

# SUSTAINABLE DEVELOPMENT REPORT 2022



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#### **Chief Executive Officer's statement**

#### **Dear shareholders and partners!**

AK Altynalmas JSC defined the strategy for sustainable development in the reporting 2022 year. We have set five corporate values - safety, cooperation, professionalism, innovation and **sustainable development**, which takes a special place among our values.

All production achievements, introduction of the most advanced technologies and transformation of business processes are aimed at successful implementation of ESG policy. Despite the difficulties caused by the geopolitical situation and growing volatility, AK Altynalmas JSC closed 2022 with positive results.

#### Lean approach to the resources

I would like to emphasize our production performance.

We commissioned the second phase of the Akbakai processing plant. It allowed us to increase the throughput of gold ore from 850,000 to 1.2 million tonnes per annum. Updated processing plant was commissioned at Zholymbet project following the modernisation of the tailings processing line and its adaptation for ore processing. Two processing lines are currently in operation at the processing plant. One for ore and the other for secondary tailings with gold doré as a finished product. I am proud to say that AK Altynalmas JSC is the only gold mining company in Kazakhstan that uses technology of secondary processing of tailings, which is one of the brightest examples of careful attitude and efficient use of resources.

It is no coincidence that the Company declared 2022 as the Year of Ecology. This means that every employee was involved in the ongoing environmental projects. For example, the employees of Altynalmas held environmental clean-ups, planted greenery in the regions of operation and landscaped the territory of production sites. Last year, the company's employees planted 5,500 trees in all regions of operation.

#### Social investments

We always emphasise that people are the main value of the Company. Before that, all social safety net for the staff was stipulated by internal regulatory documents. Before that, all social safety net for the staff was stipulated by internal regulatory documents. As the Company expands and the number of employees increases, the time has come for this important step in social partnership.

Last year, for the first time, a human rights policy was developed and implemented, ensuring the importance of the status of the Company's employee rights.

We strongly invest in the education and competence development of our employees to support the professional growth of our team. Last year only, our colleagues completed 439 training programmes.

As part of our commitment to the principles of sustainable development, we invest in social projects, including renovation of infrastructure facilities in villages, provision of street lighting for invillage roads, purchase of specialised transport, etc. It is all done to take care of the residents of the regions of our operation. One of the major projects of last year was a modern scientific and technical laboratory Altynalmas MetLab financed by the Company and physically based at the Stepnogorsk Mining and Technical College. The laboratory was provided with equipment like one that is installed in the metallurgical laboratories at our own projects Pusynnoye in Karaganda region and Aksu-2 in Akmola

region. The laboratory is designed to conduct experimental scientific research in the field of mining, geology and metallurgy using information and communication technologies of education. We hope that thanks to the knowledge gained in this laboratory, the students, some of whom are our future employees, will learn production skills that will help them in their professional life.

#### **Company's ESG Policy**

Emphasising the status and importance of sustainable development principles, the Company has defined 11 priority Sustainable Development Goals where it can make the greatest contribution. Thus, an ESG Department was formed to implement the principles in the field of sustainable development and "Basics of ESG" online course was developed for the Company's employees.

In 2022, AK Altynalmas JSC joined the UN Global Compact and published its first Sustainability Report. The Company also became a co-founder of the national ESG club, where participants share their ideas on how to stimulate ESG activities within the Republic of Kazakhstan.

The core of the Company's long-term sustainable development is the increase of operational and financial performance in line with progress in the social and environmental fields. Safety based on the best international practices, innovation and automation, support of local communities in the regions where we operate, equal career opportunities, and high standards of corporate management are our key priorities.

Best regards, Balamir Makhanov Chief Executive Officer of AK Altynalmas JSC

# **1. ABOUT COMPANY**

# **1.1 Corporate profile**

#### **GRI 2-1, 2-6**

AK Altynalmas JSC (hereinafter - the Company) is a company incorporated in 1993 to carry out a full geological, mining and gold processing cycle with gold ore as a main focus. The Company is head office in Almaty, the Republic of Kazakhstan. Gold-bearing ore is mined at the Company's deposits located in Zhambyl, Karaganda and Akmola regions of Kazakhstan. Mineral resources are processed at our own gold processing plants in Akbakai, Pustynnoye, Dolinnoye, Aksu-2, Zholymbet, as well as in process plant and the plant for tailings processing in Aksu QH. Our mining fleet consists of more than 130 unique units of equipment. Sales of gold produced by the Company are made to the Central Bank of the Republic of Kazakhstan.

Main directions of the Company's activity:

- 1. Exploration operations
- 2. Extraction and processing of gold ore
- 3. Pre-design, design and construction and installation works in MMCs, including under the EPC
- 4. Introduction of new technologies for mining and processing of gold ore based on innovative solutions in the field of digitalisation

#### 1.2 Business model

The Company's business model envisages opinions of all stakeholders at each stage of the value chain. AK Altynalmas JSC strives to contribute to the achievement of the UN SDGs and to the development of the regions where it operates by adhering to the principles of responsible business management, ensuring environmental protection and providing decent working conditions.

	Business processes of AK Altynalmas JSC	
Geological exploration	Geological exploration activities defining the resource and reserve base of the deposit according to the State Reserves Commission and JORC standards	
Pre-design activities	Defining mining and ore processing methods and conducting feasibility studies of potential projects (from Concept to Feasibility study)	
Construction	Performing work on the development of mines and construction of factories under the EPC scheme	
Mining	Ore mining by underground and open-pit mining methods	
Processing	Full-cycle processing to produce gold doré	

# Mission

We convert the subsoil potential into golden opportunities for society, employees, investors and other stakeholders. The Company's areas of operation include geological exploration, pre-design, construction, mining and processing.

# Vision

To become a leading company in the Central Asian gold mining sector. The geographical priority in terms of the Company's interests is Kazakhstan.

# Values

- Sustainable Development
- Cooperation
- Innovations
- Professionalism
- Safety

# Value chain:

# Employees: Headcount - 10,528 people

The Company's success and opportunities for future development depend on its employees. Altynalmas appreciates its employees, creates an environment of equal opportunities and professional development and strives to be among the best employers in the country.

State: Payments to the state budget - KZT 57 billion

AK Altynalmas JSC contributes to social and economic development of country as a major taxpayer paying taxes to the regional and state budgets.

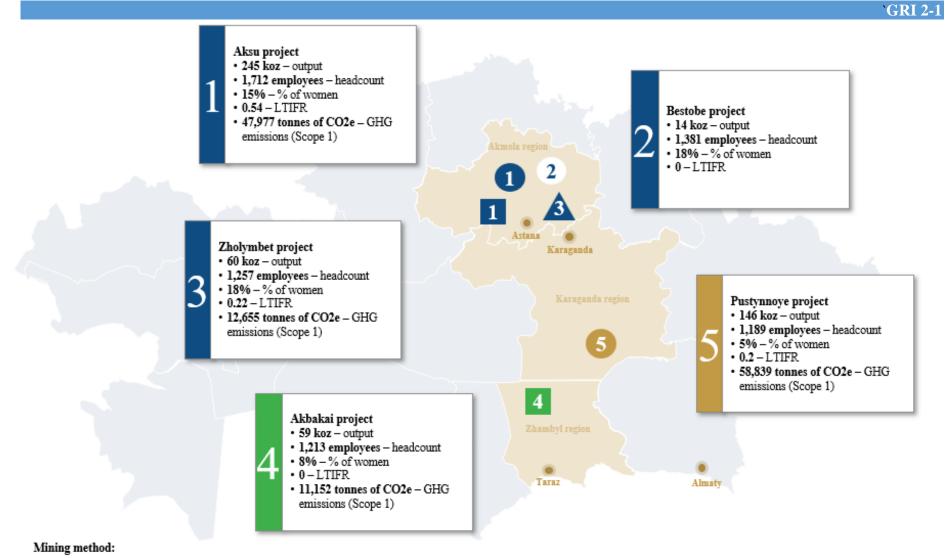
Regions: KZT 1.6 billion allocated for social support of regions

AK Altynalmas JSC actively cooperates with local executive bodies and suppliers and provides employment opportunities in the regions where it operates. As part of its social activities, the Company invests in the construction, support and development of local infrastructure, and makes a significant charitable contribution.

Investors: Preferred dividends paid - KZT 218 thousand

The main priority is to increase returns to shareholders. AK Altynalmas JSC provides information on performance to shareholders on an ongoing basis.

