLP

to members of the Board during their term on the Board in 2020 in accordance with the Rules for remuneration of executive officers and the secretary of the Supervisory Board.

/ COMPLIANCE CONTROL



Abdirassilov Baurzhan

Head of Risk Management and Management Systems Development Division – Compliance Officer

“The senior management of the Company holds a strong position in regard of anti-corruption issues. In its daily work Atyrau Refinery is guided by the norms of applicable law and adheres to the principle of “zero” tolerance for any behavior that is incompatible with the principles of business ethics, in particular, dishonest and illegal ways of conducting business.

The Atyrau Refinery makes every effort to ensure that the Company and its business partners comply with the highest ethical norms and standards, including respecting basic human rights, promoting fair and equal treatment of all people, ensuring safe and healthy working conditions, protecting the environment and exercising financial and business activities in accordance with ethical standards.”

The Atyrau Refinery has approved such documents as the Anti-Corruption Policy, the Policy for the Settlement of Conflicts of Interest Among Employees and Officials, and the Confidential Information Policy. These documents set out the key principles of the Atyrau Refinery’s Compliance Policy, in particular, the principles of business ethics, the settlement of conflicts of interest and continuous monitoring of the status of the Company’s compliance system. These documents serve as the main regulatory compliance documents for the Atyrau Refinery and are mandatory for all of its employees, regardless of their position.

The Anti-Corruption Policy of Atyrau Refinery LLP sets out the goals and objectives of the Company in the field of combating involvement in corruption activities, defines the legal basis and key principles of this combating, describes the measures taken by Atyrau Refinery LLP to prevent corruption, establishes anti-corruption obligations of the Employees and other persons, as well as responsibility for non-compliance (improper execution) of the provisions of this policy.

The Commitment in the field of combating corruption for all employees of Atyrau Refinery LLP was developed and implemented, with which all employees were personally acquainted against their signatures.

Atyrau Refinery LLP takes preventive measures in advance to prevent corruption, i.e., introducing elements of the corporate culture, organizational structure, rules and procedures aimed primarily at identifying corruption risks and minimizing them.

The Company sets the task to form a personal position of non-acceptance by the Employees of corruption in any of its forms and manifestations. For these purposes, Atyrau Refinery LLP takes all the necessary measures to implement the Policy at all levels of the organization and bring its content to the attention of its Employees and other stakeholders. Atyrau Refinery LLP contributes to raising the level of anti-corruption culture of Employees through their regular training in the basic requirements of the Policy and its practical application.

Training on anti-corruption compliance was conducted for the employees of Atyrau Refinery LLP. For this, a special company will be involved, providing training and knowledge testing services.

When organizing the training, the goals and objectives of the Compliance Policy, the trainees category, the type of training, depending on the time of its implementation, were taken into account. Training will be conducted primarily for the following categories of employees:

- management;
- newly hired employees;
- employees responsible for preventing corruption in the company;
- employees whose activities are associated with specific corruption risks.

The Policy for the Settlement of Conflicts of Interest Among Employees and Officials of Atyrau Refinery LLP manages conflicts of interest, and also defines requirements for the behavior of employees and officials, compliance with which will ensure clear and impartial performance of their official duties.

In the event of a Conflict of Interest, the Employee and/or the Official must immediately and fully disclose information about the Conflict of Interest and actively contribute to its settlement. To resolve the Conflict of Interest, a commission is formed, which includes all interested parties.

The Confidential Information Policy is in force, which establishes the procedure for receiving and processing information about signs of corrupt behavior or fraud using the methods provided – a hotline or a single e-mail, a procedure for responding to reported facts.

In case of detection of potential or already committed violations of the legislation of the Republic of Kazakhstan, standards, rules, and provisions of the Atyrau Refinery, including cases of abuse of official capacity, abuse of authority, damage to the plant or its counterparties, the employees must report the violation to the Hotline at nysana@cscck.kz and free telephone line: 8 (800) 080 – 30-30. The message can be sent anonymously. After receiving the request, the compliance officers responsible for reviewing reports of such violations will communicate the further procedure.

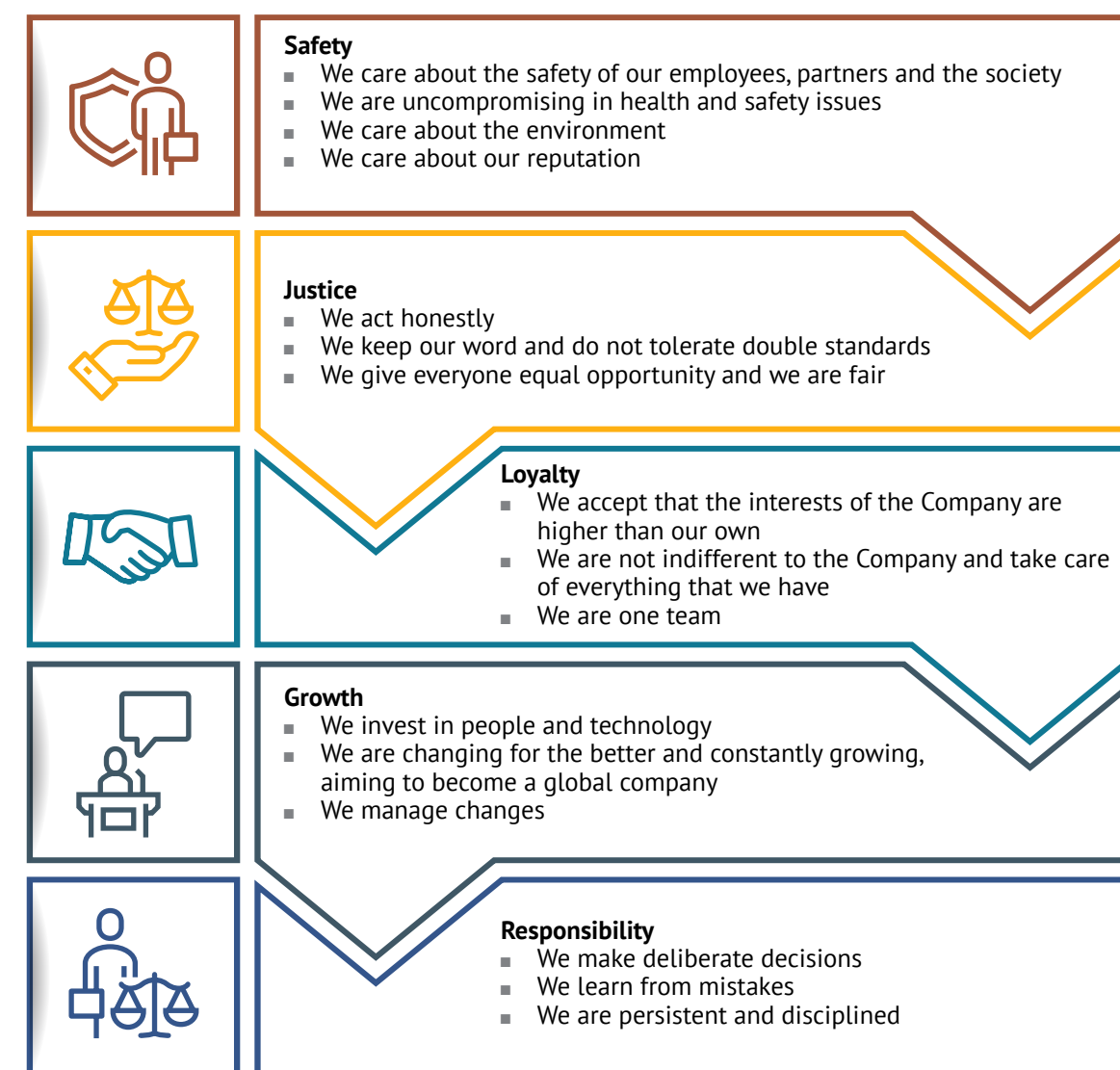
The Atyrau Refinery guarantees the confidentiality of received messages, information about the person who reported violations, as well as about other persons involved. The Atyrau Refinery do not tolerate any discriminatory measures against indifferent and concerned persons who report impending or committed violations.

/ CORPORATE ETHICS

The Atyrau Refinery has a Code of Corporate Ethics, which sets out corporate values, defines essential principles and rules of business conduct and relations with stakeholders. The Code provisions apply to all employees

of the Company to the same extent, regardless of their position. Each employee of the Company must read, accept and confirm in writing the obligation to follow the provisions and requirements of the Code.

The main corporate values of Atyrau Refinery:



/ CORPORATE PRINCIPLES

The activities of the Atyrau Refinery are based on the following principles:

Openness

The Atyrau Refinery strives for maximum openness and reliability of information about the Company, its achievements and results of activities, taking into account the protection of information constituting a commercial secret and other information protected by the legislation of the RK.

Responsibility

The Atyrau Refinery is aware of its responsibility for the impact on the economy, environment and society towards the Partnership Participants and the public, for the growth of long-term value and sustainable development in the long run.

Transparency

The Atyrau Refinery's decisions and actions should be clear and transparent for stakeholders in the established manner. The Atyrau Refinery honestly and promptly informs Participants and Stakeholders about the state of affairs.

Ethical Conduct

The Atyrau Refinery employees' decisions and actions should be based on high moral values, such as respect, honesty, openness, team spirit and trust, honesty and justice. The Atyrau Refinery employees carry out their activities on the basis of respect, tolerance, benevolence and decency.

Respect

The Atyrau Refinery respects the rights and interests of all Stakeholders, which follow from the legislation, concluded agreements, or indirectly within the framework of business relationships.

Legitimacy

Decisions, actions and behavior of the Atyrau Refinery and its employees must strictly, completely and rigorously comply with legislation of the Republic of Kazakhstan, the Company's Charter, the Development Strategy and the decisions of the Participants.

Expertise

The Atyrau Refinery strives to improve qualifications of its employees, providing the necessary labor conditions, opportunities for professional and individual development.

Justice

The Atyrau Refinery supports the principles of meritocracy, justice and objectivity, creates optimal conditions for each employee for new achievements and fairly evaluates the contribution of each employee to the activities of the Company; contributes to the formation of a culture of understanding, interest and support of employees at all levels.

Intolerance to Corruption

The Atyrau Refinery does not tolerate corruption in all its forms. In cooperation with all stakeholders, the Company strives to develop a constructive dialogue in order to raise their awareness of the Company's actions taken in the framework of combating corruption.

Non-allowability of Conflicts of Interest

In relations with the Stakeholders, the Atyrau Refinery, counting on the establishment and maintenance of fiduciary relations, in which the parties shall act towards each other honestly, conscientiously, fairly and loyally, takes measures to prevent, identify and eliminate conflicts of interest.

Environmental Consciousness

The Atyrau Refinery understands its responsibility to society and future generations for the rational use of natural resources and the preservation of a favorable environment, ensuring energy saving, reducing the negative impact on the natural environment, introducing innovative technologies aimed at careful and conscious use of resources and time, increasing labor productivity.

Safety

The Atyrau Refinery considers human life as the highest value and strives to pay special attention to supporting healthy lifestyle and protecting the health of employees. The Atyrau Refinery aims to ensure labor safety, preservation of life and health of its employees in accordance with international standards.

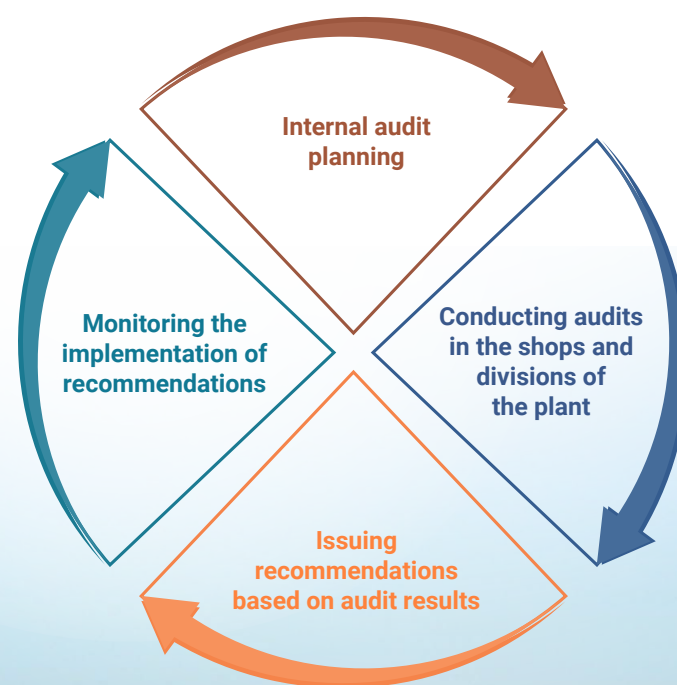
/ INTERNAL AUDIT

At the Atyrau Refinery, the Risk Management and Management Systems Development Department conducts internal audits in order to verify adherence to the approved procedures for integrated management system by all departments, as well as to identify ways to improve the Quality Systems, Occupational Health and Safety, Environmental and Energy

Management in accordance with applicable laws, regulatory and other requirements of the Republic of Kazakhstan.

Internal audits are an integral part of effective functioning of the integrated management system of the Company and allow timely identification of problems requiring a solution by executive Management.

Internal Audit Cycle of Atyrau Refinery LLP



Internal audit items

Item No.	Name of internal audit items for IMS and risk management	Number of audits	Notes
1	Central Office, Plant Management	24	Executive management, structural divisions of the plant management
2	Conversion and Fine Desulfurization Refinery (CFDR)	9	Processing units
3	Coke and Sulfur Production (CSP)	5	Processing units
4	Production and Transportation of Oil Products	5	Feedstock tank farm, loading racks for oil products loading
5	Heat Energy and Electricity Production	4	Subdivisions for the production of steam, electricity, chemically treated water
6	Central Plant Laboratory	3	Analytical control of in-demand and commercial products
7	Deep Conversion Refinery (DCR)	7	Processing units
8	Aromatic Hydrocarbon Production	5	Processing units
9	Outsourced Processes	5	Ancillary processes
TOTAL:		67	Subject to annual internal audit

Due to the switch to a remote method of work, it was difficult to conduct internal audits at the plant in 2020. In total, 31 audits were performed in 2020, based on the results of which 89 recommendations were issued.



4

Risk management

- 142 Risk management system
- 144 Risk map
- 146 Implementation of an internal control system
- 147 Key risks

SAFETY
QUALITY
STABILITY

/ RISK MANAGEMENT SYSTEM

The corporate risk management system is a key component of the corporate governance system aimed at timely identification, assessment, monitoring and mitigation of potential risk events that may negatively affect the achievement of the Atyrau Refinery's strategic and operational goals.

Realizing of the importance of corporate risk management and risk management system on a consolidated basis, since 2017 the Atyrau Refinery has been working to improve the risk management system. In particular, the indicator "Implementation of a vertical process for risk management" was included in the map of key performance indicators of managers in charge of key areas. This indicator characterizes the degree of implementation of a set of measures aimed at introducing a vertical process for managing production and non-production risks of the Atyrau Refinery.

The Atyrau Refinery applies an automated risk management system (hereinafter ARMS) to timely identify, assess, analyze, manage and monitor the state of risks, launched as part of the implemented project of KazMunayGas NC JSC (KMG) for the Group of Companies.

ARMS allows to significantly reduce time and labor resources, promptly generate information for making management decisions taking into account risks, provide up-to-date information on all significant risks of Atyrau Refinery, affecting the KPIs achievement, with action plans for their mitigation.

The Company's risk culture is developing along the path of involving all structural divisions and outsourcing organizations in the risk management process, and involves regular exchange of information between the Supervisory Board, the Board and Atyrau Refinery employees.

