



Sustainable Development and ESG

“Kazakhmys” Group Strategy



“Kazakhmys” business areas



Kazakhmys Barlau LLP
Geological exploration works



Kazakhmys Corporation LLP
Ore extraction and concentrating



Kazakhmys Smelting LLP
Concentrate processing



Kazakhmys Energy LLP
Power generation



Kazakhmys Distribution LLP
Electricity transmission and distribution



Maker LLP
Karaganda Foundry and Machine Building Plant



KazGreenEnergy LLP
Green Energy

KARAGANDA REGION

- Mines - 3
- Concentrating Plants - 2
- Power Plant-1
- Tailing Storage Facility -2

BALKHASH REGION

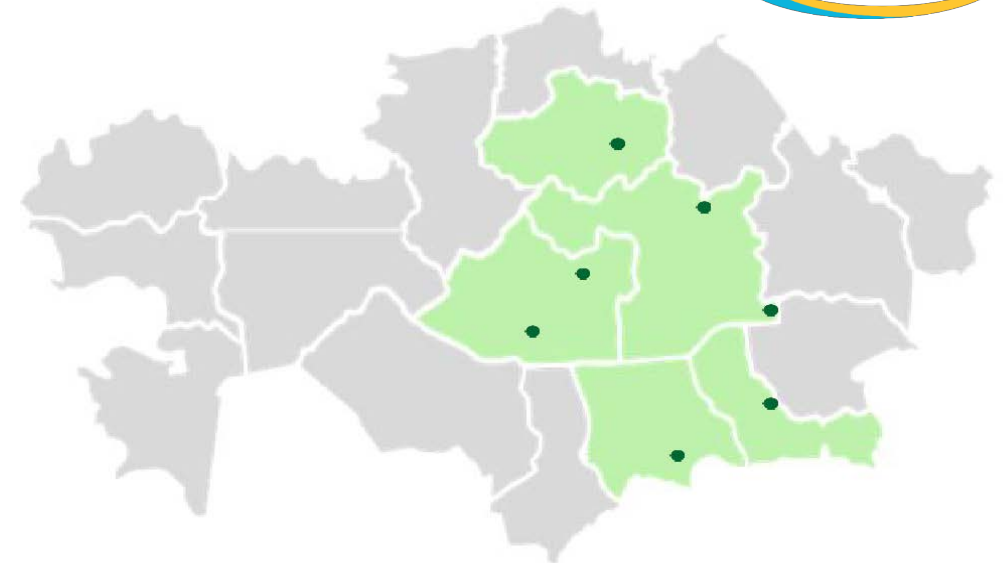
- Mines - 3
- Concentrating Plants -1
- Copper Smelters - 1
- Power Plant -1
- Tailing Storage Facility -1.

ZHEZKAZGAN REGION

- Mines - 4
- Concentrating Plants - 3
- Copper Smelters - 1
- Power Plant-1
- Tailing Storage Facility -1

ZHAMBYL REGION

- Mines - 1
- Concentrating Plants -1



- “Kazakhmys” ranks **20th** in the world in the production of copper in concentrate (271 thousand tons) and **12th** in the production of rough and cathode copper (377 and 365 thousand tons, respectively, taking into account raw materials).
- In 2020, the contribution of “Kazakhmys” Group allowed the Republic of Kazakhstan to take **11th place** in the world ranking of silver producing countries (279 tons, 51% of the total production in the country).
- As of the end of 2020, the Group ranks **3rd** in the Republic of Kazakhstan in terms of electricity generation with a production volume of 7,267.53 million kWh.
- “Kazakhmys” enterprises - Mines, Concentrating Plants, Copper Smelters - where about **39 thousand people** are employed.
- Taxes paid to the Republican and Local Budgets of Kazakhstan
- 2022 – 240.982 billion KZT
- 2023 – 243.012 billion KZT

Commitments undertaken by Kazakhstan in ESG and Sustainable Development



Ratification of the Paris Agreement

Kazakhstan became the first country in the region to ratify the Paris Agreement

Sustainable Development Goals

In 2015, the RoK, as a full member of the UN, committed to the SDGs (among 193 countries)

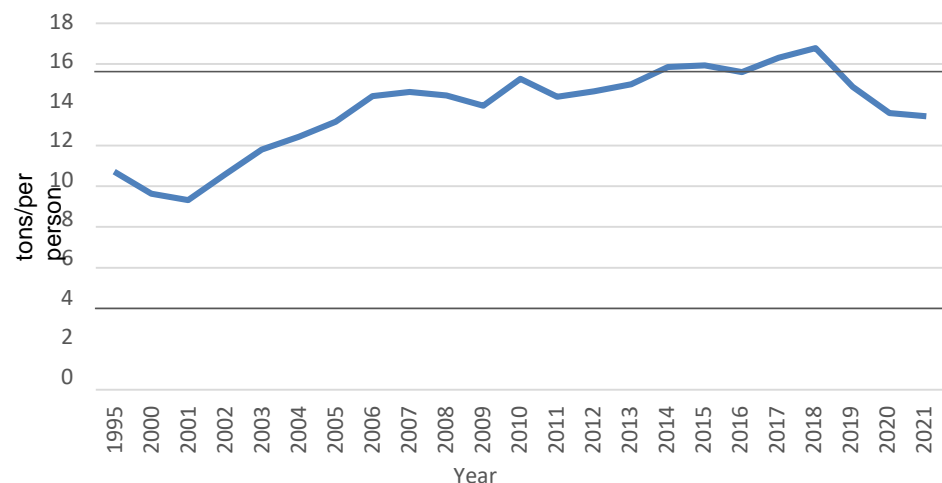
Carbon Neutrality Strategy

Kazakhstan adopted the Carbon Neutrality Strategy for 2060 (aimed at achieving carbon neutrality)

Global Commitment on Methane Emissions

Kazakhstan joined Global Methane Pledge, target to reduce methane emissions by 30% by 2030

CO2 emissions per capita



10th place

By emissions per capita

20th place

Among 221 countries in terms of CO2 emissions

351 mln tons

National GHG emissions in 2020.

5th place

In terms of carbon intensity of GDP

Damage caused by natural disasters



Over the last 10 years, the damage is 30 billion KZT.



In 2024. 199.8 billion KZT, which exceeds the cumulative damage from water-related disasters for 10 years - 115 billion KZT.