# 1.3 Geography of activities<sup>1</sup>



Combined Open-pit Underground OSuspended

<sup>&</sup>lt;sup>1</sup>Headcount of subsidiaries is not included

# Akbakai project

The Akbakai ore field is located within the Chu-Ili ore belt in the Zhalair-Naiman palaeorift syncline structure stretching in the north-west direction for more than 600 km. The ore field stretches in the same direction for 15 kilometres and is about 4 kilometres wide.

The processing plant of the Akbakai branch is aimed at processing ore from nearby deposits with metal recovery and further production of the finished product in the form of gold doré.

In 2022, AK Altynalmas JSC increased the throughput of the Akbakai processing plant to 1.2 million tonnes of ore per annum by implementing of the second phase at Akbakai processing plant.

# **Pustynnoye project**

Pustynnoe deposit is located in the Aktogay district of the Karaganda region, 100 kilometres east from Balkhash and 25 kilometres north from the Akzhaydak railway station. Karyernoye deposit, which has equivalent ore, is located 3 kilometres to the east and is developed to replenish the raw material base of the Pustynnoye project. Dolinnoye quartz vein gold deposit is located 12 kilometres to the east.

The project operates a precious metals plant, which processes gold flotation concentrate, and a processing plant, which processes ore from the Dolinnoye deposit.

Pustynnoye project includes 2 operating deposits - Pustynnoye and Dolinnoye open pit mines - a processing plant, as well as all necessary social and production infrastructure. The entire cycle of gold ore processing is carried out at the Pustynnoye project starting from mining and ending with the finished product in the form of gold doré.

The annual throughput of the Pustynnoye and Dolinnoye deposits separately is approximately the same at around 3 million tonnes per annum (6 million tonnes combined) In 2022, the deposits produced a total of 146 thousand ounces of gold in the form of gold doré bars.

# **Zholymbet project**

The Zholymbet ore field includes 3 areas (Central, Southern, Northern) and a number of occurrences of gold-quartz formation. The processing plant is intended to process ore from the Central zone of the Zholymbet deposit (open pit No. 6, Tsentralnaya mine) and its capacity is 500 thousand tonnes of ore per annum.

A key milestone in 2021 was the transformation of Zholymbet plant from tailings processing to ore processing. The processing capacity of the transformed plant is 650,000 tonnes of ore per annum with the potential to increase it to 2 million tonnes of ore per annum.

In 2022, the two processing plants have produced a total of 60 thousand ounces of gold in the form of gold-bearing products.

# Aksu project

Aksu ore field is located in Akmola region at the boundary of vast geological structures of Stepyanskoye synclinorium and Ishkeolmesskiy anticlinorium. Aksu-2 deposit is represented by six ore zones: Zapadny, Tsentralny, Staratelsky, Oktyabrsky I, Oktyabrsky II and Budennovsky The plant processes ore from the II Oktyabrskoye field of the Aksu-2 deposit. In 2022, 198 thousand ounces of gold in the form of gold doré bars was produced at the deposit.

The Quartz Hills deposit is located in the north-eastern part of the Aksu ore field. The ore from this deposit is "refractory" in relation to the traditional ore processing technologies. The annual throughput

of the mine is 300 thousand tonnes of ore. Raw material is processed in the plant by flotation beneficiation. Production in 2022 was 33 thousand ounces in the form of flotation concentrate. Exploration is currently underway at the deposit, upon completion of which a feasibility study will be prepared to potentially develop the mine's annual capacity to 650,000 tonnes.

The Aksu project also operates a tailings processing plant, which produced 14 thousand ounces.

# **Bestobe Project**

The Bestobe gold deposit is located 200 kilometres north-east from Astana and 100 kilometres east from Stepnogorsk. By the end of 2022, production was 14 thousand ounces.

In May 2021, upon the request of the activists group from among the Bestobe village community, the operation of the tailings processing plant was stopped. Production was resumed in November 2021. In addition, upon the request of the activists group, the tailings storage facility, which was receiving mine water as part of the tailings of Bestobe plant Due to impossibility to pump out mine water, the incoming groundwater resulted in partial flooding and shutdown of the Bestobe underground mine in July 2021. Earlier, an independent assessment of the Bestobe processing plant, which was put into operation in 1934, was carried out. The state of the plant was recognised as an emergency and its further operation was deemed impractical, so it was decided to dismantle the equipment. But despite the factory was on the downtime, average salaries were paid to employees from July 2021 to January 2023 by the Company, and since February 2023 the Company continues to pay minimum salary. In 2023, the management of AK Altynalmas JSC decided to initiate restoration works at Bestobe mine. Mine water pumping is planned for the 2nd half of 2023.

#### **1.4 Financial and operational review**

**GRI 201-1** 

The Company's value creation strategy is based on the principles of operational excellence, financial transparency and responsible mining to make a positive contribution to the social and economic development of the regions where we conduct our business and create long-term value for our stakeholders. The Company positively contributes to the social and economic development of the regions where it operates by providing employment, paying taxes and giving business and economic opportunities to local communities.

Indicator	2022	2021	2020	Change 2022/2021, %
Revenue	490,304,980	347,847,304	299,914,527	+41 %
Cash costs, KZT thousands per GE ounce	580,550	459,657	317,310	+26.3%
Cost of sales	(304,029,268)	(187,080,346)	(131,366,327)	+62.5%
EBITDA	200,738,223	138,019,432	157,554,363	+45.4%

# **Key indicators**<sup>2</sup>

#### KZT ths.

 $<sup>^{2}</sup>$ All financial results for 2020-2022 are presented according to the financial statements based on the IFRS financial statements for 12 months of 2020, 2021, 2022 posted on the Company's website.

Indicator	2022	2021	2020	Change 2022/2021, %
Gold sales price, \$ per ounce	1,800.5	1,799.2	1,785.1	0.06%
Net profit	113,218,719	88,653,546	63,241,697	+27.7%
Capital expenditures	49,419,454	125,951,792	89,382,600	(60.8%)
Net debt	347,921 719	337,195,636	292,173,996	+3.2%
Dividends paid	218,508	25,470,600	_	-
Cash flows from operating activities	164,124,243	141,001,428	123,998,083	+16.4%

• Revenue for 2022 increased by 41% to KZT 490.3 billion (KZT 347.8 billion in 2021) due to a 39% increase in sales of gold dore and gold products in 2022 and an increased revenue from construction, design and supply contracts for industrial facilities.

- The cost of gold sales increased significantly by 62.5% year-on-year to KZT 304 billion due to higher material costs and salary increase by an average of 27%.
- EBITDA increased by 45% compared to 2021.
- Net profit was KZT 113 billion (KZT 88.6 billion in 2021).

#### Generated and distributed direct economic value

#### **GRI 201-1**

One of the most significant and valuable contributions we can make domestically is the economic value we bring to our shareholders and regions where we operate. The Company recognises that the long-term success of any business depends on maintaining social and economic stability in the regions where we operate and in the country in general, on ensuring mutually beneficial relationships with stakeholders, and on the quality of working conditions and employees safety. We are committed to openly inform our founders, partners, employees and other stakeholders about the results of our economic value generated. Disclosure of this metric allows the Company's stakeholders to see how AK Altynalmas JSC generates and distributes economic value for the reporting period.

				KZT ths.
		2022	2021	2020
Cre	eated direct economic value			
1	Revenue	490,304,980	374,697,135	308,283,321
Dis	tributed economic value incl.			
2	Operating expenses	(43,757,391)	(46,427,812)	(47,924,872)
3	Salary	(14,567,326)	(13,245,675)	(7,363,907)

		2022	2021	2020
4	Expenses on interest and dividends	(25,470,600)	(22,077,202)	(13,327,551)
5	Tax expenses	440,841	(8,795,069)	(4,042,793)
6	Other expenses	(32,874,783)	(31,773,992)	(39,279,998)
7	Social expenses (investments in local communities)	(1,231,517)	(1,186,716)	(1,163,947)
Pro	fit for the year	113,218,719	88,653,546	63,241,697

Taxes

# GRI 207-1, 207-2, 207-3

AK Altynalmas JSC is a major taxpayer subject to tax monitoring. Company strictly complies with the tax legislation of the Republic of Kazakhstan. The Company significantly contributes to the local social and economic development through tax payments to local and state budgets. In 2022, the Company paid KZT 57 billion (KZT 31 billion in 2021) to the state budget.