Organizational chart of the corporate risk management system of Atyrau Refinery LLP



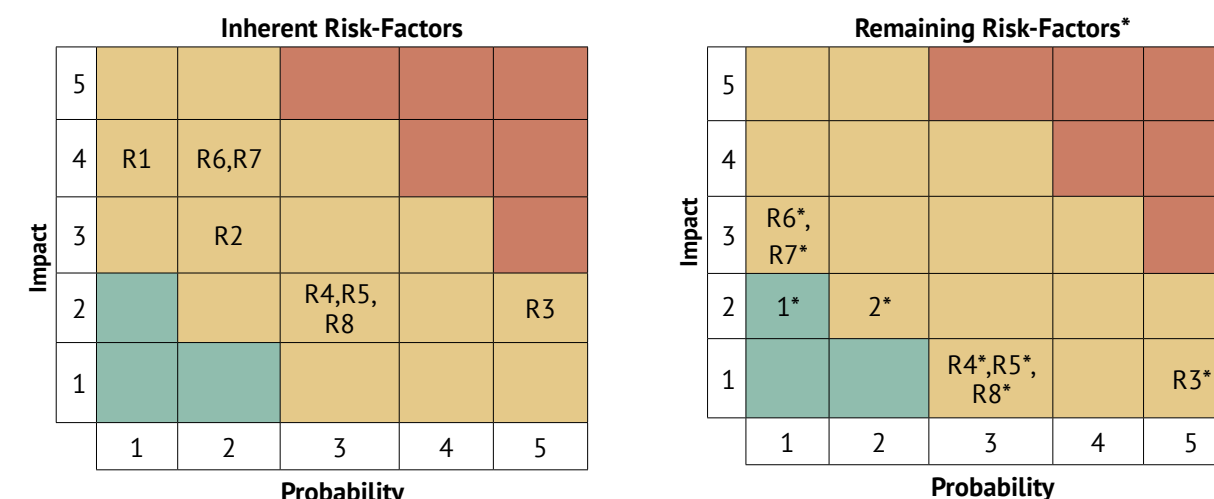
/ RISK MAP

The Refinery's activities are exposed to a range of risks in the following areas:

1. production risks associated with the production process;
2. non-production risks associated with non-production business processes;
3. risks of the external environment, lightly managed or unmanaged.

The Supervisory Board annually approves the Atyrau Refinery's Risk Register, the Risk Map, the Risk Management Action Plan.

According to the Risk Register and the Risk Map for 2020, 8 risks were identified and assessed in the specified areas. For each risk, we developed measures to manage them, and risk owners have been identified. Ongoing monitoring of the dynamics of key risks and the implementation of measures to mitigate them is performed based on the results of which a quarterly report is sent to the Board and the Supervisory Board.



*taking into account the implementation of preventive measures

No.	Risk-Factor
Non-Production Risks	
R1	Unlawful actions of a corrupt nature
R2	Unlawful actions against company assets
Production Risks	
R3	Natural influences, disasters
R4	Inconsistency of the actual technological modes of equipment operation with the technical standards of their operation
R5	Inconsistency of the actual technological modes of equipment operation with the technical standards of their operation
R6	Deterioration of an employee's state of health
R7	Deterioration of an employee's state of health
R8	Late delivery of spare parts and materials for repairs



/ IMPLEMENTATION OF AN INTERNAL CONTROL SYSTEM



Avezov Zhetkerbai

Risk Manager of the Risk Management and Management Systems Development Division

“Within the frames of the KMG Project “Implementation of a new risk management model”, the plant adapted and approved methodological documents on the internal control system (hereinafter – ICS).

ICS is a set of processes and procedures, norms of behavior and actions that contribute to effective and rational activity, aimed at ensuring the achievement of operational goals and minimizing process-level risks in the business process (hereinafter – BP).

ICS implementation allows management or employees to prevent or timely detect wrong actions, in the course of the normal performance of the functions assigned to them. The “Closing the period and preparation of separate financial statements” BP was chosen as the first recommended for the ICS approach application, in which the processes of the first, second and third levels were defined, a matrix of risks and process controls was developed with current control procedures covering the identified risks.

To constantly maintain and improve knowledge on the risk management system, the internal control system and the business continuity management system and to further support work in these areas in the services and divisions of the plant, we conducted a five-day online training on the topic “ICS and BCMS Fundamentals”. 35 specialists of the plant took part in the training.

As part of improving the risk management system at Atyrau Refinery LLP, we will continue to develop and implement the business continuity management system (risk management leading to business interruption) in 2021.”

/ KEY RISKS

The planned work on managing the key risks of the plant in 2020 was completed in full. Atyrau Refinery took appropriate measures to respond to key risks in order to reduce the probability of their occurrence and to minimize/prevent possible financial losses.

Production Risks

The risk of adverse environmental impact, harm to life, health of production personnel and property as a result of emergency and abnormal situations, man-made disasters at production facilities and sites.

The Atyrau Refinery’s production activity is potentially hazardous, carries a high risk of unfavorable environmental impact, harm to life, health of production personnel and property as a result of emergency and abnormal situations, man-made disasters at production facilities and sites, as well as a result of unlawful actions of third parties. The consequences of the realization of these risks negatively affect the reputation, production and financial activities of the plant.

In order to minimize production risks, the Atyrau Refinery carries out the following activities:

1. ensuring timely maintenance and repair of equipment in accordance with the requirements of regulatory documents;
2. timely reconstruction, modernization;
3. calculation of the optimal technological regime and development of optimal operating modes of equipment;
4. timely diagnostics and identification of potentially dangerous factors that can lead to corrosion;
5. advanced training of service personnel.

In order to prevent accidents at work, the plant implements organizational and technical measures to ensure:

1. safe performance of works, prevention of injuries and occupational diseases;
2. timely training and knowledge testing on issues safety and labor protection, the presence at the place of work of work managers and officials responsible for their work;
3. internal control in the field of safety and labor protection.

Under the KMG's Corporate Reinsurance Program, the purpose of which is to establish the procedure for placing a corporate risk insurance program to ensure high-quality protection of property interests and responsibility of KMG and its affiliates, an annual voluntary property insurance contract is concluded at the Atyrau Refinery against damage (against the risk of accidental loss, loss or damage) as a result of the insured event occurrence. The Atyrau Refinery is included in the KMG's Corporate Reinsurance Program.

Collection of information and preparation of a report for the insurance market on the current state of production facilities, inspection of industrial sites and a detailed study of fire-prevention and emergency systems existing in the Company, as well as other measures and technical means to reduce insurance risks, are carried out as part of a risk survey (insurance engineering inspection). Recommendations issued during the risk survey, taking into account the world practices of labor protection and industrial safety, are applied at the plant to increase the accident-free operation of processing units and equipment.

Social Risk

Social dissatisfaction of workers can lead to unauthorized strikes. The main directions for reducing the risk of unauthorized strikes are monitoring and analysis of the social climate, timely development of measures to address problematic issues of personnel. For these purposes, the Atyrau Refinery has established effective internal communications between the employer and employees, obligatory reporting meetings of the first head with labor collectives, meetings of management with production personnel and others, which are tools for both monitoring the social climate and jointly resolving issues raised and conducting explanatory work.

The current platform for active dialogue with the youth is the youth council. The Atyrau Refinery takes an active part in the system of unified youth policy of KMG, which provides for the formation of an active life position among young workers, their involvement in social and industrial life.

Coronavirus Pandemic Risk

The threat of spread of the 2019-nCoV coronavirus strain in 2020 had a huge impact on the economy of the whole country, including the activities of the Atyrau Refinery.

Possible consequences for the Company included:

- the 2019-nCoV strain infection of plant workers, spread of the disease on the territory of the plant among workers of the plant or contracting companies;
- decrease in the receipt of applications for the shipment of oil products;
- increase in borrowing costs in USD in 2020 due to an exchange rate increase.

To mitigate possible impacts of the pandemic, the following measures have been taken:

- optimization of operating costs, revision of investment costs;
- strengthening the measures of physical access to the plant's territory for visitors and workers arriving from the countries included in the list determined by the National Center for Public Health of the MH RK, including the first, second and third categories, as well as citizens of the RK arriving from regions of the country;

- introduction of a moratorium on the secondment of plant workers both to foreign countries and across the territory of the Republic of Kazakhstan;
- reduction of the number of meetings. Mass cultural events were cancelled. Video conferencing is used for operational planning meetings and other meetings.

Non-Production Risks

Liquidity Risk

The key risks for the Atyrau Refinery are liquidity- and financial stability-related risks. Lack of sufficient financial resources may lead to non-compliance with debt covenants and jeopardize the implementation of strategically vital projects and maintaining high rates of development. To overcome these risks, along with the use of technologies, the Atyrau Refinery is focused on improving operating activities, clearly prioritizing capital expenditures, and streamlining the Partnership's asset and project portfolios.

Tax Risk

The Atyrau Refinery is exposed to tax risk, the main external risk factor of which is the varying interpretations of the tax legislation of the RK. The Atyrau Refinery cannot influence the decisions of the tax authorities

in relation to additional taxes, fines and penalties based on an unlawful interpretation of tax legislation following the results of tax audits.

To minimize tax risks, the Company improves tax administration processes and conducts tax audits.

Corruption Risk

Allocation of resources not in the best interests of the Atyrau Refinery, causing damage to the Atyrau Refinery in order to obtain personal gain, any facts of fraud and corruption are completely intolerable at the Atyrau Refinery, regardless of the amount of financial damage.

As a subject of the Law of the Republic of Kazakhstan "On Combating Corruption" and other legislative acts on anti-corruption issues, the Atyrau Refinery has undertaken the following obligations:

1. anti-corruption monitoring implementation;
2. analysis of corruption risks (internal reasons);
3. formation of an anti-corruption culture;
4. establishment of organizational and legal mechanisms to ensure accountability, controllability and transparency of decision-making procedures;
5. acceptance and adherence to business ethics;
6. prevention of conflicts of interest.

The Atyrau Refinery has developed and approved the following documented procedures:

- the Anti-Corruption Policy;
- the Policy for the Settlement of Conflicts of Interest Among Employees and Officials;
- the Confidential Information Policy.

The plant carries out consistent work on the implementation and strengthening of internal control over corruption, prevention of illegal and unfair actions both on the part of the Atyrau Refinery employees and third parties, establishing a procedure for conducting internal investigations into the facts of unlawful and unfair actions by the plant employees. The Atyrau Refinery has a trust line.

External Risks

Currency Risk

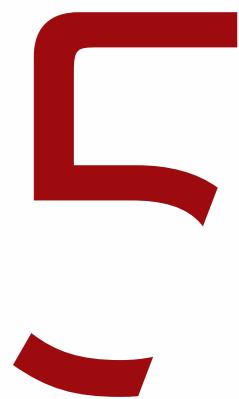
The risk is an increase of the tenge rate against the US dollar.

The main part of the Atyrau Refinery's debt portfolio – loans denominated in US dollars, which were attracted to finance strategic modernization projects with the participation of foreign contractors. In this connection, the growth of the tenge against the US dollar may lead to an increase in the cost of debt service and an increase in the cost of loans.

Atyrau Refinery LLP carries out a number of positive changes in the loan portfolio in relation to currencies and interest rates by re-financing and restructuring foreign currency loans in tenge and on more favorable terms in order to minimize this risk.

Reputation Risk

The Atyrau Refinery is exposed to reputational risk affecting its image and business relationships with investors, partners and other stakeholders. The Atyrau Refinery carries out a set of measures to manage this risk, including monitoring publications in the media about the plant's activities, publishes articles about the plant in the media, organizes management speeches to highlight various aspects of the plant's activities, and also timely responds to negative publications in media sources.



Attachment. Financial statements

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162	Statement of cash flows
163	Statement of changes in equity
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SAFETY
QUALITY
STABILITY

INCREASE OF GASOLINE
STORAGE VOLUME IN REFINERY
TANK FARM IN 2020 UP TO

57 thous.
tons





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Independent auditor's report

To the Participants, Supervisory board and management of "Atyrau Refinery" LLP

Opinion

We have audited the financial statements of "Atyrau Refinery" LLP (hereinafter, the Company), which comprise the statement of financial position as at 31 December 2020, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as at 31 December 2020 and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report. We are independent of the Company in accordance with the International Ethics Standards Board for Accountants' (IESBA) International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter

We draw attention to *Note 2* to the financial statements, which describes that the accompanying financial statements, presented in US dollar, were issued by the Company in addition to the financial statements presented in tenge. We have audited and reported separately on the financial statements presented in tenge and issued our auditor's report dated 19 February 2021. Our conclusion is not modified in respect of this matter.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.



We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

Key audit matter

How our audit addressed the key audit matter

Impairment of property, plant and equipment

We considered this matter to be one of the most significance in the audit due to materiality of the balances of property, plant and equipment to the financial statements, the high level of subjectivity in respect of assumptions underlying impairment analysis and significant judgements and estimates made by management. In addition, the combination of volatility in oil prices and Tenge, increased inflation and cost of debt and uncertainty about future economic growth affects the Company's business prospects and therefore triggers potential impairment of the Company's assets.

Significant assumptions included discount rates, oil and petroleum product prices forecasts, inflation and exchange rates forecasts. Significant estimates included crude oil tolling forecast, future capital and operational expenditures.

Information on non-current assets and the impairment tests performed is disclosed in *Note 4* to the financial statements.

We involved our business valuation specialists in the testing of impairment analysis and calculation of recoverable amount performed by management. We analysed the assumptions underlying management forecast. We compared oil and petroleum products prices used in the calculation of recoverable amounts to available market forecasts. We compared the discount rates and long-term growth rates to general market indicators and other available evidence.

We compared expected capital and operational expenditures with management forecasts and actual expenditures.

We tested the mathematical integrity of the impairment models and assessed the sensitivity analysis.

We analysed disclosures in respect of impairment tests in the financial statements.



Compliance with debt covenants

In accordance with the terms of certain financing arrangements, the Company should comply with certain financial and non-financial covenants. There is a higher likelihood that covenants impacted by revenue and profit, which depends on tolling rate and amounts of operating expenses, may be breached, therefore, we focused on this area during our audit. Breaching covenants could result in significant fines and penalties along with repayment on demand. Compliance with defined covenants is one of the matters of most significance in the audit since it can have a major impact on the going concern assumption used in the preparation of the financial statements, and on classification of interest-bearing liabilities in the statement of financial position.

Information on compliance with covenants is disclosed in **Note 14** to the financial statements.

Responsibilities of management and the Supervisory board for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations or has no realistic alternative but to do so.

The Supervisory board is responsible for overseeing the Company's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

We examined the terms of financing arrangements and analysed financial and non-financial covenants, terms of early repayment and events of default. We examined the presence of confirmation received from a bank related to compliance with financial covenants. We compared data used in the financial covenants' calculations with the financial statements. We tested arithmetic accuracy of financial covenants calculations.

We analysed disclosures in respect of debt covenants compliance in the financial statements.



As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- ▶ Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- ▶ Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- ▶ Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- ▶ Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- ▶ Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation;
- ▶ Obtain sufficient appropriate audit evidence regarding the financial information of the Company to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the Company's audit. We remain solely responsible for our audit opinion.

We communicate with the Supervisory board, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Supervisory board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.



From the matters communicated to the Supervisory board, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The partner in charge of the audit resulting in this independent auditor's report is Kairat Medetbayev.

Ernst & Young LLP


Kairat Medetbayev
Auditor

Auditor qualification certificate
№ МФ-0000137 dated 8 February 2013

050060, Republic of Kazakhstan, Almaty
Al-Farabi ave., 77/7, Esentai Tower

19 February 2021


Rustamzhan Sattarov
General Director
Ernst and Young LLP

State Audit License for audit activities on the
territory of the Republic of Kazakhstan: series
МФЮ 2 No. 0000003 issued by the Ministry
of Finance of the Republic of Kazakhstan on
15 July 2005

Atyrau Oil Refinery LLP

Financial statements

STATEMENT OF FINANCIAL POSITION

As at 31 December 2020

<i>In thousands of tenge</i>	Note	31 December 2020	31 December 2019
Assets			
Non-current assets			
Property, plant and equipment	5	694,969,679	720,177,335
Right-of-use assets		576,533	656,045
Intangible assets		2,845,417	2,729,723
Advances paid for non-current assets		722,480	470,715
Non-current financial assets		1,600,137	718,077
Investments in an associate	7	4,535,752	3,809,900
Investments in a joint venture	8	–	2,984,669
Deferred tax assets	27	9,771,193	9,281,960
Inventory, non-current	9	2,070,552	1,587,020
Other non-current assets	6	–	3,679,636
		717,091,743	746,095,080
Current assets			
Inventories	9	6,635,419	5,588,697
Trade accounts receivable		352,898	74,263
Corporate income tax prepaid		851,990	697,060
Other taxes prepaid	10	1,172,676	14,073,443
Advances paid		1,712,531	3,736,582
Other current assets		239,527	104,086
Cash and cash equivalents	11	36,180,980	97,431,749
		47,146,021	121,705,880
Assets held for sale	12	3,096,539	16,510
		50,242,560	121,722,390
Total assets		767,334,303	867,817,470

The explanatory notes on pages 6 to 42 are an integral part of these financial statements.