3.5 billion KZT damage from drought in Zhambyl region – 7000 ha of various crops burned down

Sustainable Development Strategy and ESG



Five Pillars of Sustainable Development Strategy and ESG

CORE BUSINESS



Health & Safety



Environmental



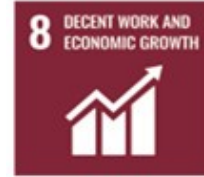
Governance



Social

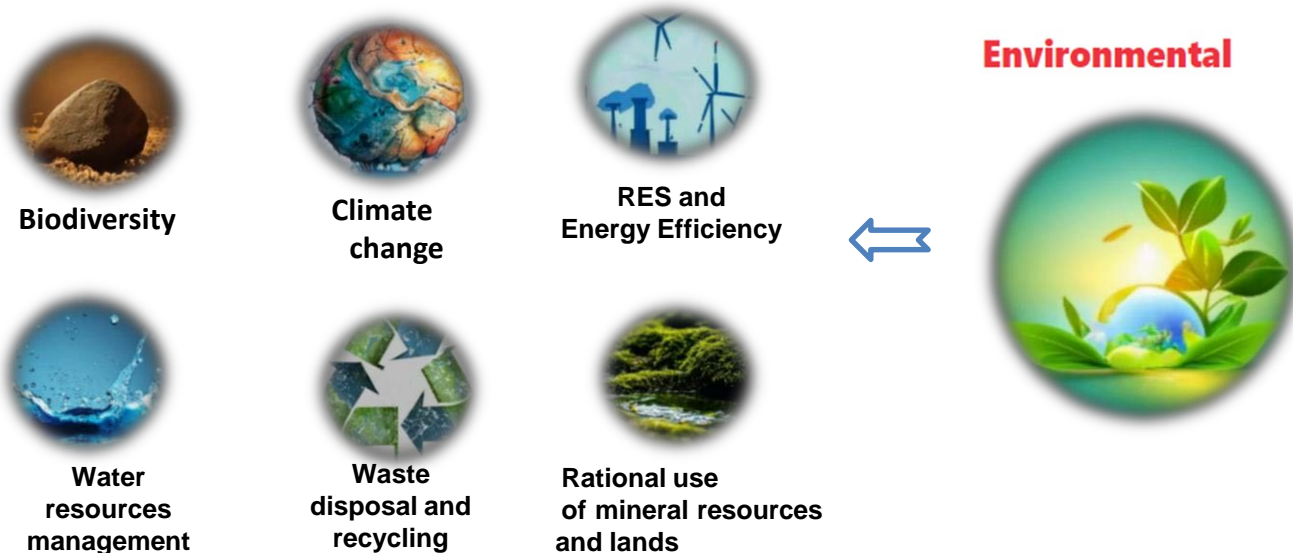


Priority Goals



Medium Priority Goals

Sustainable Development Strategy and ESG



Respect for the environment

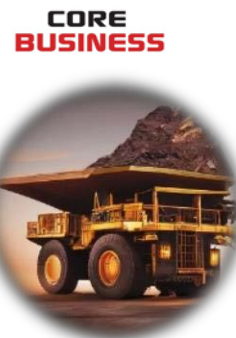
This component includes the company's commitment to environmental sustainability and responsible attitude towards the environment. It includes initiatives to reduce carbon dioxide emissions, energy saving, responsible waste management and reduce the environmental impact of mining activities.

Development of human capital and local community

This area includes initiatives for the development of human capital, the empowerment of local communities, support for education, health and infrastructure development as well as the formation of positive relationships with stakeholders.



Sustainable Development Strategy and ESG



More copper for Future Energy Transition

This component aims to increase copper production for the country's future energy transition. Integration of sustainable development into business operations, including:

- innovations in copper mining technologies;
- research and development aimed at creating more efficient and environmentally sustainable methods of copper extraction and processing.

Ethical Corporate Governance and Transparency

Emphasizing the importance of ethical behaviour, this component includes effective governance, integrity in business practices, transparency and compliance with the regulatory requirements and industry standards.

Governance



Openness in business operations



Sustainable supply chain



Risk Management

Health & Safety



Health Protection



Production Safety



Production Safety Culture

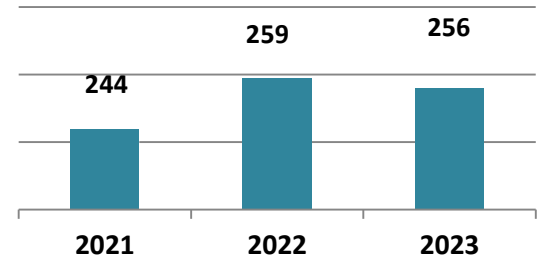
This component provides for ensuring the well-being and safety of employees and stakeholders affected by the company's activities. It includes the implementation of the required security protocols, ensuring proper training and the formation of safety culture in all production processes.



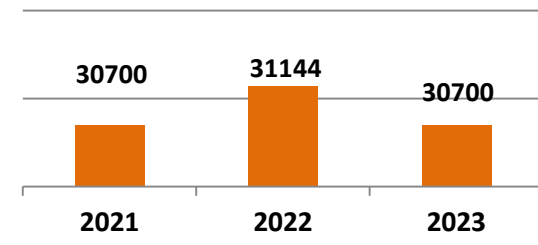
CORE BUSINESS



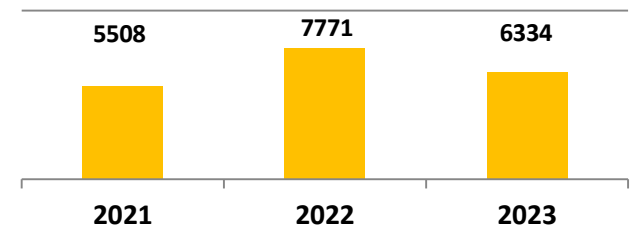
Copper, thous. tons



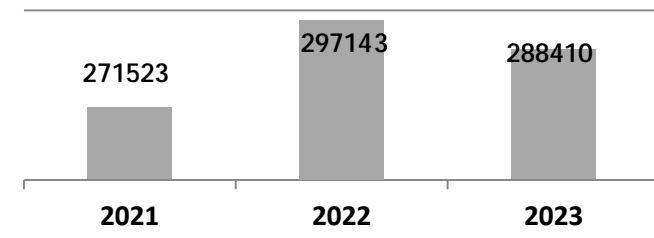
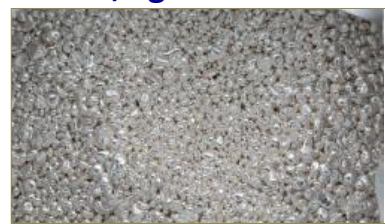
Ore production, thous. tons



Gold, kg



Silver, kg



New projects

1		Construction of Hajikongan mine	<i>Karaganda region</i>	12.1 billion KZT	2021 - 2024
		Construction of Jaisan mine	<i>Zhambyl region</i>	122.4 billion KZT	2020 - 2025
		Construction of Concentrating Plant on Shatyrcul - Jaisan cluster	<i>Zhambyl region</i>	95.46 billion KZT	2021 - 2025