The Company seeks to ensure the highest level of compliance with the requirements of applicable tax laws, tax treaties, rules and other tax regulations, as well as to apply effective control methods with respect to tax accounting and tax reporting. The Company's management is responsible for adherence to the corporate Tax Policy. It is fully aligned with the overall business strategy and the Company's approach to ethics, corporate governance and risk management.

Control implementation	To achieve our goals, we have implemented strictly regulated tax accounting and reporting processes, as well as control methods. All material transactions are subject to review and agreement at various levels of management within the Company. If necessary, third-party experts are engaged. Control processes and methods are subject to regular review by the Internal Audit Department. Each applicable change in Kazakhstan tax legislation or court practice is analysed to determine whether new control methods are needed and the Company takes appropriate action. Various types of internal and external trainings and seminars are available for AK Altynalmas JSC employees responsible for tax matters to improve their knowledge and skills.
Tax planning	The Company follows the Tax Accounting Policy approved by the AK Altynalmas JSC Executive Committee (hereinafter - Executive Committee). Compliance with the Tax Strategy is monitored by the Company's Tax Department. The Company does not conduct business in tax havens and does not use aggressive tax planning practices. The taxes paid by the Company are consistent with the actual business activities conducted, as well as with the laws of the jurisdictions of regions where we operate and our business strategy.

Approach to tax risk management	The Company's approach is to interpret tax legislation in a manner that complies with applicable law and legislative will. The Director of Tax Department is responsible for tax risks management and ensures that appropriate processes and systems are in place to control them. AK Altynalmas JSC continuously monitors its tax strategies and tax structures to ensure that they are in line with constant changes in the tax legislation of the Republic of Kazakhstan and evolving judicial tax- legislation practice. The Company regularly assesses its tax positions to ensure that they are fairly stated in the consolidated financial statements.
Interaction with the tax authorities and other stakeholders	The Company favours transparent interaction and open communication with the tax authorities, ensuring that all reporting required under the legislation of the Republic of Kazakhstan is provided in a timely manner. We endeavour to clarify uncertain tax matters where possible by directing enquiries regarding the official position of the Ministry of Finance of the Republic of Kazakhstan. AK Altynalmas JSC is an active member of industry associations that facilitate an open constructive dialogue with government authorities. It allows the Company's management to keep abreast in key trends of taxation. Stakeholders can ask any tax-related questions using the contact details on the official website of the Company. Our tax transparency helps us to build trustworthy and strong relationships with local communities in the regions where we operate. The Company also submits a national report on tax and non-tax payments as required by the Extractive Industries Transparency Initiative standard in Kazakhstan. The initiative has a high international and anti-corruption profile and aims at transparency of company and government revenues in the mining industries.

# **GRI 207-4**

KZT mln

Taxes	2022
Country	The Republic of Kazakhstan
Core activities	Gold mining
Headcount	10,528
Sales income	490,305
Profit (loss) before tax	112,520
Tangible assets, net of cash and cash equivalents	449,002
Income tax accrued on profit (loss)	699
Total employee benefits (including appropriate taxes)	(58,515)

Tax payments levied on customers	0
Industry tax charges and other taxes or payments to the government	(25,866)
Significant uncertain tax positions	0

# 2. CORPORATE GOVERNANCE

#### Key indicators:

- KZT 218 thousand of preferred dividends were paid to shareholders
- In 2022, AK Altynalmas JSC's Board of Directors (hereinafter the Board of Directors) held 19 meetings and addressed 53 matters

#### **Corporate governance system in the Company**



AK Altynalmas JSC's corporate governance is based on the principles of justice, fairness, honesty, responsibility, transparency, professionalism and competence. An effective corporate governance system implies respect for the rights and interests of all stakeholders in the Company's operations and helps to ensure efficient operations, increase the value of the Company's share capital, ensure the protection of investors' rights and implement the interests of shareholders.

The Company has adopted the Corporate Governance Code, the fundamental pillars of which are:

- protection of shareholders' rights and interests
- effective management of the Company by the Board of Directors and the executive body
- transparency and objectivity of disclosing information regarding the Company's activity
- legality and ethics
- effective dividend policy
- effective human resources policy
- environmental protection
- settlement of the corporate conflicts

The following initiatives were implemented in 2022 as part of improving the corporate governance system:

- amendments were made to the Company's Charter
- new approaches in the field of risk management were identified

- changes were made to the Company's organisational structure to improve the efficiency of operations
- internal documents on risks and business continuity management were updated

# **General Meeting of Shareholders**

The highest governing body of the Company is the General Meeting of Shareholders.

#### Composition of the Company's shareholders in 2022

As at December 31, 2022, Gouden Reserves B.V., the parent company of AK Altynalmas JSC, holds 60% of the total voting shares of the Company (as at December 31, 2021 - 60%), V. V. Dzhumanbayev holds 20% of the total voting shares of the Company (as at December 31, 2021 - 22%) and other individuals hold 20% of the total voting shares of the Company.

The following changes in the composition of the Company's shareholders took place during 2022:

• On December 30 Vladimir Dzhumanbayev became the owner of 20% of shares of AK Altynalmas JSC, the shareholdings of Diyar Kanashev and Vetiul Igor increased by 1% each.

In 2022, 4 general meetings of shareholders were held - 1 ordinary (annual) and 3 extraordinary meetings.

#### **The Board of Directors**

In 2022, the Board of Directors proceeded to ensure the Company's governance and performance improvement, representing the interests of all stakeholders involved in the decision-making processes.

Vladimir Dzumanbayev Chairman of the Board of Directors Committee membership: Nomination and Remuneration Committee	<ul><li>Year of appointment: 2017</li><li>Education:</li><li>Bachelor of Economy</li></ul>	Work experience: Over 20 years of experience in management of the largest production companies in Kazakhstan. Previously, Vladimir Dzhumanbayev held the positions of Chairman of the Board of Directors in Karazhyra JSC, member of the Board of Directors in MMC Kazakhaltyn JSC, General Director of Vertex Holding LLP and Karazhyra Ltd LLP, Strategic Development Director of Kazakhmys Corporation LLP.
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Balamir Makhanov (37) <sup>3</sup> <i>Chief Executive Officer</i> <i>Committee</i> <i>membership: AC,</i> <i>EMC, SEPC, NRC</i>	<ul> <li>Year of appointment: 2023</li> <li>Education:</li> <li>Master of Business Administration (MBA)</li> <li>Bachelor of Business Administration and Accounting</li> </ul>	Work experience: 10 years of experience in management, finance and economics in the mining industry. Previously, Balamir Makhanov was Managing Director for Commerce in AK Altynalmas JSC, General Director in MMC Kazakhaltyn JSC and Kazakhaltyn Technology LLP, Lead Investment Planner in Kazakhmys Corporation LLP, and was an auditor in Deloitte.
Scott Morrison (66) Member of the Board of Directors, Independent Director Committee membership: AC, EMC, SEPC, NRC Committee Chairman: AC, NRC	<ul> <li>Year of appointment: 2018</li> <li>Education:</li> <li>PhD of Metallurgy</li> <li>Bachelor of Geology</li> </ul>	Work experience: Enhances the Board of Directors with over 30 years of management experience in the mining, metallurgy and production sectors in major international companies such as Fengro Inc (Chairman of the Board of Directors), Tri-Star Resources PLC/Zinc Oxide LLC/ASA Resources Group PLC (Board of Directors member), Metalor Technologies International SA (Chairman of the Board of Directors, CEO), SGS SA (Executive Vice President), Commercial testing and engineering Co. (President and Chief Executive Officer), SGS Ghana Ltd (Managing Director).
David Cather <i>Member of the Board</i> <i>of Directors,</i> <i>Independent Director</i> <i>Committee</i> <i>membership: AC,</i> <i>EMC, SEPC, NRC</i> <i>Committee</i> <i>Chairman: EMC,</i> <i>SEPC</i>	<ul> <li>Year of appointment: 2019</li> <li>Education:</li> <li>Bachelor of Mining Engineering</li> </ul>	Work experience: 30 years of experience on management positions in the mining industry. Before his appointment to the Board of Directors, David Cather was a member of the Boards of Directors in Fengro Industries, CEO in European Goldfields LTD and Abu Dhabi Capital Group and Avocet mining LTD, Director in Grafton Resource Investments LTD, Managing Director in Anglo American PLC, Development Director in Miller mining and Commercial Manager in central region of Redland aggregates LTD.