Atyrau Oil Refinery LLP

Financial statements

STATEMENT OF FINANCIAL POSITION (continued)

<i>In thousands of tenge</i>	Note	31 December 2020	31 December 2019
Equity and liabilities			
Equity			
Charter capital	13	47,807,399	47,807,399
Additional paid-in capital	13	18,855,203	18,610,515
Other components of equity	13	(973,551)	(1,064,596)
Accumulated loss		(46,548,413)	(34,036,920)
Total equity		19,140,638	31,316,398
Non-current liabilities			
Loans and borrowings, non-current portion	14	466,258,607	526,986,822
Bonds, non-current portion	15	31,568,250	40,171,950
Trade payables, non-current portion	19	103,115	115,169
Lease liabilities, non-current portion	16	879,398	1,380,123
Employee benefit liabilities, non-current portion	17	1,434,639	1,976,284
Provisions, non-current portion	18	2,714,190	—
		502,958,199	570,630,348
Current liabilities			
Loans and borrowings, current portion	14	196,049,258	195,880,116
Bonds, current portion	15	13,623,860	12,670,690
Lease liabilities, current portion	16	844,434	680,200
Employee benefit liabilities, current portion	17	158,688	342,759
Provisions	18	1,317,264	1,317,264
Trade payables, current portion	19	5,011,876	41,171,205
Taxes and other payables	20	4,408,354	667,700
Obligations under contracts with customers	21	23,039,682	12,531,574
Other current liabilities		782,050	609,216
		245,235,466	265,870,724
Total liabilities		748,193,665	836,501,072
Total equity and liabilities		767,334,303	867,817,470

Signed and authorised for issue on 19 February 2021.

General Director

Deputy General Director for Corporate Functions

Chief Accountant





The explanatory notes on pages 6 to 42 are an integral part of these financial statements.

Atyrau Oil Refinery LLP

Financial statements

STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2020

<i>In thousands of tenge</i>	Note	2020	2019
Revenue from contracts with customers	22	207,553,944	200,385,965
Cost of services rendered and products sold	23	(117,777,432)	(104,877,957)
Gross profit		89,776,512	95,508,008
General and administrative expenses	24	(3,881,459)	(3,399,891)
Foreign exchange (loss)/gain, net		(52,509,996)	5,468,713
Income from operating lease		153,994	99,042
Share in profit of associate	7	1,932,922	1,347,022
Share in profit of a joint venture	8	645,360	391,785
Loss on disposal of property, plant and equipment		(449,324)	(2,112)
Other income		647,634	211,147
Other expense		(3,246,022)	(128,208)
Operating profit		33,069,621	99,495,506
Finance income	25	12,100,402	8,516,923
Finance costs	26	(63,047,884)	(65,300,711)
(Loss)/profit before taxes		(17,877,861)	42,711,718
Income tax benefit/(expense)	27	489,233	(10,905,689)
(Loss)/profit for the year		(17,388,628)	31,806,029
Other comprehensive income			
Other comprehensive income not to be reclassified to profit or loss in the subsequent periods			
Income from revaluation of defined benefit plans	17	91,045	55,905
Total comprehensive (loss)/income for the year, net of tax		(17,297,583)	31,861,934

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General Director

Deputy General Director for Corporate Functions

Chief Accountant





The explanatory notes on pages 6 to 42 are an integral part of these financial statements.

Atyrau Oil Refinery LLP

Financial statements

STATEMENT OF CASH FLOWS

For the year ended 31 December 2020

In thousands of tenge	Note	2020	2019
Cash flows from operating activities			
Cash receipts from customers		263,661,579	250,321,046
Cash payments to suppliers		(76,937,381)	(53,301,292)
Payments to employees		(10,341,036)	(9,261,668)
Other taxes and payments		(42,013,049)	(38,161,907)
Other payments		(1,850,644)	(1,241,821)
Income tax paid		(264)	(1,056)
Interest paid		(49,011,876)	(48,665,873)
Interest received		876,440	534,569
Net cash flows from operating activities		84,383,769	100,221,998
Cash flows from investing activities			
Purchase of property, plant and equipment		(40,961,930)	(8,987,381)
Purchase of intangible assets		(456,804)	(4,915)
Dividends received	7, 8	1,757,070	1,426,336
Placement of bank deposits, net		(36,325)	(401,558)
Proceed from sale of property, plant and equipment		2,136	61,285
Proceeds from sale of other non-current assets		1,083,465	-
Proceeds from sale of interests in a joint venture		5,754,474	-
Net cash flows used in investing activities		(32,857,914)	(7,906,233)
Cash flows from financing activities			
Repayment of loans	14	(273,335,061)	(312,369,696)
Proceeds from borrowings	14	173,794,398	199,395,500
Repayments of bonds	15	(11,845,800)	(5,749,350)
Proceeds on bonds	15	-	56,223,000
Lease repayment		(799,424)	(763,405)
Dividends paid		(74)	(352)
Other payments		(841,418)	(3,846,040)
Net cash flows used in financing activities		(113,027,379)	(67,110,343)
Net (decrease)/increase in cash and cash equivalents		(61,501,524)	25,205,422
Effect of exchange rate changes on cash and cash equivalents		248,815	(748,332)
Change in allowance for expected credit losses on cash and cash equivalents		1,940	(890)
Cash and cash equivalents as at 1 January	11	97,431,749	72,975,549
Cash and cash equivalents as at 31 December	11	36,180,980	97,431,749

Signed and authorised for issue on 19 February 2021.

General Director

Deputy General Director for Corporate Functions

Chief Accountant



Sh.A. Dambay

L.B. Akanova

A.M. Sadvokassova

The explanatory notes on pages 6 to 42 are an integral part of these financial statements.

Atyrau Oil Refinery LLP

Financial statements

STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2020

In thousands of tenge	Note	Charter capital	Additional paid-in capital	Other reserves	Uncovered loss	Total
At 1 January 2019		47,807,399	18,783,268	(1,120,501)	(70,892,837)	(5,422,671)
Net income for the year		-	-	-	31,806,029	31,806,029
Other comprehensive income	17	-	-	55,905	-	55,905
Total comprehensive income for the year		-	-	55,905	31,806,029	31,861,934
Reclassification due to repayment of the loan		-	(5,049,888)	-	5,049,888	-
Discounting of loans received at the below market rate		-	4,877,135	-	-	4,877,135
At 31 December 2019		47,807,399	18,610,515	(1,064,596)	(34,036,920)	31,316,398
Net loss for the year		-	-	-	(17,388,628)	(17,388,628)
Other comprehensive income	17	-	-	91,045	-	91,045
Total comprehensive income/(loss) for the year		-	-	91,045	(17,388,628)	(17,297,583)
Reclassification due to repayment of the loan	14	-	(4,877,135)	-	4,877,135	-
Discounting of loans received at the below market rate	14	-	5,121,823	-	-	5,121,823
At 31 December 2020		47,807,399	18,855,203	(973,551)	(46,548,413)	19,140,638

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General Director

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Chief Accountant

Sh.A. Dambay
L.B. Akanova
A.M. Sadvokassova

The explanatory notes on pages 6 to 42 are an integral part of these financial statements.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2020

1. CORPORATE INFORMATION

Atyrau Oil Refinery limited liability partnership (the "Company") was established on 14 July 2004 in accordance with the legislation of the Republic of Kazakhstan. As at 31 December 2016, the Company's participant was KazMunayGas Refining and Marketing JSC ("KMG RM"), the share of which was 99%, and which was dissolved in 2017. As at 31 December 2020, National Company KazMunayGas JSC ("NC KMG") owns 99% of the Company.

KMG RM operated in the Republic of Kazakhstan and was a fully controlled subsidiary of NC KMG. NC KMG is controlled by the Government of the Republic of Kazakhstan as represented by National Welfare Fund "Samruk-Kazyna" (NWF "Samruk-Kazyna", 90%) and the National Bank of the Republic of Kazakhstan (10%) and, respectively, all subsidiaries of NC KMG and other government entities are considered as related parties in these financial statements (Note 28).

Principal activities of the Company are oil processing, production and sale of petroleum products. The Company is the only major oil refinery in Western Kazakhstan. The methodology for calculating the tariff for processing of crude oil is agreed with NC KMG and approved by the Company's Supervisory Board. The tariff rates on the basis of which the Company receives most of the revenue from rendering of services for the processing of oil and petroleum products are agreed with KMG and the Ministry of Energy of the Republic of Kazakhstan and approved by the Company.

The Company's office is located at: 1 Zeynolla Kabdolov Ave., Atyrau, Republic of Kazakhstan.

Impact of the Covid-19 (coronavirus) pandemic and current economic situation

In April-December 2020, the Company has a slight reduction in yield from rendering of services for processing of oil and petroleum products due to oversupply of petroleum products in the market. The demand contraction is due to the Covid-19 pandemic and quarantine measures. The impact of Covid-19 and the current economic situation have been taken into account in the preparation of the annual financial statements. All significant transactions were recorded in the accounting records and presented in the financial statements, and the Covid-19 pandemic did not make any significant changes. These financial statements have been prepared based on the going concern assumption.

The Company's significant accounting estimates and judgements on assets and liabilities are disclosed in the Notes to the financial statements for the year ended 31 December 2020. Based on estimates and judgements, no adjustment to the value of assets and liabilities was required as at 31 December 2020.

In accordance with WHO recommendations, the Company has taken measures to preserve the health of employees (including contractors, employees of service and outsourcing companies) to prevent infection in its administrative and industrial premises. Some employees are transferred to the remote working, a thorough cleaning of workplaces is carried out, personal protective equipment is handed out, daily temperature check and testing in case of suspected illness are performed.

2. BASIS OF PREPARATION AND CHANGES IN THE COMPANY'S ACCOUNTING POLICY

Basis of preparation

The financial statements of the Company have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

These financial statements have been prepared on a historical cost basis, except as described in the accounting policies and the notes to these financial statements. These financial statements are presented in tenge and amounts herein are rounded to the nearest thousand, except when otherwise indicated.

The preparation of the financial statements in conformity with IFRS requires the use of certain critical accounting estimates and assumptions. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4. These estimates are based on information available as of the date of the financial statements. Actual results, therefore, could differ from these estimates.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

2. BASIS OF PREPARATION AND CHANGE IN THE COMPANY'S ACCOUNTING POLICY (continued)

Going concern

The Company's management prepared these financial statements on a going concern basis, which includes the realisation of assets and the satisfaction of liabilities in the normal course of business in the foreseeable future. In making this judgement, the Company's management took into account the Company's financial position, current intentions and available financial resources of the Company. As at 31 December 2020, current liabilities exceeded current assets by KZT 194,992,906 thousand (31 December 2019: KZT 144,164,844 thousand). As at 31 December 2020, the current portion of loans and bonds, including interest accrued amounted to KZT 209,673,118 thousand (31 December 2019: KZT 208,550,806 thousand), of which KZT 41,758,093 thousand represent the current portion of loans from NC KMG (31 December 2019: KZT 41,882,401 thousand).

It is planned to pay for the current portion of long-term loans and interest accrued using cash derived from operating activities and refinancing of existing loans.

The financial statements have been prepared on the basis that the Company will be able to continue its activities as a going concern in the foreseeable future. The Company is currently implementing initiatives intended to improve liquidity and efficiency. In particular, the Company increased the tariff for processing of crude oil from 37,436 tenge per ton to 41,466 tenge per ton from 1 January 2020. The management of the Company believes that the above initiatives will ensure that the Company has adequate liquidity to continue its activities during at least 2021.

New and amended standards and interpretations

The Company applied for the first time certain standards and amendments, which are effective for annual reporting periods beginning on or after 1 January 2020. The Company has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

Amendments to IFRS 3 Definition of a Business

The amendments to IFRS 3 clarify that, to be considered a business, an integrated set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. Furthermore, it clarifies that a business can exist without including all of the inputs and processes needed to create outputs. These amendments had no impact on the consolidated financial statements of the Company, but may impact future periods should the Company enter into any business combinations.

Amendments to IFRS 7, IFRS 9 and IAS 39 Interest Rate Benchmark Reform

Amendments to IFRS 7, IFRS 9, IAS 39 *Financial Instruments: Recognition and Measurement* include a number of reliefs, which apply to all hedging relationships that are directly affected by interest rate benchmark reform. A hedging relationship is affected if the reform gives rise to uncertainty about the timing and/or amount of benchmark-based cash flows of the hedged item or the hedging instrument. These amendments have no impact on the financial statements of the Company as it does not have any interest rate hedge relationships.

Amendments to IAS 1 and IAS 8 Definition of Material

The amendments propose a new definition of materiality, according to which "Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity".

The amendments clarify that materiality will depend on the nature or magnitude of information, either individually or in combination with other information, in the context of the financial statements. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users. These amendments had no impact on the consolidated financial statements of, nor is there expected to be any future impact to the Company.

Conceptual Framework for Financial Reporting issued on 29 March 2018

The *Conceptual Framework* is not a standard, and none of the concepts contained therein override the concepts or requirements in any standard. The purpose of the *Conceptual Framework* is to assist the IASB in developing standards, to help preparers develop consistent accounting policies where there is no applicable standard in place and to assist all parties to understand and interpret the standards. This document will have an impact on entities that develop their accounting policies in accordance with the provisions of the *Conceptual Framework*.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

2. BASIS OF PREPARATION AND CHANGE IN THE COMPANY'S ACCOUNTING POLICY (continued)

New and amended standards and interpretations (continued)

Conceptual Framework for Financial Reporting issued on 29 March 2018 (continued)

The revised *Conceptual Framework* includes some new concepts, provides updated definitions and recognition criteria for assets and liabilities and clarifies some important concepts. Revision of this document had no impact on the financial statements of the Company.

Amendments to IFRS 16 Covid-19 Related Rent Concessions

On 28 May 2020, the IASB issued *Covid-19 Related Rent Concessions* – amendment to IFRS 16 *Leases*. The amendments provide relief to lessees from applying IFRS 16 guidance on lease modification accounting for rent concessions arising as a direct consequence of the Covid-19 pandemic. As a practical expedient, a lessee may elect not to assess whether a Covid-19 related lease concession from a lessor is a lease modification. A lessee that makes this election accounts for any qualifying change in lease payments resulting from the Covid-19 related rent concession the same way it would account for the change under IFRS 16 if the change were not a lease modification.

The amendment is effective for annual periods beginning on or after 1 June 2020. Early adoption is permitted. This amendment had no effect on the financial statements of the Company.

Standards and interpretations issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Company's financial statements are disclosed below. The Company intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

IFRS 17 Insurance Contracts

In May 2017, the IASB issued IFRS 17 *Insurance Contracts* (IFRS 17), a comprehensive new accounting standard for insurance contracts covering recognition and measurement, presentation and disclosure. Once effective, IFRS 17 will replace IFRS 4 *Insurance Contracts* (IFRS 4) that was issued in 2005. IFRS 17 applies to all types of insurance contracts (i.e., life, non-life, direct insurance and re-insurance), regardless of the type of entities that issue them, as well as to certain guarantees and financial instruments with discretionary participation features. A few scope exceptions will apply. The overall objective of IFRS 17 is to provide an accounting model for insurance contracts that is more useful and consistent for insurers. In contrast to the requirements in IFRS 4, which are largely based on grandfathering previous local accounting policies, IFRS 17 provides a comprehensive model for insurance contracts, covering all relevant accounting aspects. The core of IFRS 17 is the general model, supplemented by:

- A specific adaptation for insurance contracts with direct participation terms (the variable fee approach).
- A simplified approach (the premium allocation approach) mainly for short-duration contracts.

IFRS 17 is effective for reporting periods beginning on or after 01 January 2023, with comparative figures required. Early application is permitted, provided the entity also applies IFRS 9 and IFRS 15 on or before the date it first applies IFRS 17. This standard is not applicable for the Company.

Amendments to IAS 1 Classification of Liabilities as Current or Non-current

In January 2020, the IASB issued amendments to paragraphs 69 to 76 of IAS 1 to specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- What is meant by a right to defer settlement;
- That a right to defer must exist at the end of the reporting period;
- That classification is unaffected by the likelihood that an entity will exercise its deferral right;
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification.