Metallurgy projects

2		Construction of Zhezkazgan sulfuric acid workshop	<i>Ulytau region</i>	70 billion KZT	2023 - 2026
		Construction of the Balkhash sulfuric acid workshop No. 2	<i>Karaganda region</i>	70.3 billion KZT	2023 - 2026
		Reconstruction of technical and aspiration gas systems of ZHCSP	<i>Ulytau region</i>	22.1 billion KZT	2022 - 2026
		Reconstruction of technical and aspiration gas systems of BCSP	<i>Karaganda region</i>	61.1 billion KZT	2022 - 2026
		Renovation of BCSP building facade	<i>Karaganda region</i>	238.7 million KZT	2023 - 2024

Production expansion and modernization

Mining projects

3		Reconstruction of Nurkazgan mine	<i>Karaganda region</i>	586.1 billion KZT	2020 - 2029
		Development of Zhylandinskiy mine	<i>Ulytau region</i>	887.8 billion KZT	2020 - 2028
		Relocation of IKI and facilities of Zhezkazgan field	<i>Ulytau region</i>	49.8 billion KZT	2021 - 2029

Stabilization of Nurkazgan Concentrating Plant

Enrichment production projects

4		Reconstruction of ZHCSP No. 1, 2 block and main building	<i>Karaganda region</i>	16.5 billion KZT	2020 - 2024
			<i>Ulytau region</i>	19.89 billion KZT	2022 - 2024

Total: 2,252.3 billion KZT

Social Sustainability of employees in the regions of the Company's operation

Social

Average salary

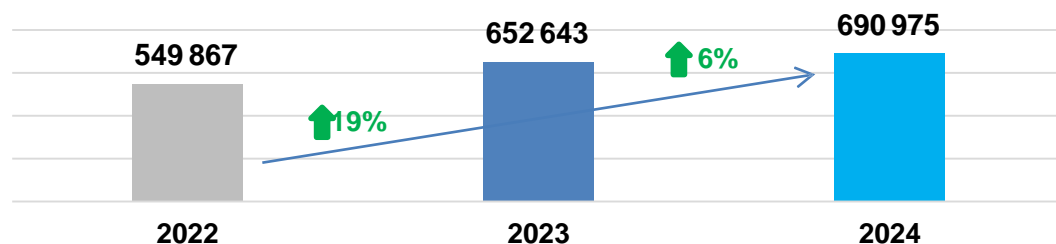


+26% salary growth in 2024 by 2022



by 125 billion KZT extra increase in the Labour Remuneration Fund over 3 years

Average salary for the Company's group, KZT



Average salary by regions of operation in 2023, KZT



Note: as of 2023, Atyrau region (598.9 thous. KZT), Mangystau region (529.1 thous. KZT), Ulytau (485.8 thous. KZT) have been recognized as the leaders in terms of the average salary in Kazakhstan.

“Kazakhmys” allocated for the implementation of social programs and sponsorship for the period 2022-2024:

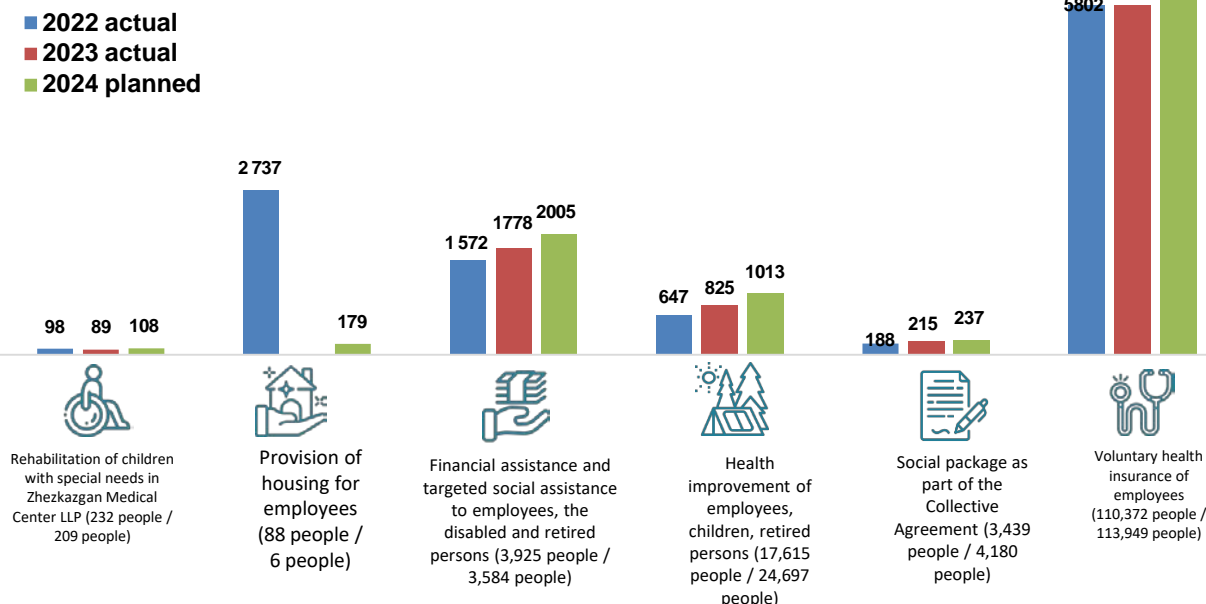
115,35 billion KZT

2022 – 39,9 billion KZT

2023 – 25,3 billion KZT

2024 – 50,15 billion KZT

Expenses for main types of social programs, billion KZT



In order to implement projects as part of Memorandum, social projects of public foundations, financing of cultural, educational and sports events, charitable assistance to citizens has been allocated in:

- ❑ 2022 – 29,6 billion KZT
- ❑ 2023 – 26,7 billion KZT
- ❑ 2024 – 47,550 billion KZT

Implementation of social projects in Ulytau region (current projects)