<sup>&</sup>lt;sup>3</sup>Elected as a member of the current Board of Directors by resolution of the General Meeting of Shareholders of the Company dated July 31, 2023.

\*\*\*Abbreviations of committees
\*AC - Audit Committee
\*RC - NRC - Nomination and Remuneration Committee
\*RM - RMC - Risk Management Committee
\*SE - SEPC - Safety and Environment Protection Committee

No changes in the composition of the Board of Directors were made during the year. The share of senior executives<sup>4</sup> in regions of operation recruited from the residents<sup>5</sup> among the Board of Directors in 2022 is 50 percent.

In 2022, the Board of Directors held 19 meetings and addressed 53 matters.

Key matters addressed by t	the Board of Directors
Matters of corporate governance	<ul> <li>On the approval of the Company's Investment Policy.</li> <li>On the approval of ESG targets.</li> <li>Determination of the number of members, term of the Executive Committee, election of members of the Executive Committee.</li> <li>Determination of the number of members, term of the Board of Directors, election of members of the Board of Directors in subsidiaries.</li> </ul>
Reports	<ul> <li>Consideration of consolidated statement of companies performance.</li> <li>Preliminary approval of company's budget.</li> <li>Approval of the annual financial statements of subsidiaries.</li> <li>Preliminary approval of the Company's consolidated annual financial statements.</li> <li>Consideration of the Audit Committee's report.</li> </ul>
Transactional matters	• On conclusion of interested party transactions.

# **Committees of the Board of Directors.**

To scrutinise and elaborate the matters within the competence of the Board of Directors and to provide recommendations thereon, four committees have been established and are functioning under the Board of Directors:

- 1) Safety and Environmental Protection Committee
- 2) Risk Management Committee
- 3) Audit Committee
- 4) Nomination and Remuneration Committee

Safety and Environmental Protection Committee was established to assist the Board of Directors in making decisions on safety, health and environmental protection (hereinafter - SHE) matters. Safety and

<sup>&</sup>lt;sup>4</sup> Senior executives - members of the Board of Directors.

<sup>&</sup>lt;sup>5</sup> Local citizens - citizen of the Republic of Kazakhstan.

Environmental Protection Committee was established in 2019 to implement the Company's SHE strategy. Functions of the Committee:

- consideration and approval of the strategic vision and policies in the field of SHE
- provision of guidance to facilitate effective implementation of SHE standards and related protective measures
- consideration of aggregate trends in incidents and illnesses/injuries statistics to identify areas of concern and provide recommendations for corrective actions
- consideration of the results of investigations of unacceptable SHE risks, as well as consideration of recommendations for their remediation or hazard mitigation
- control and monitoring of SHE activities and head the SHE Department
- consideration and approval of internal regulatory documents in the field of SHE
- consideration of all matters brought up by any member of the Committee

The Risk Management Committee coordinates the process of functioning and development of the risk management system and exercises the following functions:

- consideration and approval of draft risk management policies, standards and procedures, as well as amendments and supplements thereto
- consideration and approval of the Company's top 20 risks, which are generated from the List of Key Risks, for subsequent reporting to the Board of Directors.
- consideration and approval of reports on the top 20 risks, so that they can be further managed directly by the Board of Directors
- consideration of proposals to improve the efficiency of risk management activities
- consideration and approval of risk management action plans
- consideration of external and internal auditors' and consultants' recommendations regarding risk management matters
- reporting to the Board of Directors on the results of the Committee's activities

The Nomination and Remuneration Committee analyses and makes recommendations to the Board of Directors when it makes decisions on nominations and remuneration matters. Functions of the Nomination and Remuneration Committee:

- preparation of recommendations on the number of members and candidates, terms of appointment, fixed salaries, conditions of remuneration and bonuses for members of the Executive Committee
- preparation of recommendations on the minimum and maximum rate of the fixed salary scale and percentage of annual salary if (non-fixed) bonus payments for members of the Executive Committee, Managing Directors and directors of the departments directly reporting to the Executive Committee, the Corporate Secretary, employees of the internal audit and risk management services and its subsidiaries
- preparation of recommendations on the election, terms of appointment, the rate of fixed salary, conditions of remuneration and bonus payment for the Corporate Secretary
- preparation of recommendations on the composition and terms of appointment of the Internal Audit Service, its head and members, the rate of fixed salaries, terms of remuneration and bonus payment to employees of the Internal Audit Service
- preparation of recommendations on the composition and terms of appointment of the Risk Management Service and its head, the rate of fixed salaries, conditions of remuneration and bonus payment to employees of the Risk Management Service
- preparation of recommendations on entertainment expenses for members of the Executive Committee as part of the Company's annual budgeting process

- presentation of recommendations on the succession policy for the members of the Board of Directors and members of the Executive Committee
- preparation of recommendations on the values of key performance indicators for members of the Executive Committee, the Internal Auditor (including from the Internal Audit Service) and the Risk Management Service
- nomination of candidates to the General Meeting of Shareholders, making proposals on the terms
  of remuneration and bonus payments for members of the Executive Committee, the Corporate
  Secretary, the Internal Auditor (including the Internal Audit Service), Head of the Risk
  Management Service (appointments, terms of remuneration and bonus payments policy) and
  employees of the Risk Management Service (conditions of remuneration and bonus payments
  policy)

The Audit Committee exercises supervisory functions and was established to provide structural and systematic supervision of work in the area of corporate governance and internal control. The Audit Committee assists the Board of Directors by advising and making recommendations on the following matters:

# **Financial statements**

- analyses the changes proposed in the Accounting Policies
- analyses the results of the audits with the Executive Committee and the external auditors, including any challenges encountered
- analyses significant accounting and reporting matters, including complex or unusual accounting entries and other sensitive matters, as well as recent changes in professional and regulatory requirements and their impact on the financial statements
- consider the annual financial statements for completeness and consistency with the information available to the members of the Audit Committee and whether they give a true and fair view on the relevant accounting principles

# **External audit**

- examines and prepares recommendations to the Board of Directors on the appointment and change of the external auditor
- receives information from the external auditors about their relationship with the Company, including non-audit services undertaken in the past; discusses the information with the external auditors to assess and confirm their independence
- monitors the Company's progress in implementing the recommendations

# **Internal audit**

- supervises the activities of the internal audit service
- inspects the Internal Audit Regulations at least once a year to ensure that they accurately reflect the purpose and scope of the internal audit function, as well as changes in the professional practice of internal auditing in general
- advises the Board of Directors on whether to increase or decrease the resources required to achieve the internal audit plan; assesses whether any additional resources are needed on an ongoing basis or should be outsourced. Analyses and advises the Board of Directors on proposed changes to the organisational structure, headcount, and budget of the Internal Audit Service
- makes proposals on the qualification and recruitment, appointment and dismissal of internal audit employees
- recommends acceptable compensation, and provides the Board of Directors with information for the assessment of the internal auditor's activities

- reviews the proposed risk-based audit plan and makes recommendations on internal audit projects
- checks internal audit reports and other requests to the Board of Directors
- reviews and reports to the Board of Directors on the results of any special investigations conducted
- verifies the actual implementation of the audit plan against the approved plan

Participation of members of the Board of Directors in their committees' meetings in 2022:

Committee member	Independent	Audit Committee	Safety and Environmental Protection Committee	Risk Management Committee	Nomination and Remuneration Committee
Scott Morrison	Yes	3/3	3/3	3/3	3/3
David Cather	Yes	3/3	3/3	3/3	3/3
Diyar Kanashev	No	3/3	3/3	3/3	3/3
Vladimir Dzhumanbayev	No	-	-	-	3/3
Makpal Nussipova	No	-	-	-	3/3

# **Executive Committee**

The Executive Committee manages the Company's current operations and ensures operational efficiency as per the approved plans. Meetings are held monthly. Members of the Executive Committee pay considerable attention to matters of improving internal documents, ensuring the Company's financial stability, social issues and optimisation of the organisational structure at these meetings.

Balamir Makhanov (37) <sup>6</sup> <i>Chief Executive Officer</i>	<i>Year of appointment:</i> 2023	<i>Work experience:</i> 10 years of experience in management, finance and economics in the mining
Committee membership: AC, EMC, SEPC, NRC	<i>Education:</i> Master of Business Administration (MBA) Bachelor of Business Administration and Accounting	industry. Previously, Balamir Makhanov was Managing Director for Commerce in AK Altynalmas JSC, General Director in MMC Kazakhaltyn JSC and Kazakhaltyn Technology LLP, Lead Investment Planner in Kazakhmys Corporation LLP, and was an auditor in Deloitte.