The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and apply retrospectively. The Company is currently assessing the impact the amendments will have on current practice and whether existing loan agreements may require renegotiation.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

2. BASIS OF PREPARATION AND CHANGE IN THE COMPANY'S ACCOUNTING POLICY (continued)

Standards and interpretations issued but not yet effective (continued)

Reference to the Conceptual Framework – Amendments to IFRS 3

In May 2020, the IASB issued Amendments to IFRS 3 *Business Combinations* – *Reference to the Conceptual Framework*. The amendments are intended to replace a reference to the *Framework for the Preparation and Presentation of Financial Statements*, issued in 1989, with a reference to the *Conceptual Framework for Financial Reporting* issued in March 2018 without significantly changing its requirements.

The Board also added an exception to the recognition principle of IFRS 3 to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of IAS 37 or IFRIC 21 Levies, if incurred separately.

At the same time, the Board decided to clarify existing guidance in IFRS 3 for contingent assets that would not be affected by replacing the reference to the *Framework for the Preparation and Presentation of Financial Statements*. The amendments are effective for annual reporting periods beginning on or after 1 January 2022 and apply prospectively.

Property, Plant and Equipment: Proceeds before Intended Use – Amendments to IAS 16

In May 2020, the IASB issued *Property, Plant and Equipment – Proceeds before Intended Use*, which prohibits entities deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the costs of producing those items, in profit or loss.

The amendment is effective for annual reporting periods beginning on or after 1 January 2022 and must be applied retrospectively to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment. The amendments are not expected to have a material impact on the Company.

Onerous Contracts – Costs of Fulfilling a Contract – Amendments to IAS 37

In May 2020, the IASB issued amendments to IAS 37 to specify which costs an entity needs to include when assessing whether a contract is onerous or loss-making.

The amendments apply a "directly related cost approach". The costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract.

The amendments are effective for annual reporting periods beginning on or after 1 January 2022. The Company will apply these amendments to contracts for which it has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments.

Amendment to IFRS 1 First-time Adoption of International Financial Reporting Standards – Subsidiary as a First-time Adopter

As part of its 2018-2020 annual improvements to IFRS standards process, the IASB issued an amendment to IFRS 1 *First-time Adoption of International Financial Reporting Standards*. The amendment permits a subsidiary that elects to apply paragraph D16(a) of IFRS 1 to measure cumulative translation differences using the amounts reported by the parent, based on the parent's date of transition to IFRS. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(a) of IFRS 1.

The amendment is effective for annual periods beginning on or after 1 January 2022. Early adoption is permitted.

IFRS 9 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial liabilities

As part of its 2018-2020 annual improvements to IFRS standards process the IASB issued amendment to IFRS 9. The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

2. BASIS OF PREPARATION AND CHANGE IN THE COMPANY'S ACCOUNTING POLICY (continued)

Standards and interpretations issued but not yet effective (continued)

IFRS 9 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial liabilities (continued)

The amendment is effective for annual periods beginning on or after 1 January 2022. Early adoption is permitted. The Company will apply the amendments to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

The amendments are not expected to have a material impact on the Company.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Foreign currencies

The financial statements are presented in tenge, which is the Company's functional and presentation currency.

Transactions and balances

Transactions in foreign currencies are initially recorded by the Company at their respective functional currency rates at the date the transaction first qualifies for recognition.

Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency rate of exchange ruling at the reporting date. Differences arising from repayment or restatement of monetary items are included in profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item.

Weighted average currency exchange rates established by the Kazakhstan Stock Exchange ("KASE") are used as official currency exchange rates in the Republic of Kazakhstan. The following foreign exchange rates of tenge to US dollars have been used in the preparation of these financial statements:

	Exchange rate as at	Average weighted rate during the year
31 December 2020	420.91	413.46
31 December 2019	382.59	382.87

Current versus non-current classification

The Company presents assets and liabilities based on their current and non-current classification in the statement of financial position. An asset is current when it is:

- Expected to be realised or intended to be sold or consumed in the normal operating cycle;
- Expected to be realised within twelve months after the reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle;
- It is due to be settled within twelve months after the reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period.

The Company classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Property, plant and equipment

Property, plant and equipment is stated at cost, net of accumulated depreciation and accumulated impairment losses, if any.

The initial cost of an asset comprises its purchase price or construction cost, any costs directly attributable to bringing the asset into operation and the initial estimate of any decommissioning obligation, if any. Such cost includes the cost of replacing part of the plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of property, plant and equipment are required to be replaced at intervals, the Company recognises such parts as individual assets with specific useful lives and depreciates them accordingly. Likewise, when a major technical review is performed, its costs are recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

Depreciation of property, plant and equipment is computed on a straight-line basis over the estimated useful life of the asset as follows:

	Years
Buildings	8-100
Machinery and equipment	3-30
Transportation	5-20
Other	1-20

The expected useful lives, residual value and depreciation methods of property, plant and equipment are reviewed on an annual basis and, if necessary, respective changes are accounted for prospectively.

The carrying amount of property, plant and equipment is reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Cost related to repairs and renewals are charged when incurred and included either in cost of sales or general and administrative expenses, depending on the function of property, plant and equipment, unless they qualify for capitalisation.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal.

Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement and statement of comprehensive income when the asset is derecognised.

The residual values, useful lives and methods of depreciation of property and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate.

Lease

The Company assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Company as a lessee

The Company applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Company recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

Right-of-use assets

The Company recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Leases (continued)

Company as a lessee (continued)

Right-of-use assets (continued)

If ownership of the leased asset transfers to the Company at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The right-of-use assets are also subject to impairment.

Lease liabilities

At the commencement date of the lease, the Company recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Company uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

The Company applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do contain an option to purchase the underlying asset). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

Company as a lessor

Leases in which the Company does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

The Company accounts for cash transactions related to the payment of fees on loans and borrowings as part of its financial activities in the statement of cash flows.

Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Intangible assets (continued)

Intangible assets with finite useful lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit or loss in the expense category that is consistent with the function of the intangible assets.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of profit or loss when the asset is derecognised.

Financial instruments – initial recognition and subsequent measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient.

The Company initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient are measured at the transaction price determined under IFRS 15. See the accounting policies, section "Revenue from contracts with customers".

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Company's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Company commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement financial assets are classified as follows:

- Financial assets at amortised cost (debt instruments)

Financial assets at amortised cost (debt instruments)

This is the category most relevant to the Company. The Company measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Financial instruments – initial recognition and subsequent measurement (continued)

Financial assets (continued)

Subsequent measurement (continued)

Financial assets at amortised cost (debt instruments) (continued)

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

The Company's financial assets at amortised cost include trade and other receivables.

Derecognition

A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is derecognised (i.e. excluded from the Company's statement of financial position):

- The rights to receive cash flows from the asset have expired; or
- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Impairment of financial assets

The Company recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Company expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade and other receivables, the Company applies a simplified approach in calculating ECLs. Therefore, the Company does not track changes in credit risk, but instead recognises a loss allowance based on lifetime expected credit losses at each reporting date. The Company has established a provision matrix that is based on its historical credit loss experience and forward looking factors specific to the economic environment.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, such as loans and borrowings, finance lease, trade and other payables.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings, finance lease, trade and other payables, net of directly attributable transaction costs.

The Company has not designated any financial liabilities upon initial recognition as financial liabilities at fair value through profit or loss.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Financial instruments – initial recognition and subsequent measurement (continued)

Financial liabilities (continued)

Subsequent measurement of loans and borrowings

For purposes of subsequent measurement, financial liabilities are classified in two categories:

- Financial liabilities at fair value through profit or loss;
- Financial liabilities at amortised cost (loans and borrowings).

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Gains or losses on liabilities held for trading are recognised in the income statement.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IFRS 9 are satisfied. The Company has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (loans and borrowings)

This category is relevant to the Company. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fee or cost that are an integral part of the EIR. The EIR amortisation is included in finance costs in the statement of comprehensive income.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amount is recognised through the statement of comprehensive income or in the statement of changes in equity.

Offsetting of financial instruments

Assets and liabilities, income and expenses are not subject to offset and should be presented in the statements separately according to the materiality concept, unless it is required or permitted by IFRS or IFRIC.

Financial assets and financial liabilities are only offset and reported at the net amount in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and the Company intends to either settle on a net basis, to realise the asset and settle the liability simultaneously.

Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability; or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Company.

The Company measures such financial instruments as derivatives at fair value at each reporting date.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Fair value measurement (continued)

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 – quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 – valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable;
- Level 3 – valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements at fair value on a recurring basis, the Company determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosure, the Company classified assets and liabilities based on their nature, characteristics and risks related to them and applicable level of fair value hierarchy, as specified above.

Cash

Cash and short-term deposits in the statement of financial position comprise cash at banks and short-term deposits with initial maturity of three months or less, which are subject to an insignificant risk of changes in value.

Inventories

Inventories are valued at the lower of cost or net realisable value. Cost of inventory is determined based on FIFO method (first-in, first-out). The cost of finished goods and work in progress comprises supplies and raw materials, direct labour and other direct costs and related production overheads (based on normal production capacity) but excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

Impairment of non-financial assets

The Company assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or CGU's fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Company bases its impairment calculation on most recent budgets and forecast calculations, which are prepared separately for each of the Company's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses of continuing operations are recognised in the statement of profit or loss in those expense categories consistent with the function of the impaired asset.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Impairment of non-financial assets (continued)

An assessment is made at each reporting date as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indication exists, the Company estimates the asset's or CGU's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the statement of profit or loss.

Provisions

Provisions are recognised when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Company expects some or all of a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the statement of profit or loss and comprehensive income net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

Employees benefit

Defined benefit plans

The Company has unfunded defined benefit plans. The cost of providing benefits under the defined benefit plans is determined individually for each defined benefit plan using the actuarial projected unit credit method.

In accordance with IAS 19, the Company separates three components:

- Cost of employee services;
- Net interest related to net liability of defined benefit plan;
- Revaluation of net liability of defined benefit plan.

The first two components relate to profit or loss, and only revaluation is recorded within other comprehensive income.

As a result, components of defined benefit pension plan costs include:

- In profit and loss:
 - Cost of services rendered in the current period;
 - Cost of any services rendered in the prior periods and profit or loss arising in payment;
 - Net interest related to liability (asset) of defined benefit pension plan;
- In other comprehensive income:
 - Actuarial profit or loss;
 - Income on assets of the plan, exclusive of amounts included in net interest with respect to liability (asset) of defined benefits pension plan;
 - Any change in impact of limit of asset, exclusive of amounts included in net interest with respect to liability (asset) of defined benefits pension plan.

The cost of services includes the cost of current services and services of prior periods (includes curtailments and settlements under the plan). Due to changes in the standard, the cost of prior services and curtailment are recognised immediately.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Employee benefits (continued)

Termination benefits

The Company is also liable to pay termination benefits. This type of remuneration is provided in exchange for breaking off of labour relations. They represent a decision of employees to accept an offer on remuneration in exchange for termination of employment agreement.

Pension deductions

The Company withholds up to 10% from the salary of its employees as contribution to designated pension funds. In accordance with requirements of the legislation, the Company is responsible for payment of retirement benefits on behalf of employees and the Company has no present or future obligations to further benefit its employees upon their retirement.

Investments in associates and joint ventures

An associated company is a company, which is significantly influenced by the Company. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

The Company's investments in its associate and joint venture are accounted for using the equity method.

Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Company's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment separately.

The statement of profit or loss reflects the Company's share of the results of operations of the associate or joint venture. Changes in OCI of such investee is represented within the Company's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Company recognises its share of any changes, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Company and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The Company's share in profit or loss of the associate and joint venture is shown directly in the income statement beyond the operating profit. It represents profit or loss after taxes and non-controlling interests in subsidiaries of the associate or joint venture.

The financial statements of the associate or joint venture are prepared for the same reporting period as the Company. When necessary, adjustments are made to bring the accounting policies in line with those of the Company.

After application of the equity method, the Company determines whether it is necessary to recognise an impairment loss on its investment in its associate or joint venture. At each reporting date, the Company determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Company calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognises the loss as 'Share of profit of an associate and a joint venture' in the statement of profit or loss.

Upon loss of significant influence over the associate or joint control over the joint venture, the Company measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Taxation

Value added tax (VAT)

Tax legislation provide for repaying input VAT and output VAT on a net basis. Thus, value added tax receivable represents VAT on purchases net of VAT on sales.

VAT payable

VAT payable is accrued on accounts on income from sales of goods, work and services subject to VAT in accordance with the Tax Code of the Republic of Kazakhstan. Where provision has been made for impairment of receivables, an impairment loss is recorded for the gross amount of the debtor.

VAT recoverable

VAT recoverable is recorded in accounting on purchased goods, works and services that were purchased with VAT, in case that they were used for the purpose of obtaining income.

At each reporting date, the VAT recoverable amount is subject to offset against the VAT payable amount.

Excise

Excise duty is accrued in accounting on the date of shipment of gasoline and diesel fuel ("excisable product") to the customer. The amount of excise duty is calculated on the basis of transferred volumes of excisable products in physical terms.

The terms of oil processing agreement provide for reimbursement by oil suppliers of the amount of expenses incurred by the Company in fulfilling tax obligation to pay excise duty. The Company is an agent between the customer and the tax authority for payment of excise duty for transferred excisable products. The Company accounts for income and expenses related to excise duty on a net basis. The Company accounts for cash transactions related to excise duties in other taxes and payments, as well as in cash receipts from customers.

Social tax

The Company pays social tax to the budget of the Republic of Kazakhstan for its employees using a social tax rate set at 9.5% of taxable income of the employees.

Current income tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The Company applies tax rates and tax legislation adopted or substantially adopted at the reporting date in the Republic of Kazakhstan, where the Company operates and receives taxable income.

Current income tax relating to items recognised directly in equity is recognised in equity and not in the statement of profit or loss. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is provided using the liability method on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- Where the deferred tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Taxation (continued)

Deferred tax (continued)

Deferred tax assets are recognised for all deductible temporary differences, carryforward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward of unused tax credits and unused tax losses can be utilised except:

- Where the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax assets to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax assets to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

The Company offsets deferred tax assets and deferred tax liabilities if and only if it has a legally enforceable right to set off current tax assets against current tax liabilities, and deferred tax assets and deferred tax liabilities relate to income taxes collected by the same tax authority from the same taxable entity or from different taxable entities, which intend to either settle current tax liabilities and assets on a net basis, or to realise these assets and settle these liabilities simultaneously in each of the future periods in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Revenue from contracts with customers

The Company's activities are mainly related to processing of oil, stable gas condensate and refined products. Revenue from contracts with customers is recognised when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. The Company has concluded that it is acting as a principal in all of its revenue arrangements, since in all cases it is the main party that assumed obligations under the contract.

The services rendered represent separate performance obligations under contracts with customers. The agreements provide for variable consideration (fines) recognised in revenue.

The disclosures of significant accounting judgements, estimates and assumptions relating to revenue from contracts with customers are provided in Note 4.

Significant financing component

Generally, the Company receives short-term advances from its customers. As a result of applying practical expedient provided for by IFRS 15, the Company does not adjust promised amount of consideration with due account for impact of significant financing component in agreements, if the Company expects at contract inception, that the period between when the Company transfers a promised good or service to a customer and when the customer pays for such a good or service will be one year or less.

Contract balances

Trade accounts receivable

Accounts receivable represent the Company's right to a refund, which is unconditional. Refer to accounting policies of financial assets in section Financial instruments – initial recognition and subsequent measurement.

Atyrau Oil Refinery LLP

Financial statements

NOTES TO THE FINANCIAL STATEMENTS (continued)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue from contracts with customers (continued)

Contract balances (continued)

Contract liabilities

A contract liability is the obligation to transfer goods or services to a customer for which the Company has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Company transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Company performs under the contract.

4. SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS

The preparation of the Company's financial statements requires the management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of these items and contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below: Assumptions and estimates are based on the Company's initial data, which it had at the time of preparation of the financial statements. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Company. Such changes are reflected in the assumptions while they occur.

Useful life of property and equipment

The Company assesses the remaining useful lives of items of property, plant and equipment at least at each financial year-end. If expectations differ from previous estimates, the changes are accounted for prospectively as a change in an accounting estimate in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*. These estimates may have a material impact on the amount of the current values of property, plant and equipment and on depreciation recognised in the income statement.

Impairment of non-current assets

The management engaged an independent appraiser to assess the recoverable amount of its non-current assets as at 30 November 2020.