CONSTRUCTION OF A SPORTS AND RECREATION COMPLEX

The cost of the project: **8,0 billion KZT**
Due date: **2024**



LANDSCAPING OF THE "KENGIR" EMBANKMENT

The cost of the project: **8,1 billion KZT**
Due date, Phase I: **2024**



RECONSTRUCTION OF "SHAKHTYORSKAYA SLAVA" SQUARE, SATPAYEV CITY

Due date: Entrance Area: **2024**



RECONSTRUCTION OF METALLURGISTS' SQUARE IN ZHEKZAGAN CITY

The cost of the project: **1,3 billion KZT**
Due date: **2024**



EXTENSION TO THE GYMNASIUM OF THE "NAMYS" SPORTS CENTRE

The cost of the project: **1,5 billion KZT**
Due date: **2024**



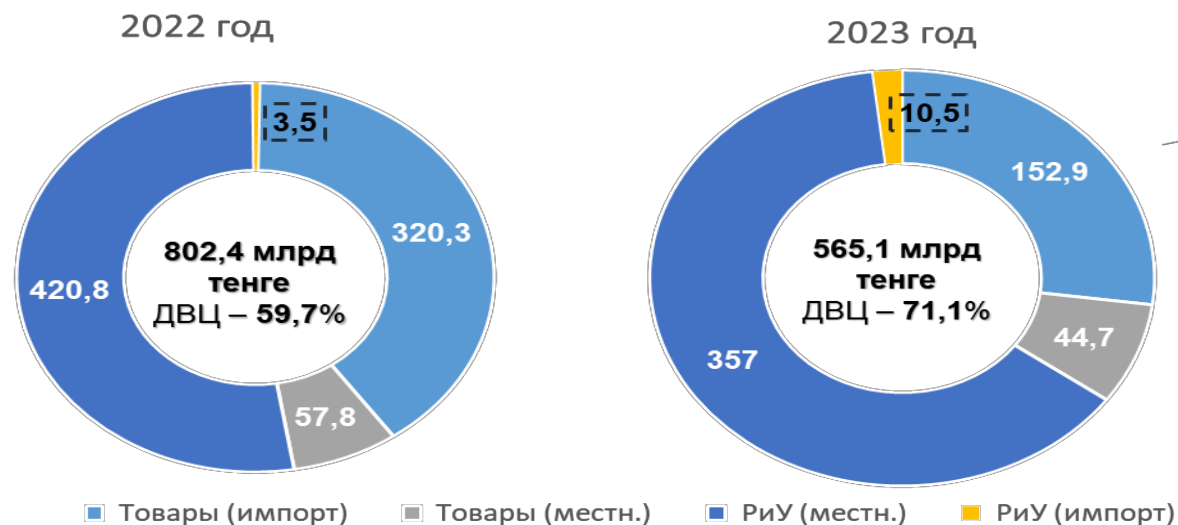
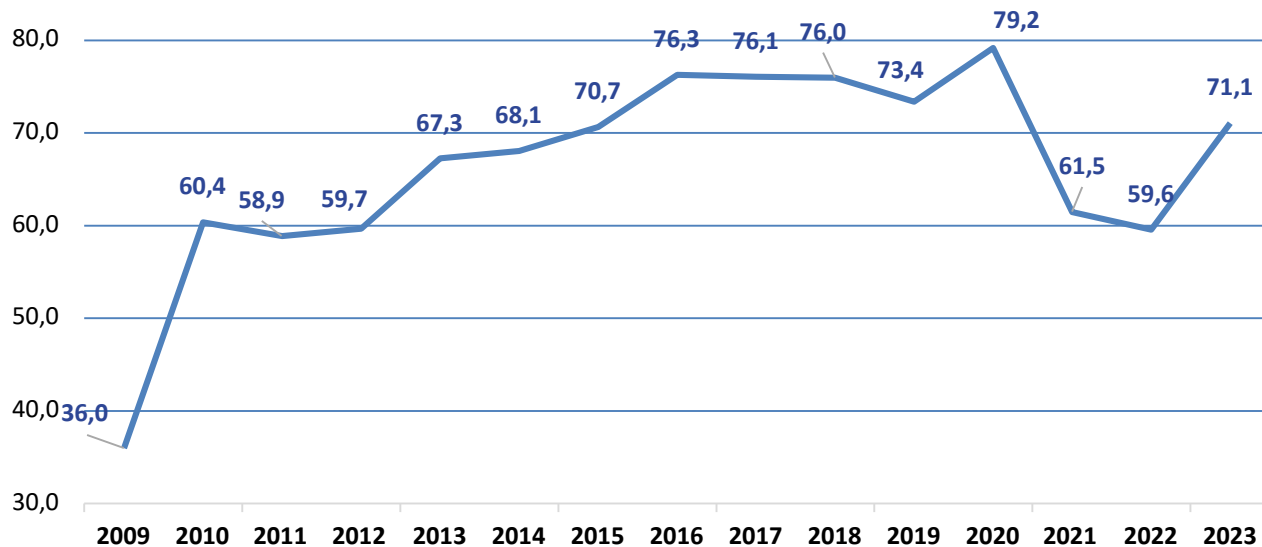
CONSTRUCTION OF GEOLOGICAL CLUSTER IN ZHEKZAGAN CITY

The cost of the project: **7,05 billion KZT**
Due date: **2024 - 2025**

In-country value development and procurement

Governance

Dynamics of in-country value development in 2009-2023
in % of “Kazakhmys” Corporation



By the end of 2023, a purchase was made from the producers of the Ulytau region in the amount of:

29,4 billion KZT

By the end of 2023 a purchase was made from the suppliers of works and services of Ulytau region in the amount of:

157,3 billion KZT

Total amount of purchase from the goods producers, suppliers of works, services by the end of 2023 for Ulytau region is:

186.7 billion KZT

“Kazakhmys” Corporation is actively involved in the development of Zhezkazgan region, providing support to Small and Medium-sized Businesses through the support of the Association of Entrepreneurs and Industrialists of the Zhezkazgan region.

Occupational Health and Safety, Civil Protection

Health & Safety

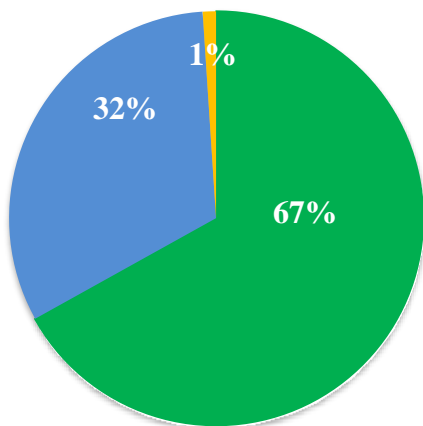
Costs of ensuring safe labour conditions for employees

31,397 billion KZT

Flood and Emergency Preparedness

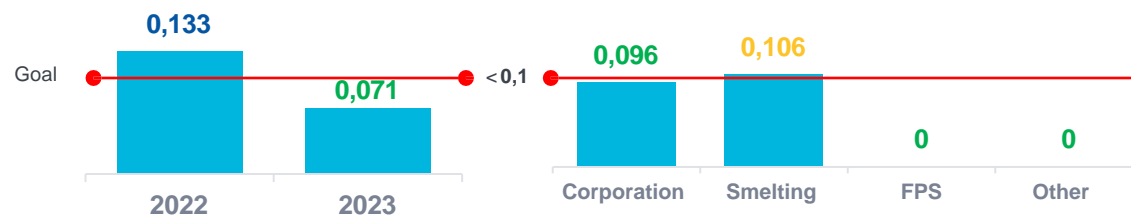
As part of the preparation for the flood period of 2024 and in order to prevent, eliminate emergency situations and ensure the alertness of "Kazakhmys" Corporation LLP, Centralized Headquarters have been established.