<sup>&</sup>lt;sup>6</sup> Elected as Chief Executive Officer by the resolution of the Board of Directors dated May 02, 2023.

Rustem Karakessov (36) <sup>7</sup> Chief Financial Officer, member of the Executive Committee	<ul> <li>Year of appointment: 2023</li> <li>Education:</li> <li>Bachelor of Business Administration and Accounting</li> <li>Bachelor of Engineering and Technology</li> </ul>	<i>Work experience:</i> Over 16 years of experience in finance, including 10 years in a management positions of mining industry. Before AK Altynalmas JSC, he held the positions of General Director and Chief Financial Officer at MMC Kazakhaltyn JSC and auditor at Deloitte.
Roman Vodopshyn (48) <sup>8</sup> Chief Operating Officer, member of the Executive Committee	<ul> <li>Year of appointment: 2023</li> <li>Education:</li> <li>Master of Business Administration (MBA)</li> <li>Bachelor of Mining and Underground Mineral Engineering</li> </ul>	Work experience: Over 26 years of experience in the mining industry, including 20 years in management positions. Previously, he held the position of Managing Director for Operations in AK Altynalmas JSC, Executive and Technical Director at MMC Kazakhaltyn JSC, Chief Specialist of the Coal Enterprises Management Department in Donetsk Metallurgical Plant, Deputy General Director in Zarechnaya Coal Company, Chief Engineer in the Donetsk Shakhtoprokhodka LLC mining company, Donbass Fuel and Energy Company JSC, Mine Director of the state Donetsk Coal Energy Company.
Makpal Nussipova (51) Chief People Officer, member of the Executive Committee Membersship: Nomination and Remuneration Committee	<ul> <li>Year of appointment: 2021</li> <li>Education:</li> <li>Bachelor of Economics Engineering</li> <li>Master of HR Management</li> </ul>	<i>Work experience:</i> She has more than 20 years of experience in HR management in international companies - in Alcon/Novartis Group she held the position of Head of HR for CIS cluster, in VERNY CAPITAL she was Head of HR for a group of companies, she was HR Director of JV KATCO/Kazatomprom and Head of HR Department in Kazyna JSC. She has also worked as an HR manager at Halliburton International and as an HR specialist at

 <sup>&</sup>lt;sup>7</sup> Elected as a member of the current Executive Committee by the resolution of the Board of Directors dated May 26, 2023.
 <sup>8</sup> Elected as a member of the current Executive Committee by the resolution of the Board of Directors dated May 26, 2023.

		Schlumberger.
Dauren Orazayev (38) <sup>9</sup> Chief Strategy and Development Officer, member of Executive Committee	Year of appointment: 2023 Education: Bachelor of Economy Bachelor of Mining Engineering	Work experience: He has over 18 years of experience in the financial and mining sectors. Previously, Dauren Orazaev was Managing Partner of E4 Capital LLP, Business Development Director of Vertex Holding LLP, member of the Board of Directors of RBK Bank, Project Manager in the Business Development Department of KAZ Minerals, Executive Director of BTA Securities JSC.
Simon James Cleghorn (54) <sup>10</sup> Chief Technical Officer, member of Executive Committee	Year of appointment: 2023 <i>Education:</i> Bachelor of Engineering	<i>Work experience:</i> He has more than 30 years of experience in international companies in the production sector. He previously held the positions of Chief Geologist at ERG and GeoProMining International, Technical Services Manager at Georgian Mining Group, Resource Manager at Kefi Minerals in Ethiopia and Saudi Arabia, Technical Services Manager at Athelea Investments CJSC.

To ensure continuous control over the Company's current operations, meetings of the Executive Committee are held on a monthly basis. The Executive Committee regularly provides the Board of Directors with performance reports to ensure a unified approach and vision of the Company's strategic goals and plans.

# **Remuneration and dividends**

#### **GRI 2-20**

The remuneration of the members of the Board of Directors shall be approved by the decision of the General Meeting of Shareholders. The conditions and rates of bonuses for members of the Executive Committee shall be approved by the Board of Directors upon recommendation of the Nomination and Remuneration Committee. Consultants are not involved in this process.

# Plans for 2023:

• Updating the Corporate Governance Code in line with international standards, based on which future reports will provide information on compliance with corporate governance principles and assess the Company's compliance with international corporate governance principles;

<sup>&</sup>lt;sup>9</sup> Elected as a member of the current Executive Committee by the resolution of the Board of Directors dated May 26, 2023.

<sup>&</sup>lt;sup>12</sup> Elected as a member of the current Executive Committee by the resolution of the Board of Directors dated July 03, 2023.

• Development and updating of regulations and internal documents governing the activities of the Board of Directors, committees of the Board of Directors, and the Executive Committee for effective distribution of competences and organisation of the management bodies' activities.

#### 2.1 Business ethics and compliance

**GRI 2-13** 

#### Key indicators:

- 95% average number of employees trained on the Code of Conduct
- 28 total number of received hotline inquiries in 2022

#### Our guidelines:

- Code of Conduct
- Anti-Corruption Code
- Conflict of Interest Policy
- Compliance Policy
- Gifts and Hospitality Policy
- Confidential Information Regulation
- Regulation on ethics violation
- Rules of Internal Control over the Management and Use of Insider Information
- Rules of Internal Control over Due Diligence of Business Partners
- Rules for Internal Investigations
- Instructions for Compliance Investigations
- other internal documents specifying the Compliance Service

AK Altynalmas JSC conducts its activities in strict compliance with the requirements of the legislation of the Republic of Kazakhstan, generally accepted principles of business ethics and internal documents. The Company's internal documents are developed based on the requirements of the legislation of the Republic of Kazakhstan and standards of corporate and business ethics.

The Code of Conduct is the fundamental document of AK Altynalmas JSC, which establishes the basic aspects of behaviour, values and principles. It defines the mission, vision and values based on which the Company operates, as well as recommendations for employees to comply with ethical principles while carrying out their activities. All employees, partners, suppliers and other stakeholders of the Company must read the provisions of the Code of Conduct and carry out any kind of cooperation in compliance with the standards of business ethics approved by the Company.

Compliance functions in the Company are exercised by the Compliance Service, which consists of 5 people - Managing Director for Legal and Compliance, Compliance Manager, two Compliance Advisors and Chief Environmental Compliance Specialist. Functionally, the Compliance Service is subordinated to the Executive Committee and reports to the Board of Directors.

The compliance function is centralised; the Company's subsidiaries do not have separate compliance departments and officers. It is planned to establish separate services in major subsidiaries in 2023.

#### **Company's corporate values:**

- people
- team

- safety
- environmental friendliness
- sustainable development
- partnership
- ethical behaviour

Each employee must confirm that he/she is familiar with the provisions of the Code of Conduct and undertakes to comply with all its requirements. Also, all those who work with the Company, including suppliers, partners, and consultants, must share the Company's values and adhere to the principles defined in the Code of Conduct.

# **Compliance risks**

The Compliance Service has developed a risk register to ensure proper management and timely response to potential and actual risks.