The recoverable amount of CGU have been estimated using a DCF model. The discount rate was derived from the pre-tax weighted average cost of capital. The WACC takes into account both debt and equity. The cost of equity is derived from the expected return on investment by the Company. The cost of debt is based on the interest-bearing borrowings the Company is obliged to service. Segment-specific risk is incorporated by applying individual beta factors. The beta factors are evaluated based on publicly available marked data.

The business plan, which is approved on an annual basis, is the primary source of information for cash flow projections. It contains forecasts for sales volumes, revenues, costs and capital expenditure. Various assumptions such as oil prices and cost inflation rates take into account existing prices, other macroeconomic factors and historical trends and variability. Expenditure cash flows up to 2025 inclusively were based on a 5-year business plan of the Company, together with management's current assessment of probable changes in operational and capital expenditure.

The cost of use according to the toll scheme was accepted as the recoverable amount of property, plant and equipment.

The main assumptions used in determining value in use comprise:

	2021	2022	2023	2024	2025
Oil refining tariff forecast (tenge per ton)	41,466	41,466	41,466	41,466	41,466
The volume of oil refining (thousand tons)	5,355	5,355	5,355	5,355	5,355
Kazakhstan consumer price index (inflation)	5.80%	5.40%	5.30%	5.90%	5.90%

Atyrau Oil Refinery LLP

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NOTES TO THE FINANCIAL STATEMENTS (continued)

4. SIGNIFICANT ACCOUNTING JUDGEMENTS, ESTIMATES AND ASSUMPTIONS (continued)

Useful life of property and equipment (continued)

Impairment of non-current assets (continued)

Cash flows were discounted using the pre-tax weighted average cost of capital of 11.36%. As at 30 November 2020, the recoverable amount of property, plant and equipment amounted to KZT 895,553,585 thousand, which exceeds their carrying amount. If the discount rate is reduced/increased by 1%, the recoverable amount will increase/decrease by KZT 133,015,061/ 94,429,827 thousand, respectively.

Allowance for expected credit losses on trade receivables and assets under the contract

The measurement of expected losses under IFRS 9 across all categories of financial assets requires judgement, in particular, the estimation of the amount and timing of future cash flows and collateral values when determining impairment losses and the assessment of a significant increase in credit risk. These estimates are driven by a number of factors, changes in which can result in different levels of allowances. The Company's ECL calculations are outputs of complex models with a number of underlying assumptions regarding the choice of variable inputs and their interdependencies. Elements of the ECL models that are considered accounting judgements and estimates include:

- The Company's internal credit grading model, which assigns PDs to the individual grades;
- The segmentation of financial assets when their ECL is assessed on a collective basis;
- Development of ECL models, including the various formulae and the choice of inputs;
- Determination of associations between macroeconomic scenarios and, economic inputs, such as oil price with one-year lag, and the effect on PDs, EADs and LGDs.

As at 31 December 2020, the allowance for expected credit losses on accounts receivable and other current assets amounted to KZT 9,587 thousand (31 December 2019: KZT 293,439 thousand).

Employee benefit obligations

The present value of defined benefit obligations and related current service cost are determined in accordance with actuarial valuation, which rely on demographic and financial assumptions including mortality, both during and after employment, rates of employee turnover, discount rate, future salary and benefit levels and, to a limited extent, expected return on plan assets. In the event that further changes in the key assumptions are required, the future amounts of the employee benefit costs may be affected materially. The net employee benefit liability as at 31 December 2020 amounted to KZT 1,593,327 thousand (31 December 2019: KZT 2,319,043 thousand). More details are provided in Note 17.

Taxes

Uncertainties exist with respect to the interpretation of complex tax regulations, changes in the tax legislation and the amount and timing of future taxable income. Given the wide range of business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to income tax expense or benefit already recorded.

The amount of such provisions is based on various factors, such as experience of previous tax inspections and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Such differences in interpretation might arise on a wide range of issues depending upon prevailing conditions. Uncertainties related to taxation are detailed in Note 29.

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. A significant judgement of management is required to calculate the amount of deferred tax assets, which may be recognised in the financial statements based on possible dates of generation and amount of future taxable profit as well as strategy of tax planning.

Fair value of financial instruments

Where the fair value of financial assets and financial liabilities recorded in the statement of financial position cannot be derived from active markets, they are determined using valuation techniques including the discounted cash flows model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. The judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the fair value reported in the financial statements. Further details are contained in Note 30.

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NOTES TO THE FINANCIAL STATEMENTS (continued)

5. PROPERTY, PLANT AND EQUIPMENT

Movement in property, plant and equipment comprise the following:

In thousands of tenge	Land	Buildings	Machinery and equipment	Transportation	Other	Construction-in-progress	Total
Cost							
At 31 December 2018	4,236,459	264,849,146	557,602,223	22,325	35,152,882	3,204,542	865,067,577
Additions	70,934	–	146,534	–	2,571,287	36,972,060	39,760,815
Disposals	–	(17,539)	(66,558)	(112)	(376,602)	–	(460,811)
Transfers to intangible assets	–	–	–	–	–	(1,869,626)	(1,869,626)
Transfer to other non-current assets	–	–	–	–	(976,535)	–	(976,535)
Transfer to right-of-use assets	–	–	–	–	(840,135)	–	(840,135)
Transfers	–	7,680,529	15,174,002	–	902,411	(23,756,942)	–
At 31 December 2019	4,307,393	272,512,136	572,856,201	22,213	36,433,308	14,550,034	900,681,285
Additions	–	443,769	806,119	–	768,632	21,498,033	23,516,553
Disposals	–	(81)	(170,870)	–	(4,907,026)	–	(5,077,977)
Transfers to intangible assets	–	–	–	–	–	(154,668)	(154,668)
Transfers to assets held-for-sale	–	–	–	–	–	(1,381,755)	(1,381,755)
Transfer from inventory	–	–	102,488	–	1,516,587	–	1,619,075
Transfers	–	23,263,861	(8,256,483)	20,229	7,424,231	(22,451,838)	–
At 31 December 2020	4,307,393	296,219,685	565,337,455	42,442	41,235,732	12,059,806	919,202,513
Accumulated depreciation and impairment							
At 31 December 2018	–	(25,873,769)	(106,139,059)	(21,595)	(6,721,629)	–	(138,756,052)
Depreciation charge	–	(7,212,169)	(30,294,728)	(185)	(5,470,073)	–	(42,977,155)
Disposals	–	7,997	65,188	112	375,045	–	448,342
Transfer to other non-current assets	–	–	–	–	464,404	–	464,404
Transfer to right-of-use assets	–	–	–	–	316,511	–	316,511
At 31 December 2019	–	(33,077,941)	(136,368,599)	(21,668)	(11,035,742)	–	(180,503,950)
Depreciation charge	–	(10,054,299)	(30,961,172)	(187)	(7,327,707)	–	(48,343,365)
Disposals	–	78	170,850	–	4,443,553	–	4,614,481
Other transfers and reclassifications	–	(1,501,173)	1,475,665	(1,476)	26,984	–	–
At 31 December 2020	–	(44,633,335)	(165,683,256)	(23,331)	(13,892,912)	–	(224,232,834)
Net book value							
At 31 December 2020	4,307,393	251,586,350	399,654,199	19,111	27,342,820	12,059,806	694,969,679
At 31 December 2019	4,307,393	239,434,195	436,487,602	545	25,397,566	14,550,034	720,177,335

At 31 December 2020 and 31 December 2019, all of the Company's property, plant and equipment were pledged as collateral for borrowings from Development Bank of Kazakhstan JSC (Note 14).

As at 31 December 2020, the cost of fully depreciated operated property, plant and equipment amounted to KZT 38,481,658 thousand (31 December 2019: KZT 21,387,899 thousand).

As at 31 December 2020, non-current reactive assets that were not loaded into processing units (catalysts, absorbers, etc. with a production life of more than one year) were reclassified as construction in progress from Other non-current assets in the amount of KZT 3,255,804 thousand (Note 6).

Atyrau Oil Refinery LLP

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NOTES TO THE FINANCIAL STATEMENTS (continued)

6. OTHER NON-CURRENT ASSETS

Other non-current assets are as follows:

In thousands of tenge	31 December 2020	31 December 2019
Catalysts in the warehouse	–	3,448,048
Other	–	231,588
Total	–	3,679,636

As at 31 December 2020, non-current reactive assets that were not loaded into processing units (catalysts, absorbers, etc. with a production life of more than one year) were reclassified from Other non-current assets to construction in progress in the amount of KZT 3,255,804 thousand (Note 5).

7. INVESTMENT IN AN ASSOCIATE

Investments in an associate are represented by the investment in RTI-ANPZ LLP originated in November 2014 by acquisition of a 30% share in RTI-ANPZ LLP in cash for KZT 55 thousand and by contributing property (right to use land plots) for KZT 1,477,218 thousand. The main activity of the Company includes construction and operation of railways; steaming, washing and preparing cars for loading of crude oil and oil products; outer and inner washing of cars; services related to verification and preparation of rail cars; operating of washing and steaming stations.

The Company's participation in RTI-ANPZ LLP is accounted for in the financial statements using equity method. The following table illustrates the summarised financial information of the Company's investment in RTI-ANPZ LLP:

In thousands of tenge	31 December 2020	31 December 2019
Cash	1,434,356	866,653
Short-term trade and other accounts receivable	409,614	192,904
Other current assets	346,020	269,255
Non-current assets	22,238,336	24,439,969
Loans, current portion	(5,186,713)	(2,611,977)
Short-term trade and other accounts payable	(14,146)	(1,163,652)
Other current liabilities	(416,711)	(371,027)
Loans, non-current portion	(2,963,026)	(6,544,177)
Long-term trade and other accounts payable	(39,642)	(1,926,181)
Other non-current liabilities	(688,915)	(452,100)
Equity	15,119,173	12,699,667

Carrying amount of investments	4,535,752	3,809,900
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The Company's share of the financial results of RTI-ANPZ LLP included into the financial statements of the Company is as follows:

In thousands of tenge	2020	2019
Revenue	13,813,276	12,244,285
Cost	(4,938,376)	(4,633,426)
General and administrative expenses	(292,576)	(291,037)
Other expense	(7,819)	(56,355)
Other income	319,289	42,020
Finance income	89,048	106,160
Finance costs	(1,042,172)	(1,396,660)
Profit before tax	7,940,670	6,014,987
Income tax expense	(1,497,596)	(1,524,915)
Net profit for the year	6,443,074	4,490,072
Total comprehensive income for the year	6,443,074	4,490,072
Share of the Company in profit for the year (30%)	1,932,922	1,347,022

According to the decisions taken at the general meeting of RTI-ANPZ LLP participants, dividends in the amount of KZT 273,221 thousand were paid in 2020 based on 2018-2019 financial results, for the 1-3 quarters of 2020 – KZT 933,849 thousand. The carrying amount of the investment in RTI-ANPZ LLP was reduced accordingly.

Atyrau Oil Refinery LLP

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NOTES TO THE FINANCIAL STATEMENTS (continued)

8. INVESTMENTS IN A JOINT VENTURE

Investments in a joint venture represent an investment of the Company in Liquefied Petroleum Gas's Storing Park LLP (LPGSP) by means of acquiring 50% of interest in the share capital of LPGSP by cash for the amount of KZT 2,200,000 thousand in May 2014. The fair value of the net assets acquired at the acquisition date was KZT 3,076,674 thousand. The difference in KZT 661,663 thousand between the acquisition cost and the fair value of net assets was fully recorded as LPGSP cost of property, plant and equipment. The principal activity of LPGSP comprises sale of liquefied gas purchased from processors of the Company in accordance with three party agreements on the domestic and export markets.

According to the decisions taken at the general meeting of LPGSP participants, dividends in the amount of KZT 550,000 thousand were paid in 2020 based on 2019 financial results. The carrying amount of the investment in LPGSP was reduced accordingly.

Since 30 September 2020, the investment in LPGSP has met the criteria for recognition of non-current assets for sale in accordance with the requirements of IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* and was transferred to assets for sale with a total carrying amount of KZT 3,080,029 thousand (Note 12).

The Company's participation in LPGSP is accounted for in the financial statements using equity method. Summarised financial information on the joint venture, based on its IFRS financial statements, and reconciliation with the carrying amount of the investment in the financial statements is set out below:

In thousands of tenge	31 December 2020	31 December 2019
Cash	–	1,093,750
Short-term trade and other accounts receivable	–	337,868
Other current assets	–	1,008,925
Non-current assets	–	5,154,467
Short-term trade and other accounts payable	–	(1,344,290)
Other current liabilities	–	(281,382)
Equity	–	5,969,338

Carrying amount of investments	–	2,984,669
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The Company's share in the financial results of LPGSP included in the Company's financial statements is presented for the period from 1 January 2020 to 30 September 2020 (*the date of transfer of the investment in LPGSP to assets held for sale was 30 September 2020):

In thousands of tenge	2020*	2019
Revenue	5,521,663	9,071,614
Cost of sales	(3,440,296)	(5,771,486)
Selling expenses	(628,628)	(1,440,671)
General and administrative expenses	(301,154)	(411,168)
Other expense	(174,874)	(460,948)
Other income	472,696	433,229
Finance income	2,547	9,875
Finance costs	–	(3,467)
Profit before tax	1,451,954	1,426,978

Income tax expense	(161,234)	(643,408)
Income for the year	1,290,720	783,570
Total comprehensive income for the year	1,290,720	783,570

Share of the Company in profit for the year (50%)	645,360	391,785
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Atyrau Oil Refinery LLP

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NOTES TO THE FINANCIAL STATEMENTS (continued)

9. INVENTORIES

Current inventories

As at 31 December 2020 and 31 December 2019, current inventories comprised the following:

<i>In thousands of tenge</i>	31 December 2020	31 December 2019
Raw and other materials	5,090,107	3,621,594
Spare parts	1,132,900	1,369,132
Chemical agents	439,619	547,970
Other	70,047	61,925
	6,732,673	5,600,621
Less: provision for obsolete inventories	(97,254)	(11,924)
Total	6,635,419	5,588,697

Non-current inventories

As at 31 December 2020, emergency stock in the amount of KZT 2,070,552 thousand (31 December 2019: KZT 1,587,020 thousand) comprised process oil in the vessels and pipelines in the amount of KZT 380,326 thousand (31 December 2019: KZT 380,326 thousand), methanol in pipelines in the amount of KZT 11,044 thousand (31 December 2019: KZT 11,044 thousand), oil products in the vessels and pipelines in the amount of KZT 821,136 thousand (31 December 2019: KZT 821,136 thousand), minimum stock of spare parts held for emergency repair of the Company's property, plant and equipment to ensure continuous operations in the amount of KZT 858,046 thousand (31 December 2019: KZT 374,514 thousand).

Movements in the provision for obsolete inventories are as follows:

<i>In thousands of tenge</i>	2020	2019
At 1 January	11,924	20,049
Recovered for the year	(1,104)	(9,543)
Charge for the year	86,434	1,418
At 31 December	97,254	11,924

10. OTHER TAXES PREPAID

Current portion

As at 31 December 2020 and 2019, other taxes prepaid were fully denominated in tenge and presented as follows:

<i>In thousands of tenge</i>	31 December 2020	31 December 2019
Property tax	733,293	1,594,148
Excise duties	393,567	240,570
VAT recoverable	24,625	12,231,442
Other taxes	21,191	7,283
Total	1,172,676	14,073,443

11. CASH AND CASH EQUIVALENTS

Cash and cash equivalents are as follows:

<i>In thousands of tenge</i>	31 December 2020	31 December 2019
Current accounts with banks in US dollars	29,978,169	75,611,076
Current accounts with banks in tenge	6,202,317	21,820,671
Current accounts with banks in Russian ruble	494	2
Total	36,180,980	97,431,749

As at 31 December 2020, the allowance for expected credit losses on cash and cash equivalents amounted to KZT 501 thousand (31 December 2019: KZT 2,441 thousand).

During 2020, interest is accrued on balance of cash on current accounts in tenge of 5% (2019: 5%), interest on deposit accounts in tenge is accrued in the range of 0.5% to 10% (2019: 0.5-8.25%).

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NOTES TO THE FINANCIAL STATEMENTS (continued)

12. ASSETS HELD FOR SALE

As at 31 December 2020, assets held for sale comprised the following:

<i>In thousands of tenge</i>	31 December 2020	31 December 2019
The Company's interest in the MC LPGSP JV (Note 8)	3,080,029	–
Other assets held for sale	16,510	16,510
Total	3,096,539	16,510

Since 30 September, the Company's interest in MC LPGSP JV has met the recognition criteria of IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*, and therefore, the investment has been transferred to assets held for sale at the lowest cost.