Scheduled activities – 384, including

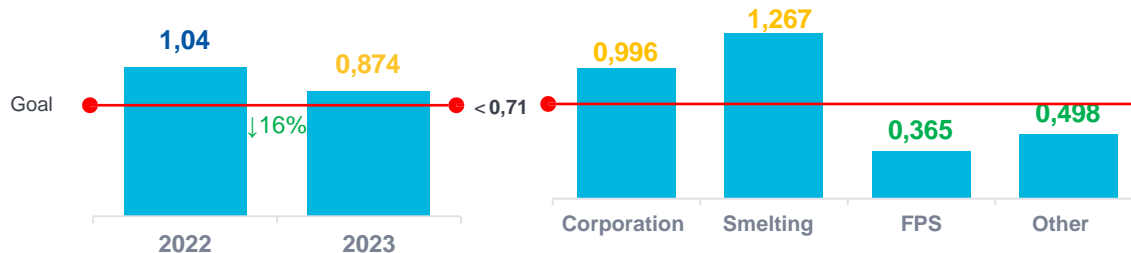


- Completed – 257 (67%)
- In progress – 123 (32%)
- Not due yet – 4 (1%)

FIFR (Fatal Injury Frequency Rate)



LTIFR (Lost Time Frequency Rate)



- Indicates international indicators and the company's aspirations for HSE goals

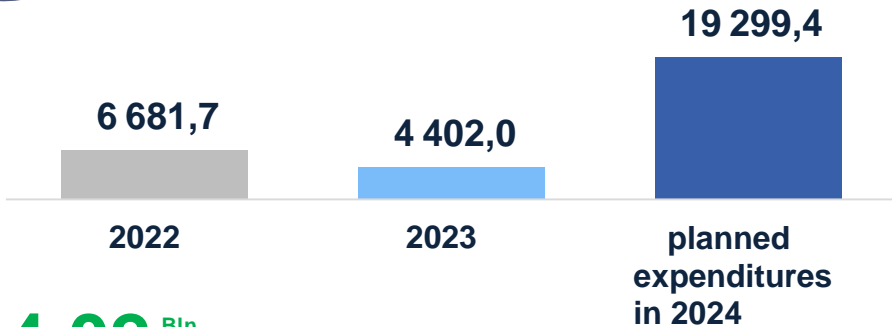
Transforming the Culture and Processes of Production Safety to 2025

Цели стратегии БиОТ:

	2023	2024	2025
Культура безопасности	Сотрудники понимают важность безопасности.	Сотрудники соблюдают правила и отказываются от выполнения опасной работы.	Сотрудники участвуют в повышении уровня безопасности.
Система управления БиОТ	Разработана СУ в соответствии с международными практиками.	СУ внедрена и функционирует во всех предприятиях.	Эффективность СУ подтверждена внешними аудиторами.
Управление рисками	Исключены риски повторения крупных происшествий.	Исключены риски с потенциалом смертельного травматизма.	Исключены риски с потенциалом тяжелого травматизма.
Медицина труда	Разработана система охраны здоровья.	Сокращено число производственных смертельных случаев.	Сокращено число профзаболеваний.
Работа с подрядчиками	Разработана методология работы с подрядными организациями.	Привлечение крупных подрядчиков после процедуры предквалификации.	Процессы БиОТ у подрядных организаций соответствуют требованиям безопасности.

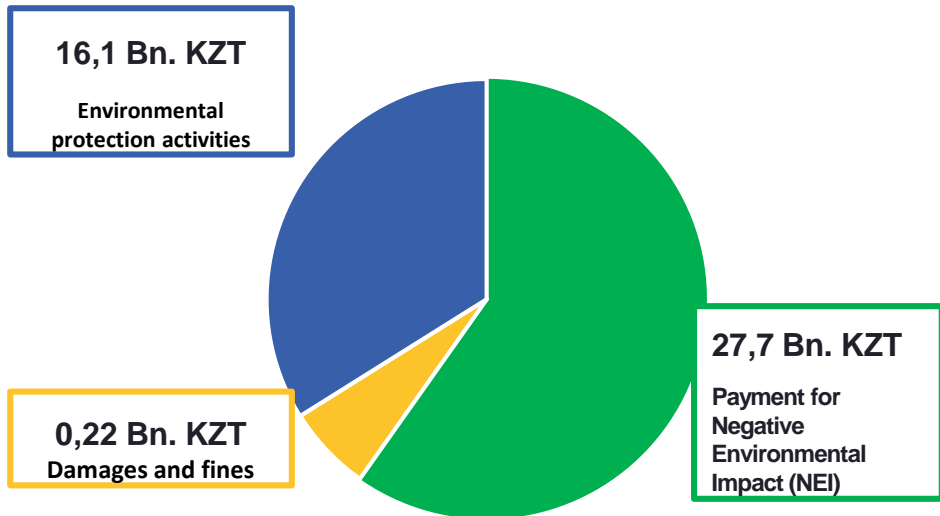


Expenditures on environmental protection measures, mln KZT



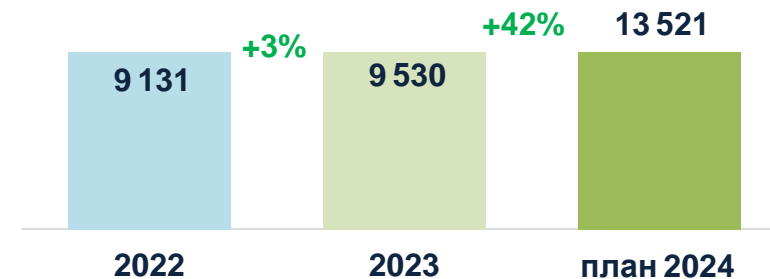
44,02 Bn. KZT

Major environmental expenditures for 2021-2023



Payments for negative environmental impact increased by **399 mln KZT** in 2023

Payments for negative environmental impact, mln KZT



Environmental

The most effective activities for this period are the following:

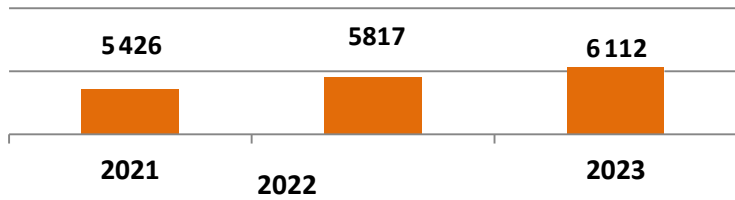
- Reuse of clarified water from tailings dumps in the recycling system of factories;
- repair and maintenance of ventilation units at mines;
- pre-treatment of wastewater, repair and maintenance of pipelines and pumping equipment in mines;
- recultivation of slopes of the preserved tailings dam of ZHCSP No.1,2;
- construction of a pond-evaporator of mine waters of the Zhylandinskiy mine;
- installation of Upgraded Automatic Gas contamination Control System with automatic gas supply shutdown of ZHCSP No. 1,2,3 CSF;
- hydraulic drilling of wells during drilling and blasting operations;
- overhaul of boilers at ZHTPP;
- implementation of Automatic Monitoring System at ZHTPP sources;
- repair of turbine oil coolers at ZHTPP;
- designing and commissioning of Automatic Monitoring System at ZHCSP;
- overhaul of electric filter at ZHCSP;
- development of design and estimate documentation for the construction of a new sulfuric acid workshop at ZHCSP;

Environmental indicators and activities

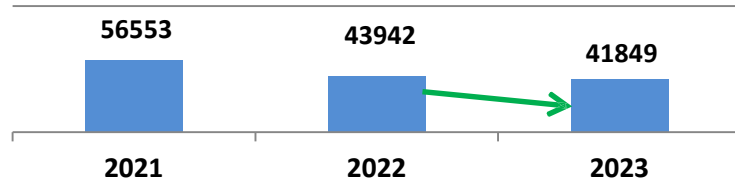
Environmental



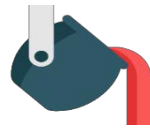
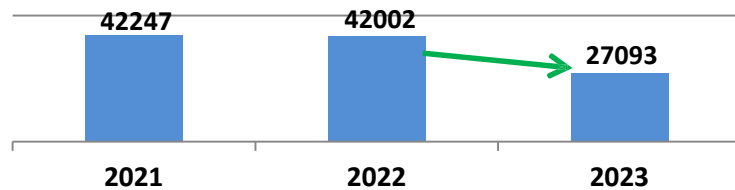
Emissions, actual tons



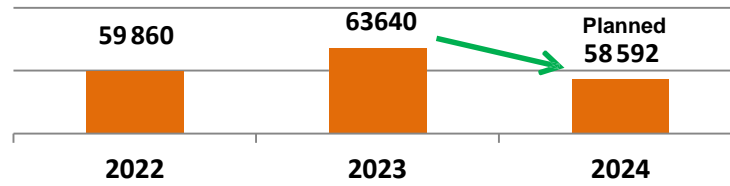
Discharges, actual tons



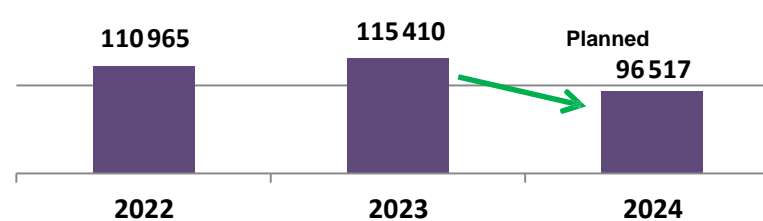
Waste, actual mln tons



Emissions, actual tons



Greenhouse gas emissions, tons



In 2023, greenhouse gas emissions, tons of CO₂, decreased by 16% due to the replacement of fuel oil with natural gas.

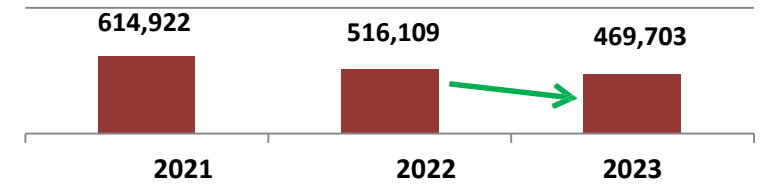
In 2023, ZHCSP carried out 11 environmental protection activities.

For 2024, ZHCSP has planned 5 environmental activities.

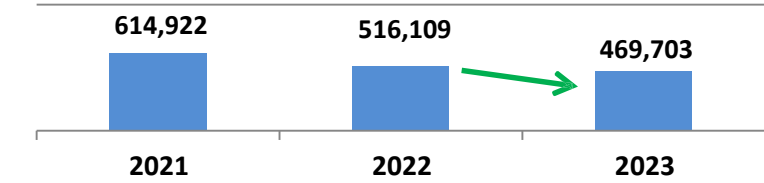
Automatic Monitoring System of polluting system emissions, installed at source No. 0227 (tail flue) of sulfuric acid workshop. The system is scheduled to be launched in the 1st half of 2024.



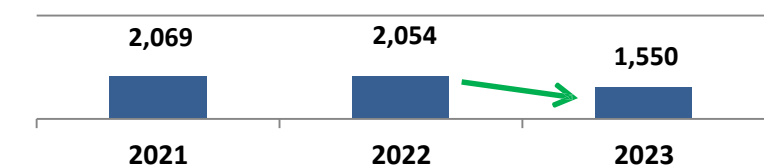
Emissions, actual thous. tons



Waste and, actual thous. tons



Greenhouse gas emissions, mln. tons

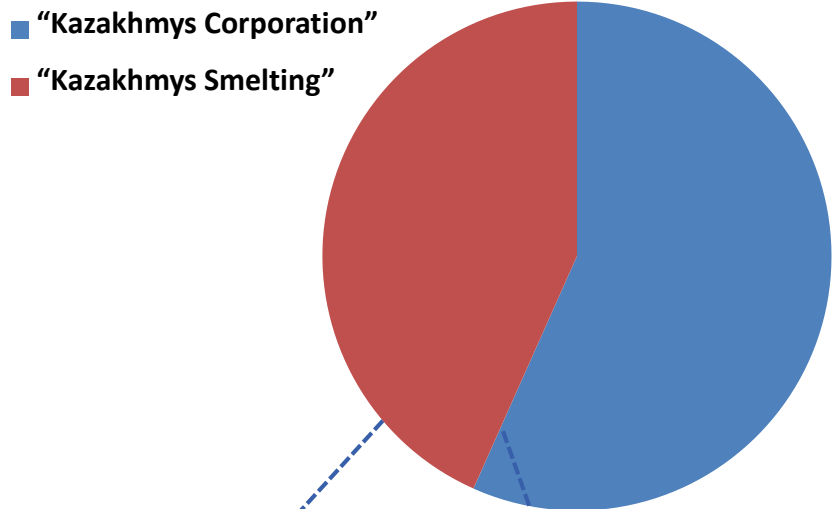


Discharges for 2021-2023 – 0.

Development and implementation of a Pilot project at ZHTPP for the construction of two combined cycle gas plants with total capacity of 100 MW.

Overhaul of boilers with replacement of burners.