Risk name	Risk response measures	
Potential litigation with employees and stakeholders	• education and training of all employees and additional persons at risk on corruption and fraudulent acts	
Acts of corruption related to state bodies	• development of the Policy on Cooperation with State Bodies	
Violation by the Company's employees of the provisions of Code of Conduct, the laws of the Republic of Kazakhstan and other internal regulatory documents	<ul> <li>Compliance with the Code of Conduct training course</li> <li>an anonymous channel for violations reporting Hotline (feedback)</li> <li>instruction for Compliance Investigations</li> <li>policies to manage conflicts of interest among employees and officers</li> <li>Regulation on Notification of Violations of Ethical Standards, Legislation and Internal Rules</li> <li>Regulation on the Compliance Service</li> <li>AK Altynalmas JSC Compliance Policy</li> <li>Rules of Internal Control over Due Diligence of Business Partners</li> <li>Human Rights Policy</li> </ul>	
Violations by Suppliers of the Supplier Code of Conduct, RoK legislation and other internal regulatory documents	<ul> <li>contractors due diligence procedures</li> <li>due diligence procedures for security contractors officers</li> <li>anti-corruption audits of individual operations and transactions</li> <li>monitoring and testing of individual operations and transactions</li> <li>identification and elimination of conflict of interest situations</li> <li>development of a Supplier Code of Conduct</li> <li>implementation of an automated system for approval/registration of the gifts register and suppliers due diligence</li> <li>monitoring (analysis, standards interpretation, inspection) of suppliers' activities to ensure compliance with the obligations</li> </ul>	

Risk name	Risk response measures
	stipulated by the Supplier Code of Conduct
Violations by the Company of international sanctions provisions	<ul> <li>acquisition of contractor screening database identifying sanctioned entities/companies and connections to sanctions risks/politically exposed persons/negative media</li> <li>proper due diligence on all contractors</li> <li>check the GWS supply chain for entities/companies on the sanctions lists</li> <li>inclusion of the following contractual obligations for the contractor: <ol> <li>to provide a letter of assurance that neither it nor its parent/affiliated entities are on the sanctions list; 2) notification in the event of inclusion in the sanctions list or potential of such inclusion</li> <li>periodically review all existing agreements with suppliers registered in the Russian Federation/Republic of Belarus.</li> <li>monitoring mass media, social networks and public reports for information on the Company's relationship with sanctioned entities</li> </ol> </li> </ul>

#### **Corruption and fraud control**

GRI 205-1, 205-3

Based on the anti-corruption legislation and the Anti-Corruption Strategy of the Republic of Kazakhstan for 2015-2025, the Company has developed the Anti-Corruption Code.

The prevention of corruption is one of the Company's priorities. We are certain that acts of a corruption hinder the development of business, and therefore we strive to prevent such violations. No cases of corruption were discovered in 2022.

The Company has approved 9 anti-corruption principles:

- 1) honesty and patriotism
- 2) honesty and diligence
- 3) responsibility and reliability
- 4) transparency of business and openness
- 5) partnership and solidarity
- 6) justice and democracy
- 7) high professionalism and intolerance to the corruption
- 8) recognition and respect of the rights of all stakeholders and strive to cooperate with them in compliance with the rule of law and anti-corruption and business ethics provisions
- 9) respect of human identity, irrespective of origin, social, official or property status, sex, race, nationality, language, attitude to religion, political convictions, place of residence, gender, national or cultural background or any other factors

Compliance with these principles guarantees not only the Company's effective functioning in the present, but also its sustainable development for the future.

#### Human rights

We recognise and comply with international human rights framework agreements, in particular the Universal Declaration of Human Rights, the Fundamental Conventions of the International Labour Organisation and the UN Guiding Principles on Business and Human Rights.

Human rights are a fundamental value of the Company, both internally with employees and in externally with our partners. AK Altynalmas JSC relies on the principles of respect for human rights when developing internal documents, standards and external agreements. Human rights are also an important factor when compiling risk registers.

The Company is aware of its obligations and does not allow employees to be restricted in their labour rights and freedoms or to enjoy any advantages based on gender, race, nationality, language, origin, property, family, social and official status, age, place of residence, religion, beliefs, membership or non-membership in public associations or any social groups, as well as other factors unrelated to the professional qualities of the employee.

In 2022, the Company formally implemented a corporate human rights policy.

#### **Conflict of Interest Management**

#### **GRI 2-15**

One of the Company's fundamental principles in the area of sustainable development is the inadmissibility of conflicts of interest. Officers and employees are obliged to put the interests of the Company above private interests when performing their functional duties and must not be guided by personal interests and other benefits when making decisions. The Executive Committee approved the Policy on Conflicts of Interest Management Policy for employees and officers to create a unified system for managing actual and potential conflicts of interest and mitigating risks of decision-making by officials and employees influenced by private interests and connections.

The Company has established basic principles for managing conflicts of interest:

- mandatory disclosure of real or potential conflicts of interest or even the likelihood of a conflict of interest
- individual review and assessment of the risk for the Company of each conflict of interest and settlement of each case of conflict of interest
- confidentiality when disclosing information related to conflicts of interest and the conflict of interest settlement process
- keep the balance of interests between the Company, its employees and officers when resolving conflicts of interest
- protection of an employee against retaliation for a conflict of interest that was disclosed by that employee in a timely manner

Each structural unit of the Company keeps a register of conflicts of interest, in which all conflicts of interest are recorded. The Company's Compliance Officer keeps and updates the register of conflicts of interest. Upon receipt of complaints, the Compliance Service analyses the existence of a real or potential conflict of interest, based on the results of which the line manager (in some cases based on a decision of the Board of Directors) takes the following measures to resolve the conflict of interest:

- restriction of an officer's access to Company's specific information that may conflict with the officer's private interests
- voluntary refusal of an officer or his/her suspension (permanent or temporary) from participation in the discussion and decision-making process on matters that are or may conflict with officer's interest

• an officer's waiver from his private interest, which creates a conflict with the interests of the Company

During the reporting period, no actual or potential conflicts of interest were registered by the Compliance Service.

The Conflict of Interest Policy also regulates the procedure for giving and receiving gifts and hospitality, which provides requirements for preventing conflicts of interest from arising in the course of such actions. The process of giving and receiving gifts in the Company is implemented according to the requirements of the legislation of the Republic of Kazakhstan.

#### Feedback communication

#### GRI 2-26, 406-1

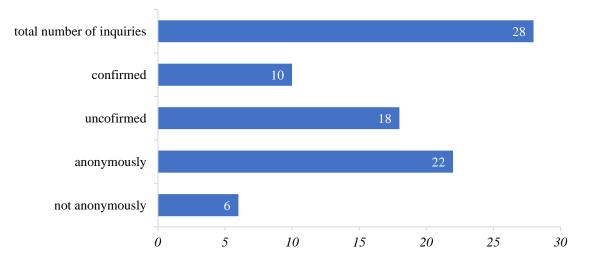
AK Altynalmas JSC recognises the need for continuous monitoring of possible violations of the Company's principles in the field of corporate ethics, anti-corruption and respect for human rights. In this regard, the Company has a special hotline at the level of business units and professional services, which represents an effective communication path for internal and external stakeholders. The main purpose of the hotline is to identify and prevent violations that may adversely affect the Company's reputation, as well as to receive and analyse inquiries from stakeholders on human rights and business ethics issues.

The Company thoroughly analyses each inquiry and strives to provide the complainant with an appropriate response. The methodology for inquiries management is provided in the Ethic Issues Hotline Policy. In addition to information channels within the business units, there are communication channels in the head office that can be used by any stakeholder.

The Company has entered into a hotline maintenance agreement with an independent external organisation to ensure confidentiality. This hotline covers the entire Company (including subsidiaries and projects). The hotline inquiries are accepted both anonymously and openly and are processed in three languages. All inquiries received via the hotline are forwarded to the Compliance Service and further processed by it; if necessary, the inquiries are redirected to the relevant structural units. The functions of the hotline are fully automated, which means that there are no operators in the process, and all incoming information is registered in the system, the servers of which are located abroad. The received inquiries are processed within three months.

The hotline provides an opportunity to confidentially report cases or suspicions of corruption, fraud, discrimination, as well as other violations of the legislation of the Republic of Kazakhstan, ethical norms or the AK Altynalmas JSC Code of Conduct by any person.

# General statistics of calls to the hotline



The Compliance Service informs the Board of Directors on a regular basis about the Company's compliance activities, adherence to the principles of corporate ethics and anti-corruption measures. For example, the Board of Directors annually reviews a report on the Compliance Service's activities and statistics on complaints received and processed. Also, since 2016 the Company presents a report to the Financial Monitoring Agency of the Republic of Kazakhstan. It is to be noted that no complaints on environmental issues were received and no cases of discrimination were recorded in the reporting year.

#### **Compliance training**

**GRI 205-2** 

Mandatory online training on the Code of Conduct is organised annually for employees. Below are the statistics for trainings conducted in 2022:

Project Name	% of completion
Head Office	95 %
Pustynnoye project	100 %
Aksu QH project	95 %
Akbakai project	100 %
Aksu-2 project	90 %
Zholymbet project	100 %

Training on the Code of Conduct for those who do not own or use computer on Akmola Hub projects was conducted between June and August of 2022.

The Company does not support any political activities of any persons and does not fund the activities of political parties or individuals.