13. CHARTER CAPITAL

As at 31 December 2020, declared and fully paid share capital of the Company amounted to KZT 47,807,399 thousand (31 December 2019: KZT 47,807,399 thousand).

Additional paid-in capital represents the accumulated income from discounting of loans and borrowings received from: KMG PM at the below market rate or under interest-free financial aid, interest-free financial aid from NC KMG (Note 14).

Other components of equity represent the accumulated revaluation of net liability of defined benefit plan resulting from adjustments based on experience and the impact of changes in actuarial assumptions.

14. LOANS AND BORROWINGS

Loans and borrowings are as follows:

<i>In thousands of tenge</i>	Currency	Interest rate under the agreement	Maturity	31 December 2020	31 December 2019
Export-Import Bank of China	US dollar	6 months LIBOR + 4.1%	2018-2026	287,387,235	350,041,654
Halyk Bank of Kazakhstan JSC	Tenge	11%	2020-2024	41,207,404	–
Halyk Bank of Kazakhstan JSC	US dollar	5%	July 2021	21,517,095	–
Halyk Bank of Kazakhstan JSC	US dollar	5%	December 2021	20,627,454	–
Halyk Bank of Kazakhstan JSC	US dollar	5%	2019-2024	–	52,771,145
Halyk Bank of Kazakhstan JSC	US dollar	5%	December 2020	–	38,322,765
Japanese Bank of International Cooperation	US dollar	4.64% 6 months LIBOR + 1.1%	2016-2025	60,098,211	65,253,957
NC KMG / KMG RM	Tenge	–	July 2021	31,038,592	31,137,117
NC KMG / KMG RM	Tenge	3.5%	2026-2032	11,846,892	11,263,894
NC KMG / KMG RM	Tenge	–	December 2021	10,719,501	10,745,284
Development Bank of Kazakhstan JSC	US dollar	5%	2016-2025	59,523,947	63,915,985
Development Bank of Kazakhstan JSC	Tenge	10.99%	2019-2023	47,793,759	61,431,248
Development Bank of Kazakhstan JSC	Tenge	7.99%	2019-2026	25,150,881	25,051,441
Development Bank of Kazakhstan JSC	Tenge	9%	2014-2023	10,064,401	12,932,448
Development Bank of Kazakhstan JSC	Tenge	7.99%	2020-2026	35,332,493	–
Loans and borrowings				662,307,865	722,866,938
Less: the amount to be repaid within 12 months from the reporting date				(196,049,258)	(195,880,116)
Amounts due for settlement after 12 months				466,258,607	526,986,822

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NOTES TO THE FINANCIAL STATEMENTS (continued)

14. LOANS AND BORROWINGS (continued)

Development Bank of Kazakhstan JSC (DBK)

The Company pledged all of its property, plant and equipment as a security under the loans obtained from DBK JSC.

On 15 January 2020, in order to finance the contract for the construction of the “Advanced oil processing plant”, the Company received a loan from DBK JSC in the amount of KZT 46,061,800 thousand with an interest rate of 7.99%. Principal and interest payments are made from June 2020 as semi-annual payments. Upon initial recognition, this loan was recognised in the amount of KZT 35,059,591 thousand calculated by discounting future cash payment of principal amount at the effective rate of 15.2% per annum. Income from discounting in the amount of KZT 11,002,209 thousand was recognised as part of finance income in the statement of comprehensive income (Note 25).

In 2020, the principal amount was repaid on loans received from DBK JSC, according to the payment schedule, for a total amount of KZT 27,749,438 thousand, interest in the amount of KZT 16,483,691 thousand.

As at 31 December 2020 and 2019, the management believes that the Company was in compliance with all financial and non-financial covenants of this borrowing.

NC KazMunayGas JSC (NC KMG)

As at 31 December 2020, the Company had three long-term loans from NC KMG, the amortised cost of which was KZT 396,928 thousand, KZT 9,942,914 thousand and KZT 1,507,050 thousand as at the rate of 3.5% per annum to cover the expenses on arrangement of financing of the investment project “Construction of the advanced oil processing plant”. At initial recognition, the Company recognised these loans using the effective interest rate method of 12%.

Non-interest bearing financial aid

In July 2020, the Company received an interest-free financial aid from NC KMG in the amount of KZT 33,000,000 thousand for one year. Upon initial recognition, this loan was recognised in the amount of KZT 29,255,152 thousand calculated by discounting future cash payment of principal amount at the effective rate of 13%. The difference from discounting in the amount of KZT 3,744,848 thousand was recognised within equity.

In December 2020, the Company received an interest-free financial aid in the amount of KZT 12,000,000 thousand for one year. Upon initial recognition, this loan was recognised by the Company in the amount of KZT 10,623,025 thousand calculated by discounting future cash payment of principal amount at the effective rate of 13%. The difference from discounting in the amount of KZT 1,376,975 thousand was recognised within equity.

In July and December 2020, due to repayment of financial aid, the Company reclassified a discount of KZT 4,877,135 thousand from additional paid-in capital to accumulated loss.

Halyk Bank of Kazakhstan JSC

In December 2020, the Company made a full early repayment of the loan received in January 2019 from Halyk Bank of Kazakhstan JSC in order to refinance existing loans raised to finance a strategic investment project, i.e. the construction of the aromatic hydrocarbons plant, with an interest rate of 5.25% in 2020. Repayment of interest and the principal was made in semi-annual payments starting from July 2019.

The amount of principal and interest paid by the Company in 2020 amounted to KZT 55,479,179 thousand and KZT 3,528,185 thousand, respectively (equivalent to USD 135,000 and USD 8,809 thousand, respectively).

In December 2020, the loan received in December 2019 was fully repaid in order to repay current obligations to the creditor banks, i.e. Development Bank of Kazakhstan JSC, The Export-Import Bank of China. During the reporting period the principal has been paid in the amount of KZT 41,447,367 thousand (equivalent to USD 100,000 thousand), interest in the amount of KZT 1,123,311 thousand (equivalent to USD 2,746 thousand).

In July 2020, in order to repay current liabilities to creditor banks, i.e. Development Bank of Kazakhstan JSC, The Export-Import Bank of China, Japan Bank for International Cooperation, the Company received a loan from Halyk Bank of Kazakhstan JSC in the amount of KZT 21,040,050 thousand (equivalent to USD 51,000 thousand), with a fixed rate of 5% per annum. During the reporting period, interest was paid in the amount of KZT 462,715 thousand (equivalent to USD 1,091 thousand).

In accordance with the Credit Line Agreement No. KS 01-11-24 dated 23 December 2011 concluded between Halyk Bank of Kazakhstan JSC and ANPZ LLP, for the purpose of internal partial/full refinancing of loans received from Halyk Bank of Kazakhstan JSC, in December 2020 the Company received two tranches in tenge with a fixed rate of 11% per annum in the amount of KZT 17,611,190 thousand and KZT 23,477,838 thousand. Payment of the principal and interest will be made starting from January 2021 on the basis of semi-annual payments.

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NOTES TO THE FINANCIAL STATEMENTS (continued)

14. LOANS AND BORROWINGS (continued)

Halyk Bank of Kazakhstan JSC (continued)

Also, in December 2020, in order to refinance the existing loan, the Company received a short-term loan from Halyk Bank of Kazakhstan JSC in the amount of KZT 20,603,520 thousand (equivalent to USD 49,000 thousand), with a fixed rate of 5% per annum. The interest is paid monthly, starting from January 2021, and the principal is due in December 2021.

According to the loan agreements with Halyk Bank of Kazakhstan JSC, there are no covenants on these loans.

Export-Import Bank of China (EXIM Bank)

The Company has concluded a loan agreement with Export-Import Bank of China for the amount of USD 1,130,409 thousand with interest rate of 4.1% + 6m LIBOR (payments of principal from 2018 to 2026) to finance the construction of the advanced oil processing plant. Interest payment is carried out in terms of semi-annual payments.

In January and July 2020, the Company paid principal and interest in the amount of KZT 91,491,390 thousand and KZT 21,002,281 thousand, respectively (equivalent to USD 235,576 thousand and USD 53,331 thousand, respectively).

As at 31 December 2020 and 2019, the management believes that the Company was in compliance with all covenants of this borrowing.

Japanese Bank of International Cooperation (JBIC)

The Company entered into a loan agreement with the Japanese Bank for International Cooperation for the financing of construction of the advanced oil processing plant in the amount of USD 297,500,000 (equivalent to KZT 100,992,325 thousand) including: USD 178,500,000 (equivalent to KZT 60,595,395 thousand) (Tranche A) provided by Japan Bank for International Cooperation of 4.64% interest rate and USD 119,000,000 (equivalent to KZT 40,396,930 thousand) (Tranche B) provided by Bank of Tokyo MUFG of 6m LIBOR + 1.10% interest rate. Repayment of the principal should be made from 2016 till 2025. Interest payment is carried out in terms of semi-annual payments. As at 31 December 2019, the Company fully repaid the amount due on tranche B (USD 119,000 thousand).

In June and December 2020, the Company paid the principal and interest in the amount of KZT 12,175,187 thousand and KZT 3,289,569 thousand, respectively (equivalent to USD 29,750 thousand and USD 8,047 thousand, respectively).

As at 31 December 2020 and 2019, the management believes that the Company was in compliance with all covenants of this borrowing.

15. BONDS

Issued bonds consisted of the following:

	31 December 2020	31 December 2019
<i>In thousands of tenge</i>		
Bonds issued	44,195,550	51,649,650
Coupon interest payable	996,560	1,192,990
	45,192,110	52,842,640
Less: the amount to be repaid within 12 months from the reporting date	(13,623,860)	(12,670,690)
Amounts due for settlement after 12 months	31,568,250	40,171,950

In accordance with the decision of the General Meeting of Participants and the decision of the Management Board of SWF Samruk-Kazyna on 10 January 2019, the Company placed coupon bonds with the Astana International Exchange in the amount of 150,000 bonds with the nominal value of one security equivalent to 1,000 US dollars for a total amount of USD 150,000,000 (equivalent to KZT 56,223,000 thousand). The bonds were placed for the purpose of targeted sale of SWF Samruk-Kazyna and, therefore, do not assume further resale on the exchange. The bonds mature on 21 January 2024 (5 years). The annual coupon interest rate is 5% per annum and is fixed for the entire term of the bonds. Repayment of the principal and interest is made in tenge at the rate ruling at the maturity date indexed to the rate ruling at the date of issuance of bonds. Repayment is made semi-annually starting from July 2019. Borrowings are intended for refinancing of existing liabilities.

According to the schedule of coupon payment and repayment of the principal on bonds, in 2020, the principal in the amount of KZT 11,845,800 thousand and the coupon interest in the amount of KZT 2,510,932 thousand were repaid.

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NOTES TO THE FINANCIAL STATEMENTS (continued)

16. LEASE LIABILITIES

The Company entered into catalyst lease agreements with catalysts having a guaranteed useful life until 2022-2023. The minimum future lease payments under lease and lease option agreements as well as present value of net minimum lease payments are provided in the table:

In thousands of tenge	31 December 2020		31 December 2019	
	Minimum payment	Present value of payments	Minimum payment	Present value of payments
Within one year	905,534	775,317	823,093	637,944
More than one year, but less than five years	767,340	708,054	1,438,879	1,266,628
Total minimum lease payments	1,672,874	1,483,371	2,261,972	1,904,572
Less finance costs	(189,503)	–	(357,400)	–
Present value of minimum lease payments	1,483,371	1,483,371	1,904,572	1,904,572

The Company has leases of temporary land use and other equipment (servers).

In thousands of tenge	31 December 2020		31 December 2019	
	Minimum payment	Present value of payments	Minimum payment	Present value of payments
Within one year	80,205	69,117	54,791	42,256
More than one year, but less than five years	167,477	101,196	94,978	78,584
Over five years	263,332	70,148	98,654	34,911
Total minimum lease payments	511,014	240,461	248,423	155,751
Less finance costs	(270,553)	–	(92,672)	–
Present value of minimum lease payments	240,461	240,461	155,751	155,751

17. EMPLOYEE BENEFIT OBLIGATIONS

The Company has defined benefit plans, mainly consisting of pension supplementary payments and anniversary payments, covering all of its employees. These payments are unsecured.

These employee benefit liabilities are as follows:

In thousands of tenge	31 December 2020	31 December 2019
Post-employment benefits	1,324,814	1,262,355
Other long-term benefits	109,825	713,929
Short-term payments	158,688	342,759
Total employee benefit liabilities	1,593,327	2,319,043
Current portion of employee benefit liabilities	(158,688)	(342,759)
Long-term portion of employee benefit liabilities	1,434,639	1,976,284

The following tables summarise the components of net benefit expense recognised in the statement of comprehensive income for the respective plans for the years ended 31 December 2020 and 2019:

In thousands of tenge	2020	2019
Recorded in cost of sales (Note 23)	(377,305)	513,984
Recorded in finance costs (Note 26)	203,844	169,605
Recorded in general and administrative expenses (Note 24)	(86,958)	112,815
Recorded in other comprehensive income	(91,045)	(55,905)
Net benefit expense	(351,464)	740,499

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NOTES TO THE FINANCIAL STATEMENTS (continued)

17. EMPLOYEE BENEFIT OBLIGATIONS (continued)

Changes in the carrying amount of the defined benefit obligations at 31 December 2020 and 2019 are as follows:

In thousands of tenge	2020	2019
Defined benefit obligation at the beginning of the year	2,319,043	2,028,767
The cost of current services and services of previous years	(481,720)	532,027
Interest expenses (Note 26)	203,844	169,605
Interest paid during the year	(374,251)	(450,225)
Actuarial losses on other long-term benefits	17,456	94,774
Actuarial (income)/loss on post-employment benefits	(91,045)	(55,905)
Defined benefit obligation at the ending of the period	1,593,327	2,319,043

The principal assumptions used in determining obligations for the Company's employee defined benefit plans are presented below:

In thousands of tenge	2020	2019
Discount rate	10%	8.79%
Expected inflation rate in future years	6%	7%
Future salary increase rate	7%	7%
Future pension increases	7%	7%

18. PROVISIONS

Provisions are as follows:

In thousands of tenge	Tax risks	Provision for abandonment and recultivation of evaporation ponds	Total
At 1 January 2020	1,317,264	–	1,317,264
Accrued	–	3,936,874	3,936,874
Change in estimates	–	(1,274,917)	(1,274,917)
Unwinding of discount	–	52,233	52,233
At 31 December 2020	1,317,264	2,714,190	4,031,454
Current	1,317,264	–	1,317,264
Non-current	–	2,714,190	2,714,190

Tax risks

In December 2018, the Company accrued a provision for property tax in the amount of KZT 1,317,264 thousand for objects of the Advanced oil processing plant that were put into operation from capital construction in progress.

Provision for commitments under the environmental program

During 2020, the Company made a provision for abandonment and recultivation of evaporation ponds, using the estimated cost of such services, in the amount of KZT 3,936,874 thousand, which was recognised as other expenses in the statement of comprehensive income. In December 2020, based on the updated information (reduction of the implementation period on the Project for abandonment and recultivation of evaporation ponds and changes in the estimated value), the previously created provision was revised. In this regard, the changes in the accounting estimate amounted to KZT 1,274,917 thousand. During 2020, the finance cost amounted to KZT 52,233 thousand.

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NOTES TO THE FINANCIAL STATEMENTS (continued)

19. TRADE PAYABLES

Trade payables comprised the following:

	31 December 2020	31 December 2019
<i>In thousands of tenge</i>		
Long-term accounts payable		
Due to third parties	56,120	–
Due to related parties (Note 28)	46,995	115,169
Total	103,115	115,169
Short-term trade and other accounts payable		
Due to third parties	3,812,126	40,019,284
Due to related parties (Note 28)	1,199,750	1,151,921
Total	5,011,876	41,171,205
<i>In thousands of tenge</i>		
Tenge	4,269,825	7,106,688
US dollars	557,824	33,536,340
Euro	278,033	143,562
Other currencies	9,309	499,784
Total	5,114,991	41,286,374

As at 31 December 2020 and 2019, trade payables are due within 30-90 days.