Power consumption, 3 kW

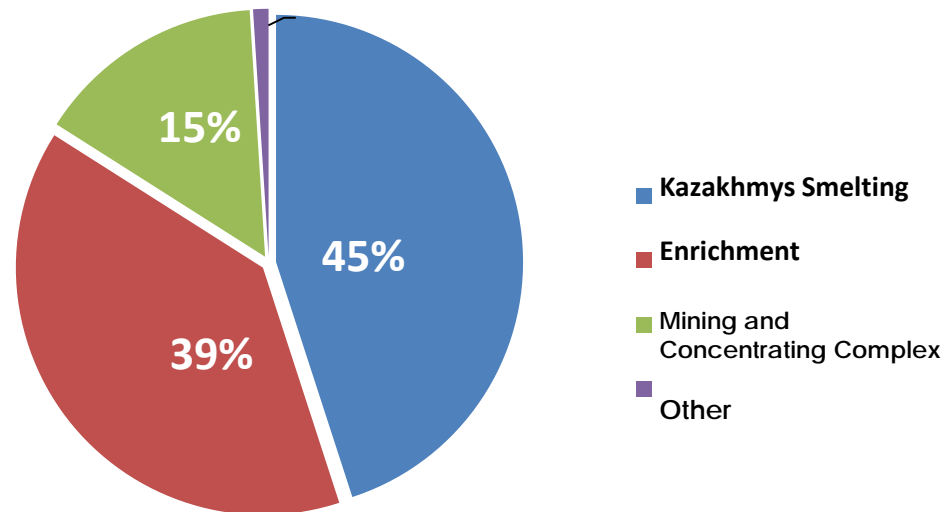


Corporation has saved **34 MW** per year in power consumption through the Energy Saving and Energy Efficiency Programme for 2023

RES power consumption for production needs, for decarbonisation purposes

Reduction of greenhouse gas emissions as a result of fuel and lubricants not burnt for electricity generation and the use of renewable energy sources

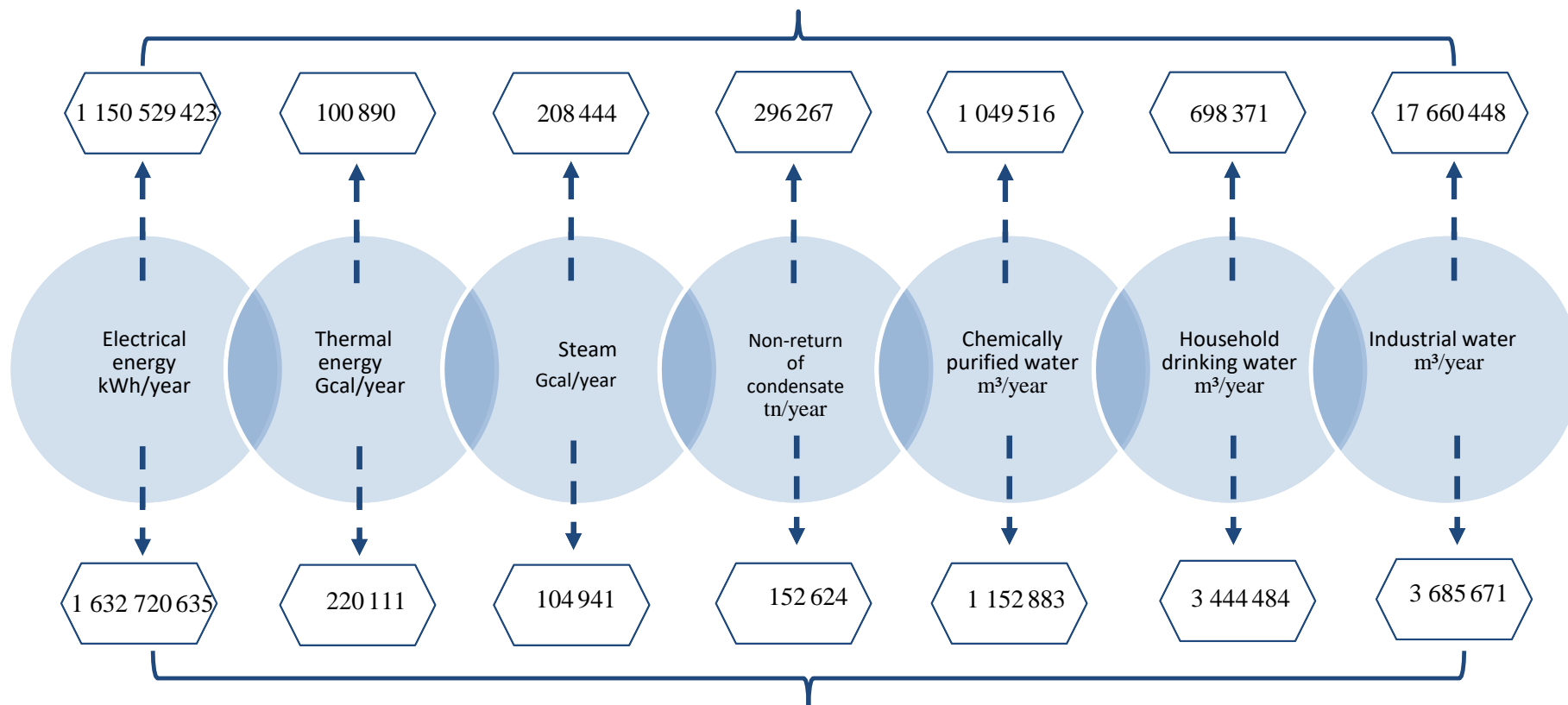
Power consumption in the context of Kazakhmys activities, %



In 2023, Audit was conducted and a Certificate of Conformity to the requirements of ISO 50001:2018 Energy Management Standard was issued to "Kazakhmys Corporation" LLP