# Plans for 2023:

- Undergo an external audit for compliance with the requirements of the international standard ISO 37001
- Set up separate compliance officer services in major subsidiaries
- Improve environmental legislation
- Develop and update internal documents in the field of compliance control
- Develop a register of legislative requirements in the field of environmental protection
- To assess the Company's key business processes for exposure to compliance risk, risks of corruption, fraud, conflict of interest, develop and implement a methodology for assessing the level of risks inherent to the Company's operations
- Establish a system of management reporting, internal procedures to manage risks and maintain the effectiveness of internal control systems
- Implement a plan to identify and minimise environmental risks
- Introduce a universal automated Declaration of Conflict of Interest
- Develop a compliance risk management policy

# 2.2 Risk management

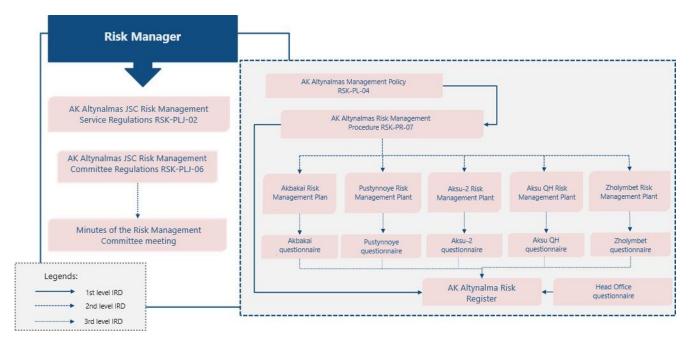
# Key indicators:

- 347 employees trained by the Risk Management Service in 2022
- **486 risks were identified** in 2022

# Our guidelines:

- Risk Management Policy
- Regulation on the Risk Management Committee
- Regulation on Risk Management Service
- Enterprise Risk Management System
- Risk Management Plan for Projects
- International Standard ISO 31000:2018
- Law No. 415-II of the Republic of Kazakhstan on Joint Stock Companies dated May 13, 2013
- other internal documents specifying the Internal Audit and Risk Management Service

The hierarchy of the Company's internal documents in the field of risk management is presented below.



The Risk Management Service is guided in its activities by the provisions set out in the International Standard ISO 31000:2018. The Risk Management Service submits performance reports to the Risk Management Committee on a quarterly basis. This report reflects both production risks and risks of strategic, economic, environmental and social nature.

In 2018, Risk Management Services developed and in 2021 updated an Enterprise Risk Management Policy (ERM) and concept, which sets out the general means and requirements for risk management. The expected result of ERM is that the Company understands and effectively and efficiently manages its risks to achieve its business objectives and meet its performance expectations. Risk management processes cover all subsidiaries, departments and projects of AK Altynalmas JSC and shall function in accordance with the developed concept. Risk management procedures are divided into 2 levels, which include development of documents and training activities, as well as practical implementation of the developed procedures. Risk assessment is set according to a scale from minimal (acceptable) to extreme (unacceptable) risk level.

Risk specialists from head office during their business trips assess production risks and carry out risk management at production sites.

Risk registers and risk matrices for subsidiaries are developed and approved on an annual basis. According to the Company's Risk Register, 486 risks have been identified in 2022<sup>11</sup>:

The table below presents the main risks and response measures to address them.

Risk name	Risk <b>response measures</b>
Price and demand for gold	<ul> <li>regular updates of economic analyses and product pricing assumptions</li> <li>a set of measures to maintain a conservative balance through fiscal responsibility focused at the achievement of balanced budget and optimisation of costs by reducing the quantity or cost of procured materials and services so that they do not exceed anticipated</li> </ul>

<sup>&</sup>lt;sup>11</sup>The estimates include risks for the Head Office and all projects of the Company.

Risk name	Risk response measures
	<ul> <li>revenues</li> <li>proactive debt management</li> <li>cash improvements and improved operating performance</li> <li>regular updates of economic analyses and product pricing assumptions</li> </ul>
Operational Stability	<ul> <li>implementation of the operating model and compliance with technical standards, supported by operational risk management and assurance processes</li> <li>regular tracking and monitoring of progress towards key objectives</li> <li>development and implementation of a business continuity management system</li> </ul>
Compliance with regulatory requirements	<ul> <li>strategy of active cooperation with the Government of the Republic of Kazakhstan, regulatory authorities and other stakeholders</li> <li>assessing portfolio capital investments in terms of political risks and minimising the impact of Kazakhstan legislation with an unacceptable level of risk</li> <li>monitoring of regulatory and political events at the state level as well as global topics and trends in international politics on an ongoing basis</li> </ul>
Operational safety	<ul> <li>safety improvement plans continue to be implemented at all enterprises</li> <li>effective management of critical controls required to manage major safety risks</li> <li>analysis of near-misses and hazards</li> <li>implementation of a safety culture</li> <li>involvement of management and accountability</li> <li>improvement initiatives for future improvements in safety performance</li> </ul>
Information security	<ul> <li>implementation of a confidential information protection system</li> <li>introduction of internal documents regulating the use and protection of personal data in the Group of companies, use of Internet resources, as well as granting and control of access rights to the Company's information systems</li> <li>provide employees with training on information security (IS) basics</li> <li>annual inspection of reliability of anti-virus, backup system, PC and server update system</li> <li>quarterly inspection of the information systems and information resources access matrices, accounts of dismissed employees, EDS keys</li> </ul>

Risk name	Risk <b>response measures</b>
	<ul><li>management of mobile devices encryption</li><li>identification of bottlenecks in systems and their correction</li></ul>
Opportunity to access and replace existing reserves	<ul> <li>active monitoring of the market for new potential projects</li> <li>continuous improvement of the development strategy</li> <li>close cooperation with government agencies on this matter</li> <li>in-depth analyses of new projects, given the existing status and historical data provided (geology, hydrogeology, geomechanics, mining engineering, metallurgy)</li> <li>preparation of a deposit estimation and resources/reserves verification plan with the help of an independent consultant</li> <li>development of follow-up monitoring and reserves evaluation concept</li> </ul>
Civil unrest in local communities	<ul> <li>development of an educational programme for locals</li> <li>building a team to solve social issues of local communities</li> <li>elaboration of feedback system</li> <li>review and update of the external communications strategy</li> <li>conduct of training for local leaders on crisis communications</li> </ul>
Catastrophic risk	<ul> <li>availability of technical standards and regulations that set minimum requirements for the construction and operation of industrial facilities and compliance with which is regularly inspected by technical experts</li> <li>regular trainings on Health and Safety</li> <li>development and successful implementation of SANA Safety project to improve Health and Safety</li> <li>technical inspections and audits to identify potentially hazardous conditions</li> <li>additional work to assess the appropriateness of control measures and associated risks</li> <li>development and implementation of a business continuity management system</li> </ul>

Besides the top 10 risks, the Company keeps registers of sustainable development risks and regularly monitors environmental, social, management and strategic risks. Thus, environmental impact risks are considered at all deposits and projects where the Company operates. The Company has also developed and approved measures to respond the social risks that may potentially occur when interacting with personnel, local communities, suppliers and other stakeholders. The Risk Management Service presents risk reports to the Executive Committee and the Board of Directors on a quarterly basis. Thus, the Company's management bodies play a key active role in managing sustainability risks.

In 2022, the Risk Management Service conducted risk management training for managers and white collars of the above-mentioned companies and projects.

Name	Number of trained
Head Office	146
Kazakhaltyn MMC JSC (Stepnogorsk office)	0
Aksu-2 project	55
Aksu QH project	10
Zholymbet project	0
Kazakhaltyn Technology LLP (Stepnogorsk office)	0
Pustynnoye Project	136
Akbakai project	0
Total number of trained	347

#### 3. OUR APPROACH TO SUSTAINABLE DEVELOPMENT

#### GRI 2-24, 2-28

#### 3.1 Sustainable development management

As one of the largest gold mining companies, we recognise the importance of our impact on the economy, environment and society. We are guided by the principles of sustainable development and take a balanced and rational approach when cooperating with our stakeholders.

An optimal combination of environmental, social and economic aspects of business is the basis for the Company's long-term sustainable development.

As part of the social commitment, the Company strives to create safe workplaces, provide social support to employees and their families, consistently reduce incidents rates, occupational injuries, occupational diseases and maintain a favourable social environment in the regions where it operates. In terms of environmental protection, we aim to minimise negative environmental impact based on an approach of in-depth study of environmental risks and continuous monitoring.