Accounts payable of related parties as at 31 December 2020 in the amount of KZT 1,246,745 thousand represent the amount payable to Grace Kazakhstan Catalysts LLP for purchased inventory in the amount of KZT 913,308 thousand; KMG Automation LLP – for technical support and license lease in the amount of KZT 87,079 thousand; KEGOC JSC – for electricity and other services in the amount of KZT 86,604 thousand; Samruk-Kazyna Business Service LLP for intangible assets lease services in the amount of KZT 45,116 thousand; KMG-Security LLP for providing private security services in the amount of KZT 39,720 thousand; and other service providers in the amount of KZT 74,918 thousand.

20. TAXES AND OTHER PAYABLES

As at 31 December 2020 and 2019, taxes and other payables were fully denominated in tenge and are presented as follows:

	31 December 2020	31 December 2019
<i>In thousands of tenge</i>		
VAT payable from residents	4,069,173	–
Other taxes	339,181	667,700
Total	4,408,354	667,700

21. OBLIGATIONS UNDER CONTRACTS WITH CUSTOMERS

Liabilities under contracts with customers are presented as follows:

	31 December 2020	31 December 2019
<i>In thousands of tenge</i>		
Advances received from third parties	11,441,828	9,329,542
Advances received from related parties (Note 28)	11,597,854	3,202,032
Total	23,039,682	12,531,574

During the year ended 31 December 2020, the Company received an advance payment in the amount of KZT 5,754,474 thousand for the sale of an interest in the joint venture. The sale under the contract will be carried out after the customer receives the consent of the antimonopoly authority for economic concentration, in accordance with the requirements of the legislation of the Republic of Kazakhstan.

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NOTES TO THE FINANCIAL STATEMENTS (continued)

22. REVENUE FROM CONTRACTS WITH CUSTOMERS

Revenue from contracts with customers for the years ended 31 December comprised the following:

	Performance of obligations under contracts with customers	31 December 2020	31 December 2019
<i>In thousands of tenge</i>			
Types of services			
Revenue from crude oil refining	At a point in time	205,927,729	199,706,323
Revenue from octane-increasing resources	At a point in time	1,020,345	–
Revenue from refinery of pentane-hexane fraction	At a point in time	581,766	622,608
Revenue from the sale of the main marketable products	At a point in time	–	8,617
Other income	–	24,104	48,417
Total		207,553,944	200,385,965
Geographical regions			
Republic of Kazakhstan		207,553,944	200,385,965
Total		207,553,944	200,385,965

During the year ended 31 December 2020, the tariff for processing of crude oil was 41,466 tenge per ton of crude oil (2019: the tariff was 37,436 tenge per ton of crude oil).

23. COST OF SOLD GOODS AND RENDERED SERVICES

Cost of sales of products and rendered services for the year ended 31 December comprised the following:

	2020	2019
<i>In thousands of tenge</i>		
Depreciation and amortisation	48,807,582	43,186,375
Materials and fuel	16,937,703	13,768,725
Payroll and related taxes	11,611,658	10,327,669
Repair and maintenance	9,701,747	7,264,905
Electricity	9,241,497	10,624,928
Works and services of production nature	9,020,970	7,247,959
Taxes other than income tax	7,953,359	8,448,653
Environmental preservation expenses	1,203,702	651,067
Costs of compliance with sanitary and hygienic norms	100,396	99,303
Employee benefits (Note 17)	(377,305)	513,984
Other expense	3,576,123	2,736,756
Total	117,777,432	104,870,324
Change in finished goods and WIP	–	7,633
Total	117,777,432	104,877,957

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NOTES TO THE FINANCIAL STATEMENTS (continued)

24. GENERAL AND ADMINISTRATIVE EXPENSES

General and administrative expenses for the year ended 31 December comprised the following:

In thousands of tenge	2020	2019
Payroll and related taxes	1,485,679	1,647,053
Repair and maintenance	374,142	183,205
Losses on impairment of assets for sale	310,326	-
Depreciation and amortisation	276,438	150,295
Medical insurance of employees	234,918	25,791
Advisory, professional and audit services	167,046	325,735
Social payment to labour union	105,943	82,389
Taxes other than income tax	72,528	98,324
VAT not allowed for recovery	56,482	4,930
Business trip expenses	55,887	65,838
Costs of compliance with sanitary and hygienic norms	44,347	22,948
Transportation	40,096	46,441
Cleaning and administrative services	38,662	14,690
Support shop services	29,384	22,869
Communication and security expenses	27,432	35,514
Trainings	27,218	82,296
Bank service expenses	21,548	24,149
Third party services	20,670	271,214
Materials	18,794	38,088
Social payments to pensioners	9,740	13,473
Allowance for expected credit losses	89,303	(36,577)
Employee benefits (Note 17)	(86,958)	112,815
Other expenses for children of employees	-	1,965
Other	461,834	166,446
Total	3,881,459	3,399,891

25. FINANCE INCOME

Finance income for the year ended 31 December comprised the following:

In thousands of tenge	2020	2019
Income from discounting of loans and borrowings at below-market rates (Note 14)	11,002,209	7,780,974
Income from interest on funds placed with credit institutions	1,031,107	628,905
Other	67,086	107,044
Total	12,100,402	8,516,923

26. FINANCE COSTS

Finance costs for the year ended 31 December comprised the following:

In thousands of tenge	2020	2019
Interest on loans	46,914,324	48,243,234
Amortisation of discount on loans from the parent company and DBK JSC	8,115,311	5,551,037
Commissions for early repayment of loans and CIT at source	3,775,246	7,766,254
Interest on debt securities issued	2,231,353	2,637,609
Finance costs on insurance	1,141,715	665,667
Expenses from discounting on deposits at below-market rates	360,020	-
Fee interest - actuarial valuation (Note 17)	203,844	169,605
Finance costs on lease	201,833	216,854
Other	104,238	50,451
Total	63,047,884	65,300,711

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NOTES TO THE FINANCIAL STATEMENTS (continued)

27. INCOME TAX EXPENSE/(BENEFIT)

The Company is subject to corporate income tax at the prevailing statutory rate of 20% as of 31 December 2020.

The main income tax expense components in the income statement and statement of comprehensive income are as follows:

In thousands of tenge	2020	2019
Deferred income tax (benefit)/expense	(489,233)	10,905,689
Income tax (benefit)/expense	(489,233)	10,905,689

The reconciliation of income/(losses) before tax with income tax expenses/(benefits) is as follows:

In thousands of tenge	2020	2019
Profit/(loss) before taxes	(17,877,861)	42,711,718
Statutory tax rate	20%	20%
Income tax expense/(benefit) at the statutory rate	(3,575,572)	8,542,344

Expenses that are not deductible for income tax purposes

Share in profit of an associate and joint venture	(515,656)	(347,761)
Amortisation of fees on loans and borrowings	1,221,069	990,884
Commission for early repayment of loans	-	632,462
Discounting expenses on loans and borrowings	1,114,603	1,110,207
Accrual of allowance under the environmental program	532,391	-
Interest expense on debt securities issued	446,271	-
Other (non-taxable income) / non-deductible differences	287,661	(22,447)
Income tax expense/(benefit)	(489,233)	10,905,689

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

In thousands of tenge	31 December 2018	Recorded in the statement of comprehensive income	31 December 2019	Recorded in the statement of comprehensive income	31 December 2020
Deferred tax assets					
Payments to employees	446,630	(7,264)	439,366	(52,444)	386,922
Other reserves	74,918	(7,623)	67,295	(37,151)	30,144
Taxes	47,881	105,788	153,669	(32,225)	121,444
Benefits	1,600,488	(387,084)	1,213,404	(223,395)	990,009
Tax loss carry-forward	23,229,651	(9,030,191)	14,199,460	726,208	14,925,668
Deferred tax assets	25,399,568	(9,326,374)	16,073,194	380,993	16,454,187
Deferred tax liabilities					
Finance income from recognition of a discount	-	(1,550,326)	(1,550,326)	(1,692,152)	(3,242,478)
Property, plant and equipment	(5,211,919)	(28,989)	(5,240,908)	1,800,392	(3,440,516)
Deferred tax liabilities	(5,211,919)	(1,579,315)	(6,791,234)	108,240	(6,682,994)
Deferred tax assets	20,187,649	(10,905,689)	9,281,960	489,233	9,771,193

Deferred tax balances are calculated by applying the income tax rates in effect at the respective balance sheet dates to the temporary differences between the tax basis of assets and liabilities and the amounts reported in the financial statements. Tax losses carried forward as at 31 December 2020 per tax legislation applied by the Company expire for tax purposes 6 (six) years from the date they are incurred. Consequently, the majority of the tax losses carried forward by the Company at 31 December 2020 expire for tax purposes until 2025.

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NOTES TO THE FINANCIAL STATEMENTS (continued)

28. RELATED PARTY DISCLOSURES

In accordance with IAS 24 *Related Party Disclosures*, parties are considered to be related if one party has the ability to control the other party or exercise significant influence over the other party in making financial or operational decisions. In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form. Related parties may enter into transactions that unrelated parties would not and also, transactions between related parties may not be made at the same amounts as between unrelated parties. The Management believes that the Company has appropriate procedures for identification and appropriate disclosure of information on related parties transactions.

During 2020 and 2019, the sales to and purchases from related parties are made at terms equivalent to those that prevail in arm's length transactions. Significant related parties' transactions for the years ended 31 December 2020 and 2019, and balances as of 31 December 2020 and 31 December 2019 are as follows:

Balances on transactions with related parties

<i>In thousands of tenge</i>	Trade and other accounts receivable	Advances paid	Loans and borrowings	Bonds	Accounts payable and obligations under contracts with customers	Lease liabilities
At 31 December 2020						
NC KMG	2	-	(53,604,985)	-	(11,597,854)	-
Joint ventures and associates	2	-	-	-	(2,901)	-
Development Bank of Kazakhstan JSC	-	-	(177,865,481)	-	-	-
Entities under common control of the Government of RK, NC KMG and NWF Samruk-Kazyna	671	210,356	-	(45,192,110)	(1,243,844)	(101,724)
Total	675	210,356	(231,470,466)	(45,192,110)	(12,844,599)	(101,724)

<i>In thousands of tenge</i>	Trade and other accounts receivable	Advances paid	Loans and borrowings	Bonds	Accounts payable and obligations under contracts with customers	Lease liabilities
At 31 December 2019						
NC KMG	3	-	(53,146,295)	-	(3,202,032)	-
Joint ventures and associates	984	-	-	-	(25)	-
Development Bank of Kazakhstan JSC	-	-	(163,331,122)	-	-	-
Entities under common control of the Government of RK, NC KMG and NWF Samruk-Kazyna	308	163,047	-	(52,842,640)	(1,267,065)	(17,266)
Total	1,295	163,047	(216,477,417)	(52,842,640)	(4,469,122)	(17,266)

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NOTES TO THE FINANCIAL STATEMENTS (continued)

28. RELATED PARTY DISCLOSURES (continued)

Balances on transactions with related parties (continued)

<i>In thousands of tenge</i>	Sales to related parties	Purchases from related parties	Finance costs	Finance income
2020				
NC KMG	90,752,667	(30,370)	(6,292,062)	-
Joint ventures and associates of the Company	31,169	(3,480)	-	-
Development Bank of Kazakhstan JSC	-	-	(18,345,449)	11,002,209
Entities under common control of the Government of RK, NC KMG and NWF Samruk-Kazyna	11,023	(11,289,202)	(2,253,593)	-
Total	90,794,859	(11,323,052)	(26,891,104)	11,002,209

<i>In thousands of tenge</i>	Sales to related parties	Purchases from related parties	Finance costs	Finance income
2019				
NC KMG	86,940,902	(36,824)	(6,240,744)	-
Joint ventures and associates of the Company	33,435	(92)	-	-
Development Bank of Kazakhstan JSC	-	-	(15,140,797)	7,780,974
Entities under common control of the Government of RK, NC KMG and NWF Samruk-Kazyna	12,143	(4,176,101)	(2,659,672)	57,144
Total	86,986,480	(4,213,017)	(24,041,213)	7,838,118

Revenue and trade receivables

During the year ended 31 December 2020, the Company provided services to entities under common control of NC KMG and NWF Samruk-Kazyna, which amounted to 44% (2019: 43%) of the scope of all provided services. The services to related parties were provided at prices available to third parties, since pricing policy for such services is agreed with NC KMG.

As at 31 December 2020, the Company has no provision for expected credit losses on receivables from related parties (31 December 2019: KZT 0 thousand). This assessment is undertaken each reporting year through examining the financial position of the related party and the market in which the related party operates.

Compensation to key management personnel

Key management personnel totalled 5 persons as at 31 December 2020 and comprised members of the Management Board (31 December 2019: 7 persons). Total compensation to key management personnel, including payroll taxes, for the year ended 31 December 2020, included in general and administrative expenses in the statement of comprehensive income amounted to KZT 206,018 thousand (31 December 2019: KZT 295,301 thousand).

Remuneration to the key management personnel for the years ended 31 December comprised the following:

<i>In thousands of tenge</i>	2020	2019
Short-term payments to employees	184,345	252,528
Pension deductions	20,014	27,321
Other payments	1,659	15,452
Total	206,018	295,301

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NOTES TO THE FINANCIAL STATEMENTS (continued)

29. CONTINGENT AND CONTRACTUAL COMMITMENTS

Taxation

Kazakhstan's tax legislation and regulations are subject to ongoing changes and varying interpretations. Instances of inconsistent opinions between local, regional and national tax authorities regarding IFRS interpretation of recognition of revenue, expenses and other items of the financial statements. The current regime of penalties and interest related to unreported and discovered violations of Kazakhstan law are severe. Fines are generally 80% of any taxes additionally assessed and interest is assessed at the refinancing rate established by the National Bank of Kazakhstan multiplied by 1.25. As a result, penalties and interest can amount to multiples of any assessed taxes. Fiscal periods remain open to review by tax authorities for 5 (five) calendar years preceding the year of review. Under certain circumstances, reviews may cover longer periods. Because of the uncertainties associated with Kazakhstan's tax system, the ultimate amount of taxes, penalties and interest, if any, may be in excess of the amount expensed to date and accrued at 31 December 2020. The management believes that as at 31 December 2020 its interpretation of the relevant legislation is appropriate and that the Company's tax positions will be sustained, except as provided for or otherwise disclosed in these financial statements.

Antitrust legislation

The Company's activities are subject to antitrust legislation control. It is possible, with the evolution of the interpretation of antitrust law in Kazakhstan and the changes in the approach of the Antimonopoly Agency, that such transactions could be challenged in future. Currently, the impact of such issues on financial statements cannot be reliably estimated and, therefore, no provision for any liability has been made in these financial statements.

Contingent liabilities

The Company assesses the likelihood of material liabilities arising from individual circumstances and makes provision in its financial statements only where it is probable that actual events giving rise to liability will occur and the amount of the liability can be reasonably estimated.

Dispute with the Department of State Revenues for Atyrau region

In February 2020, the Company received Order No. 28 from the Department of State Revenues for Atyrau Region on the opening of a comprehensive audit for the period from 1 January 2015 to 31 December 2019.

In September 2020, based on an additional regulation to Regulation No. 28, the audit period was changed from 1 January 2015 to 31 December 2017.

On 15 December 2020, the Company received Tax Audit Report No. 28 with additional charges for the period from 1 January 2015 to 31 December 2017 on the following taxes:

- Value added tax on goods produced, works performed and services rendered in the Republic of Kazakhstan in the amount of KZT 8,434,011 thousand, the amount of penalties is KZT 684,443 thousand;
- Value added tax for a non-resident in the amount of KZT 138,280 thousand;
- The loss for 2015-2017 was reduced by KZT 29,026,225 thousand.

The Company does not agree with the results of the Tax Audit Report, and therefore sent a Complaint to the Ministry of Finance of the Republic of Kazakhstan No. 23/330 dated 28 January 2021 to Notification No. 28 dated 15 December 2020.

The Company estimates that the risk of additional taxes, according to the Report, is low.

Legal matters

In the ordinary course of business, the Company is subject to legal actions and complaints. The management believes that the Company has no legal proceedings/claims that could have a material impact on the results of operations or financial position as at 31 December 2020.

Commitments

As at 31 December 2020, the Company had contractual obligations in the amount of KZT 416.032 thousand (31 December 2019: KZT 928,963 thousand).

As at 31 December 2020, the Company has raw materials obtained on a tolling basis for further processing in the amount of 5,944 tons (including additives for 24 tons) (as at 31 December 2019: 1,149 tons including additive for 822 tons) and petroleum fractions received as a result of tolling oil processing, for which technological cycle is not completed in the amount of 124,308 tons (31 December 2019: 203,619 tons) and finished products in the amount of 27,281 tons (as at 31 December 2019: 33,320 tons).