Total energy consumption of "Kazakhmys" Group companies enterprises

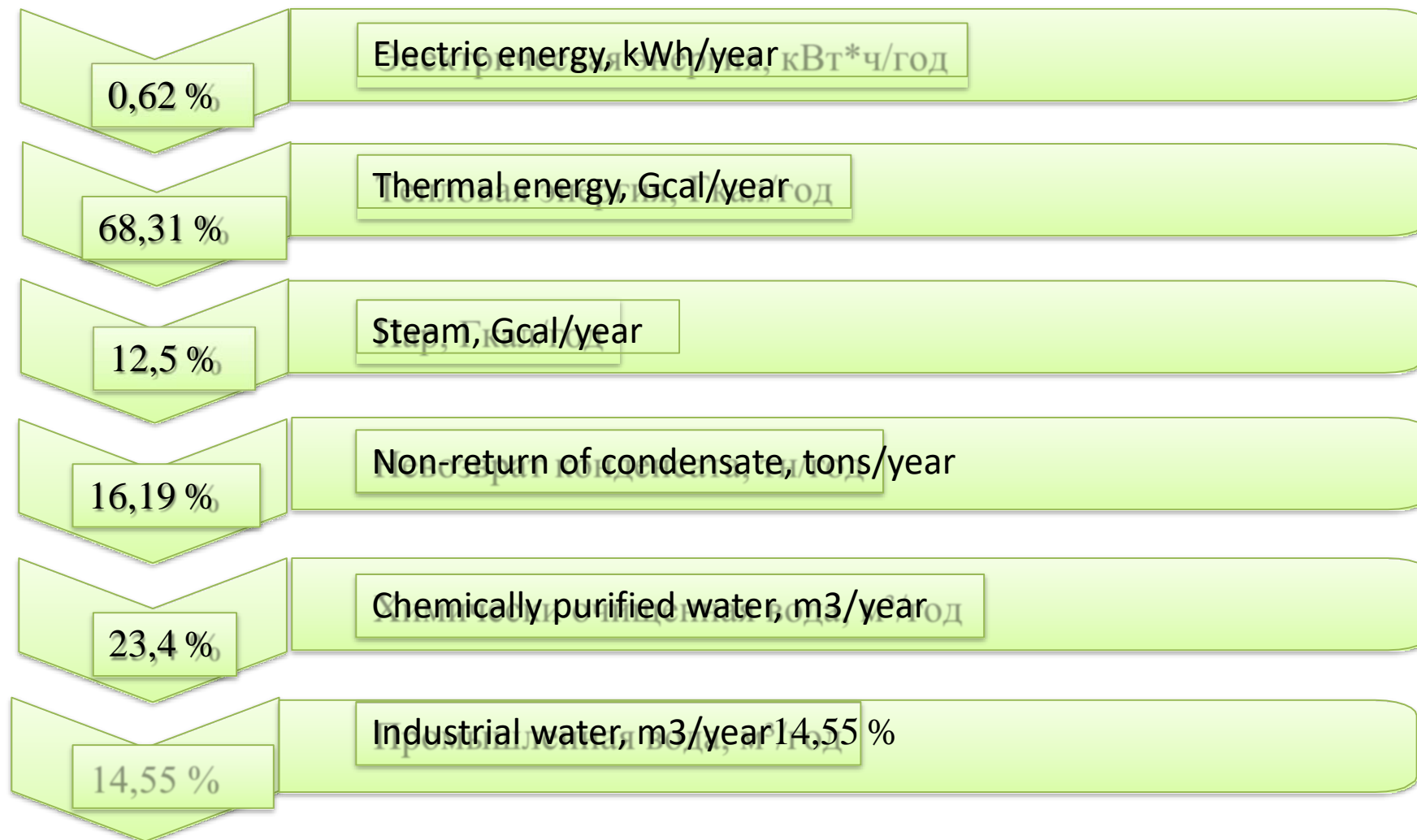
Metallurgical industry
Металлургическая промышленность



Mining and processing industry
Горнообогатительная и перерабатывающая промышленность

Снижение потребления энергии предприятиями Группы «Казакхмыс» по сравнению с 2022

Reduction of energy consumption of “Kazakhmys” Group enterprises compared to 2022



Projects completed and in the process of implementation



“Kengir” 10MW Solar Power Plant

Participants:
“Kazakhmys Corporation” LLP (KCC) and Baiterek Venture Fund JSC (BTVF)

Location:
Karaganda region,
Zhezkazgan,
Kengir village

Implemented in 2019.



100 MW Solar Power Plant (Phase 1 – 50MW) “Balkhash”

Participants:
“Kazakhmys Corporation” LLP (KCC) and Development Bank of Kazakhstan JSC (DBK).

Location:
Karaganda region,
Balkhash

Implemented in 2022.



100 MW Solar Power Plant (Phase 2 – 50MW) "Balkhash"

Participants:
“Kazakhmys Corporation” LLP (KCC) the second participant has not been identified

Location:
Karaganda region,
Balkhash

Implementation plan for Q2, 2024.

Planned Project – Development Stage



5 MW Bioelectric Power Plant



**45 MW
Balkhash Wind
Power Station**



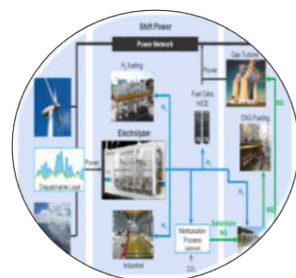
**29 MW Hydroelectric Power
Plant in East-Kazakhstan region**



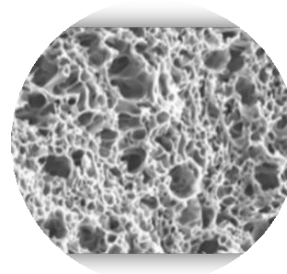
**27.4 MW Hydroelectric Power
Plant in East- Kazakhstan region**



Energy Storage



**Hydrogen-
based
Technologies**



**Carbosil-E 50,000
tons/year**



RES development



2019

2022

2023-2025

2027



Solar Power Plants 2019
10 MW,
Zhezkazgan



Solar Power Plants 2022
Phase 1 –
50 MW,
Balkhash



Wind Power Station 2024
45 MW
Zhezkazgan



BIO – 2023
5 MW
Zhezkazgan



Solar Power Plants 2024.
100 MW
Balkhash



Hydroelectric Power Station 2027.
56,5 MW
East-Kazakhstan Region



1,587 MW including:
1,265 MW coal-fired generation;
322 MW of renewable energy (20.2% share), including 60 MW completed;
50 MW in the process of implementation;
212 MW - planned;

Implementation of Sustainable Development Strategy and ESG in “Kazakhmys”



Development of Roadmap for the implementation of ESG (2022): In 2022, the company, in collaboration with KPMG international consultants, developed the Roadmap that defines main steps and milestones for the implementation of Sustainable Development Goals (ESG) in the company's activities.



Creation of the Directorate for Sustainable Development (2023): In 2023, a specialized Directorate was established with four Departments in the following areas: Social Projects, Liaison with External Stakeholders, Ecology and Budget Planning



Training sessions and trainings (early 2024): Starting from the beginning of 2024, the company started to provide training sessions and trainings for the staff on Sustainable Development and ESG principles.



Hybrid Report Release (2024): Plans for 2024 include the release of a hybrid report on the company's activities which will comply with the recommendations of the Global Reporting Initiative (GRI).



Foundation of ESG Committee under the Board of Directors (2024): In 2024, it is planned to form special ESG Committee that will function under the Board of Directors of the Company.



Implementation of the required policies and procedures for Sustainable Development and ES (2024-2025): The Company has identified all the required procedures and methodologies for the implementation of the principles of Sustainable Development and ESG in various aspects of its activities.





Thank you for your attention!