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NOTES TO THE FINANCIAL STATEMENTS (continued)

30. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Company's main financial instruments include non-current financial assets, trade receivables, current financial assets, loans and borrowings, leases, cash and cash equivalents. During the year the Company did not undertake trading in financial instruments.

(a) Interest risk

The Company's exposure to the risk of changes in market interest rates relates primarily to the Company's long-term loans with floating interest rates. The Company does not have any hedging instruments to reduce the potential risk.

The following table demonstrates the sensitivity to a reasonably possible change in interest rates, with all other variables held constant, of the Company's profit before tax (through the impact on floating rate borrowings). There is no impact on the Company's equity.

	Increase/ decrease in basis points	Effect on profit before tax
2020		
US dollars	+1.00	(3,171,085)
US dollars	-0.25	792,771

	Increase/ decrease in basis points	Effect on profit before tax
2019		
US dollars	+35.00	(1,360,191)
US dollars	-35.00	1,360,191

(b) Currency risk

Loans and borrowings denominated in foreign exchanges lead to the potential foreign currency risk. The Company does not have any formal arrangements to mitigate foreign exchange risks arising from the foreign currency loans and borrowings.

The following table demonstrates the sensitivity to a reasonably possible change in the US dollars to tenge exchange rates, with all other variables held constant, of the Company's loss before income tax expense (due to changes in the fair value of monetary assets and liabilities). There is no impact on the Company's equity.

	Increase/ decrease in tenge rate	Effect on loss/profit before tax
2020		
US dollars	+14%	(67,912,406)
US dollars	-11%	53,359,747

	Increase/ decrease in tenge rate	Effect on loss/profit before tax
2019		
US dollars	+12%	(72,842,690)
US dollars	-9%	54,632,017

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NOTES TO THE FINANCIAL STATEMENTS (continued)

30. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

(c) Credit risk

Financial assets which give rise to the Company's potential credit risk are mainly represented by trade accounts receivable. The Company developed procedures intended to ensure that the goods and services are sold only to the buyers with the appropriate credit history. The Company does not require collateral upon sale of goods and services. The carrying amount of accounts receivable net of provision for impairment represent the maximum amount exposed to credit risk. The Company has no significant concentrations of credit risk. While the collection of receivables is subject to economic factors, the management of the Company believes that there is no significant risk of losses in excess of the amount of created provision for expected credit losses on trade receivables.

In thousands of tenge	Location	Rating 2020	Rating 2019	Balance	
				31 December 2020	31 December 2019
Halyk Bank of Kazakhstan JSC	Kazakhstan	Ba1/stable	Ba1/stable	36,195,903	61,856,094
SB Sberbank of Russia JSC	Kazakhstan	–	Ba1/stable	–	33,084,495
ForteBank JSC	Kazakhstan	Ba3/stable	B1/positive	76,019	2,898,436
Other banks	–	–	–	5	4
				36,271,927	97,839,029

Cash is placed with financial institutions, which are considered at time of deposit to have minimal risk of default.

(d) Fair value of financial instruments

The fair value of long-term financial assets, loans and borrowings is based on cash flows discounted using the market interest rates. The fair value of cash and cash equivalents, trade accounts receivable and trade accounts payable, and other current liabilities approximates their carrying amount due to the short-term nature of these financial instruments.

In thousands of tenge	Carrying amount		Fair values	
	31 December 2020	31 December 2019	31 December 2020	31 December 2019
Financial liabilities				
Level 2				
Loans and borrowings	662,307,865	722,866,938	689,783,545	757,343,465
Bonds	45,192,110	52,842,640	45,192,110	52,842,640
Lease liabilities	1,723,832	2,060,323	1,820,058	2,283,178
	709,223,807	777,769,901	736,795,713	812,469,283

For the years ended 31 December 2020 and 2019 there were no transfers between Levels 1, 2 and 3 of the financial instruments' fair value.

(e) Liquidity risk

The Company monitors its risk to a shortage of funds using a recurring liquidity planning tool. This tool considers the maturity of both its financial investments and financial assets (e.g. trade accounts receivables, other financial assets) and projected cash flows from operations.

The Company's objective is to maintain a balance between continuity of funding and flexibility through the use of bank loans and borrowings from NC KMG.

The table below summarises the maturity profile of the Company's financial liabilities at 31 December 2020 and 2019 based on contractual undiscounted payments.

In thousands of tenge	On demand	Less than 3 months	From 3 to 12 months	1 to 5 years	Over 5 years	Total
At 31 December 2020						
Interest-bearing loans and borrowings	63,179,435	–	153,558,591	460,960,186	77,195,218	754,893,430
Accrued interest	1,531,923	436,811	23,933,719	74,415,474	5,241,767	105,559,694
Trade accounts payable	–	4,919,327	107,328	112,589	–	5,139,244
Lease liabilities	203,914	110,241	671,584	934,817	263,332	2,183,888
Other current liabilities	48,957	–	–	–	–	48,957
	64,964,229	5,466,379	178,271,222	536,423,066	82,700,317	867,825,213

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NOTES TO THE FINANCIAL STATEMENTS (continued)

30. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

(e) Liquidity risk (continued)

In thousands of tenge	On demand	Less than 3 months	From 3 to 12 months	1 to 5 years	Over 5 years	Total
At 31 December 2019						
Interest-bearing loans and borrowings	65,950,595	–	144,056,018	424,512,459	185,789,882	820,308,954
Accrued interest	2,221,883	483,551	25,394,781	104,543,264	18,087,158	150,730,637
Trade accounts payable	–	41,171,205	–	115,169	–	41,286,374
Lease liabilities	81,696	201,748	596,198	1,540,460	92,051	2,512,153
Other current liabilities	89,751	–	–	–	–	89,751
	68,343,925	41,856,504	170,046,997	530,711,352	203,969,091	1,014,927,869

The Company believes that in 2020 it will have sufficient working capital to pay for its obligations timely and fully.

(f) Capital management

The Company manages its capital to ensure that the Company will be able to continue as a going concern while maximising the return to stakeholders through the optimisation of the debt and equity balance. There were no changes in the Company's approach to capital management as compared to 2019. The structure of the Company's capital consists of debt, which includes loans and borrowings and equity.

(g) Changes in liabilities arising from financing activities

In thousands of tenge	1 January 2020	Additions	Disposals	Change in foreign currencies	Other	31 December 2020
Loans and borrowings	706,114,230	173,794,398	(273,335,061)	48,006,458	(2,783,889)	651,796,136
Interest payable on loans	16,752,708	–	(46,500,944)	(256,021)	40,515,986	10,511,729
Bond obligations	51,649,650	–	(11,845,800)	4,391,700	–	44,195,550
Interest payable on bonds	1,192,990	–	(2,510,932)	83,149	2,231,353	996,560
Obligations under lease agreements	1,921,839	–	(799,424)	176,790	285,890	1,585,095
Dividends payable	13,594	–	(74)	–	–	13,520
Other payments	–	–	(841,418)	–	841,418	–
Total liabilities from financing activities	777,645,011	173,794,398	(335,833,653)	52,402,076	41,090,758	709,098,590

In thousands of tenge	1 January 2019	Additions	Disposals	Change in foreign currencies	Other	31 December 2019
Loans and borrowings	825,940,624	199,395,500	(312,369,696)	(4,421,307)	(2,430,891)	706,114,230
Interest payable on loans	21,266,006	–	–	–	(4,513,298)	16,752,708
Bond obligations	–	56,223,000	(5,749,350)	1,176,000	–	51,649,650
Interest payable on bonds	–	–	–	–	1,192,990	1,192,990
Obligations under lease agreements	2,438,941	–	(763,405)	(9,608)	255,911	1,921,839
Dividends payable	13,946	–	(352)	–	–	13,594
Other finance costs	–	–	(3,846,040)	–	3,846,040	–
Total liabilities from financing activities	849,659,517	255,618,500	(322,728,843)	(3,254,915)	(1,649,248)	777,645,011

The "Other" column in 2019 and 2020 includes the amounts received as a result of the recognition and amortisation of the discount and additional costs associated with the loans. The "Other" column also comprised of the amount of accrued but unpaid interest on loans and borrowings, as well as on bonds. The Company classifies interest paid as cash flows from operating activities in the statement of cash flows.

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NOTES TO THE FINANCIAL STATEMENTS (continued)

31. SUBSEQUENT EVENTS

On 11 January 2021, the Company partially repaid the principal and interest on long-term loans received from Halyk Bank of Kazakhstan JSC in the amount of KZT 5,869,861 thousand and KZT 256,481 thousand, respectively.

On 5 and 11 January 2021, in order to refinance the existing loan from DBK JSC, the Company received long-term loans from Halyk Bank of Kazakhstan JSC in the amount of KZT 53,626,880 thousand, with an interest rate of 11%. Principal and interest payments will be made from July 2021 as semi-annual payments.

On 13 January 2021, the Company paid interest on short-term loans received from Halyk Bank of Kazakhstan JSC in the amount of KZT 89,314 thousand (equivalent to USD 213 thousand).

On 14 January 2021, the Company partially paid the principal amount and interest for the loan received from the Export-Import Bank of China in the amount of KZT 26,317,623 thousand (equivalent to USD 62,788 thousand) and KZT 6,721,340 thousand (equivalent to USD 16,036 thousand), respectively.

On 15 January 2021, the Company paid principal and coupon interest on the bonds of SWF Samruk-Kazyna in the amount of KZT 6,287,250 thousand and KZT 1,100,269 thousand, respectively.

On 18 January 2021, the Company paid interest on the loan from NC KMG in the amount of KZT 152,798 thousand.

On 21 January 2020, the Company partially paid principal and interest on loans received from DBK JSC in the amount of KZT 7,893,565 thousand and KZT 2,995,074 thousand, respectively.

On 21 January 2021, the Company fully paid the principal and interest on the loan received from DBK in the amount of KZT 58,023,953 thousand (equivalent to USD 138,591 thousand) and KZT 1,482,834 thousand (equivalent to USD 3,542 thousand), respectively.

On 9 February 2021, it became known about the approval of the Government of the Republic of Kazakhstan for alienation (sale) of the Technical Nitrogen Production Unit and Hydrogen Production and Purification Unit to ANPZ.

Glossary

Atyrau Refinery	“Atyrau Refinery” Limited Liability Partnership
JSC	Joint Stock Company
DBK JSC	“Development Bank of Kazakhstan” JSC
AMS	Automatic monitoring system
AGMS	Automatic gasoline mixing station
ATPCS	Advanced Technological Process Control System
ARMS	Automated risk management system
ATS	Automatic telephone station
AUOG	Safi Utebayev Atyrau University of Oil and Gas
AOSLU	Automatic on-spot loading unit
CCG	Catalytically cracked gasoline
Block AT	Atmospheric-tubular block Block VT Vacuum-tubular block
HT block	hydrotreating block
HT GS block	HT GS block
HT and DDF block	Block for hydrotreating and dewaxing of diesel fuel
BP	Business process
GDP	Gross domestic product
WHO	World Health Organization
GOST	All-Union State Standard characterizing, describing and providing a list of requirements made up by state certification bodies in order to ensure compliance with the quality and production of goods)
SB	Subsidiary bank
EBRD	European Bank for Reconstruction and Development
RC	Residential compound
CJSC	Closed Joint Stock Company
ALV	Artificial lung ventilation
IMS	Integrated management system
IEPS	Information e-purchasing system
CPL	“Central plant laboratory” test center
KGNT	“KazGiproNefteTrans Engineering Company” Limited Liability Partnership
AORC	Advanced Oil Refining Complex
KMG	“KazMunayGas National Company” Joint Stock Company
APC	Aromatics Production Center
EF	Efficiency factor
CIT	Corporate Income Tax

KPI	Key performance indicator
CT	Computed tomography
CSC	Computer Simulator Complex
CGDF HU	Combined gasoline and diesel fuel hydrotreating unit
CGDF HU	Combined gasoline and diesel fuel hydrotreating unit
CLPK	Professional knowledge level control
CCLG	Catalytic cracking light gasoil
MPF	Mechanical purification facilities
IFRS	International Financial Reporting Standards
AIFC	Astana International Financial Center
MEG and NR RK	Ministry of Ecology, Geology and Natural Resources of the RK
MBA	Master of Business Administration
PJSC	Private Joint Stock Company
ICGTIP NJSC	“International Center for Green Technologies and Investment Projects” NJSC
OGCC	Oil and Gas Construction Company
VAT	Value Added Tax
BAT	Best available technologies
NC	National Company
IA	Intangible assets
NSEI	Non-state educational institution
OR	Oil refinery
NGO	Scientific and educational department or non-governmental organization
SB	Supervisory Board
OJSC	Open Joint Stock Company
EIA	Environmental Impact Assessment
ECL	Expected credit losses
OPEC	The Organization of the Petroleum Exporting Countries
E	Environment
GMP	General Meeting of Participants
PAH	Production of Aromatic Hydrocarbons
PDOR	Production of Deep Oil Refining
PHF	Pentane and Hexane Fraction
PTPP	Production and Transportation of Petroleum Products
CSP	Coke and Sulfur Production
PKOP	“PetroKazakhstan Oil Products” LLP

PKOSI	PetroKazakhstan Overseas Services Inc.
SW	Software
PORDD	Production of oil refining and deep desulfurization
SPM	Scheduled preventive maintenance
DED	Design and estimate documentation
LPGSP LLP	Liquefied Petroleum Gas Storage Park LLP
PCR	Polymerase chain reaction
IEC	Industrial environmental control
RSE	Republican State Enterprise
RSUOG	I.M. Gubkin Russian State University of Oil and Gas
RoK	Republic of Kazakhstan
RNA	Ribonucleic acid
EO	Executive officers
IAS	Internal audit service
ICS	Internal control system
SPZ	Sanitary protection zone
PPE	Personal protective equipment
MM	Mass media
SSB	Secretary of the Supervisory Board
JV	Joint Venture
BCMS	Business continuity management system
RMS	Risk management system
APCS	Advanced Process Control System
TAME	Tert-amyl methyl ether
TAME	Tert-amyl methyl ether
SMW	Solid municipal wastes
Inv.	Inventory
M&R	Maintenance and Repair
TCO	Tengizchevroil
FER	Fuel and energy resources
USPTU	Ufa State Petroleum Technological University
DCU	Delayed coking unit
CC	Coke calciner
HPPU	Hydrogen production and purification unit
TNP	Technical nitrogen plant
FIFO	First In, First Out – inventory items evaluation method meaning that inventories registered first are written off first.

NWF	National Welfare Fund
BPA ITUECPRI	Branch of the Public Association “Industrial labor Union of Employees in the Chemical, Petrochemical and Related Industries”
ES	Emergency situation
EDP AVDU-3	Crude desalter unit (3 million tones/year)
EDP ADU-2	Crude desalter unit (2 million tones/year)
GRI	GRI standards (Global Reporting Initiative) for reporting in the sphere of sustainable development
ISO	International Organization for Standardization
NCOC	North Caspian Operating Company
PEP	Performance Excellence Process
REACH	International certification, Regulation (EC) adopted to improve personal and environmental safety from all possible risks in connection with chemicals exposure

FEEDBACK GETTING

The purpose of this annual report is publication of the most important facts and information on “Atyrau Refinery” LLP activity. We strive to develop the practice of information disclosure on a constant basis to all concerned parties. And in order to improve our reporting it is crucial to get a feedback.

This year we applied to the representatives of a number of non-government organizations requesting to review this annual report draft, comment and give their proposals. Galina Chernova, Shynar Izteleuova, Viktor Sutyagin, Artur Shakhnazaryan and Arman Khairullin in particular responded our request.

We got very valuable comments which influenced the contents of this document. Some of the comments were taken into account in this annual report; we added additional information and corrected information submission. In particular, we see that environmental protection issues are of the greatest interest and we will continue to develop this issue in a high-quality format.

Obtained feedback was very substantive for us and useful. We are very grateful to our colleagues from NGOs. We will continue to develop advisory process with concerned parties in relation to information disclosure when preparing subsequent annual reports.

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Hotline of the Samruk-Kazyna Joint-Stock Company Group of Companies

In accordance with the Initiative Reporting Policy, you can report any happened or suspected facts of theft, fraud, corruption and other violations of the basic principles of conducting business or the Code of Conduct of Samruk-Kazyna JSC.

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