Integration of sustainable development principles into the business processes of AK Altynalmas JSC is a prerequisite for the Company's development. We recognise the potential impact of our activities on society and the environment and are committed to:

- the development of safety, health and environmental protection
- the achievement of the best results in corporate social responsibility
- the improvement of economic contribution in the regions where we operate
- the enhancement of anti-corruption measures
- the improvement of the quality of relationship with stakeholders
- the perfection of the corporate governance system
- the development of a corporate culture of ethics and compliance

The Company has built a system of internal regulatory documents governing the management of sustainable development matters. To manage thematic aspects of sustainable development, we develop separate policies and standards, review and amend them as needed on a regular basis. Such approach allows the Company to effectively distribute areas of responsibility between structural units and strictly pursue its declared goals. Thus, a collective agreement was signed in 2022 and following documents were developed:

- 1) Human Rights Policy
- 2) Policy for Procurement
- 3) Supplier Code of Conduct

The Company has also initiated the process of issuing annual sustainability reports in compliance with the Global Reporting Initiative ("GRI") standards. This work will be coordinated by the ESG Department.

Participation in associations and international initiatives:



Joining year: 2022



Joining year: 2021



Joining year: 2022



Joining year: 2021

# Structure of sustainable development management

The Company is moving towards a sustainable development management model, which requires the integration of sustainable development management into all levels of the corporate governance system.

Under this model, primary responsibility for sustainable development management lies with the Board of Directors. The Board of Directors and its committees play an important role in shaping strategy and prioritising sustainable development directions, assessing risks and monitoring sustainability performance.

The Executive Committee is involved in environmental, social and economic impact management and risks management processes and controls sustainability performance.

Thus, in 2022, the ESG Department was established. It is responsible for the systemic management of sustainable development, coordinating initiatives and increasing the information transparency of sustainability activities. It should be noted that the ESG Department has developed a mandatory online course "Basics of ESG" for ESG awareness among the head office employees.

In addition, an ESG Committee was established to ensure efficient allocation of the company's resources and to prepare recommendations in the field of environmental, social responsibility and corporate governance projects for further consideration by the Authorised Body. The first meeting was held in 2022.

#### Sustainable development risks management

#### GRI 2-13, 2-25

AK Altynalmas JSC analyses risk factors, including sustainability risks, that may adversely affect business development and achievement of set goals. Based on that analyses, the Company has identified safety, health and environmental risks. In this regard, the Company initiated a programme to monitor and limit the environmental impact of the operations. In addition, the Company successfully implements health and safety processes that include workplace risk analysis at certain production facilities.

The Company considers the following factors when assessing the potential impact of operations:

- opinions of stakeholders, including vulnerable communities, who may affect or be affected by the Company's operations
- potential conflicts that could jeopardise the Company's operations

In addition to the new ESG (Environmental, Social, Governance) initiatives of the Company, we have established a list of 11 prioritised UN Sustainable Development Goals for 2021.

The sustainable development management system includes, but is not limited to, the following elements:

- managing the integration of SDGs into the Company's Development Strategy
- integration of ESG goals and sustainable development matters into the Development Strategy, identification of sustainable development strategic objectives, priority areas and strategic ESG projects
- development and approval of key performance indicators (hereinafter referred to as KPI) on sustainable development matters
- elaboration of proposals on implementation of an efficient organisational structure for ESG matters, as well as on distribution of responsibility for ESG matters in the Company
- development of an operating model, responsibility allocation mechanism and cooperation with stakeholders within the Company and its subsidiaries for effective achievement of sustainable development objectives and goals
- assistance in identification, assessment of ESG risks and development of ESG risk management measures
- development of programme documents on cost-effective use of resources, Energy Efficiency and Conservation Policy, Energy Conservation Programme (Roadmap), programme on low-carbon development of the Company based on the understanding of the best international practices on the structure of a vertical document
- comprehensive analysis of carbon regulation and its impact on financial operations
- development and implementation of initiatives to support local suppliers and suppliers from the regions where projects are being implemented, assistance in the development and use of the ESG criteria for supplier selection
- building a system of cooperation with stakeholders, development of a Stakeholders Map, as well as policies, processes and plans for cooperation with stakeholders;
- coordination of cooperation with local communities, development of effective channels and plans for cooperation with local communities, monitoring the implementation of the plan and assessing the effectiveness of communications
- participation in public hearings, initiatives, regional and international industrial programmes in the field of sustainable development

- improvement of ESG culture in the Company and its subsidiaries by providing methodological support for the development of measures and initiatives in priority areas of sustainable development, consolidation and monitoring of their implementation
- development and improvement of information collection tools for sustainability reporting, as well as data consolidation

## 3.2 Contribution to the UN Sustainable Development Goals

#### **GRI 2-28**



The UN Sustainable Development Goals are globally adopted Goals aimed at eradicating poverty, combating inequality and injustice, and protecting the planet and ensuring peace and prosperity for all people. We recognise the importance of all 17 UN SDGs and have adopted 11 of them as the most relevant to the Company and are committed to take part in their implementation.

UN SDGs		Our contribution	Main activities for 2022
1 <sup>NO</sup> Poverty <b>Ř¥ŘŘŘÍ</b>	<b>Goal 1:</b> End poverty in all its forms everywhere	<ul> <li>revise the employees salaries</li> <li>sponsor low-income families</li> <li>provide free medical and therapeutic services</li> <li>provide access to water, protection against land degradation, water pollution and sand shifting when the region is arid</li> </ul>	• <b>KZT 1 billion</b> was allocated for charitable social projects to support the regions where the Company operates
3 GOOD HEALTH AND WELL-BEING -///	<b>Goal 2:</b> Ensure healthy lives and promote well-being for all at all ages	<ul> <li>provide employees with PPE</li> <li>comply with the AK Altynalmas JSC Golden Safety Rules</li> <li>provide employees and their family members and Company retirees with free medical care</li> <li>provide free medical examinations for locals of the regions where the Company operates</li> </ul>	<ul> <li>KZT 247 million was allocated for charitable social projects to support health care</li> <li>7,467 - number of facility inspections</li> <li>disinfection of all checkpoints, canteens, administrative buildings</li> <li>Sana Safety project implementation</li> <li>implementation of procedures on:         <ul> <li>safe work at height</li> <li>handling operations</li> <li>internal audit of health and safety management</li> </ul> </li> </ul>
4 eucation	<b>Goal 4</b> : Ensure inclusive and quality education for all and promote lifelong	<ul> <li>provide financial support to employees wishing to pursue post-secondary, higher (higher professional), postgraduate education</li> <li>partnering with educational institutions</li> <li>provide educational grants for children of deceased employees, low-income and socially vulnerable families</li> </ul>	<ul> <li>KZT 300 million was allocated for charitable social projects to support education</li> <li>KZT 799 million was allocated for training and development of employees</li> <li>equipping the Altynalmas MetLab laboratory at the Stepnogorsk Mining Engineering College</li> <li>material aid to low-income families and families with many children to prepare for school</li> </ul>

UN SDO	Gs Our co	ontribution	Main activities for 2022
5 EENGER EQUALITY	<b>Goal 5</b> : Achieve gender equality and empower all women and girls	<ul> <li>our Human Resources Policy does not allow any discrimination, distinction, exclusion or preference in the realisation of employees rights</li> <li>endeavour to promote diversity and inclusion at every level of the Company</li> <li>strive to expand the list of women's occupations by introducing labour-saving technologies</li> </ul>	<ul> <li>17% of Company's employees are women</li> <li>Initiation and implementation of the Women in Mining programme under ESG:</li> <li>initiation of mentoring programme focused on leaders development</li> <li>increase the number of women hired among all categories of personnel</li> <li>implementation of the initiative to hire women drivers</li> <li>"Woman - Haul Truck Operator" draft project</li> </ul>
6 CLEAN WATER AND SAMUATION	<b>Goal 6</b> : Ensure availability and sustainable management of water and sanitation for all	<ul> <li>reduce water consumption by increasing the use of recycled water</li> <li>provide access to water, protection against land degradation, water pollution and sand shifting when the region is arid</li> </ul>	<ul> <li>the total amount of water reused was 18 million m<sup>3</sup></li> <li>additional measurements by independent laboratories of the quality of water withdrawn and discharged</li> </ul>
8 ECONOMIC GROWTH March 1000 decent w	<b>Goal 8</b> : Promote sustained, inclusive and sustainable economic growth, full and productive employment and vork for all	<ul> <li>pay taxes and other fees to the state budget</li> <li>provide employment opportunities</li> <li>launched a SAP S/4HANA-based business processes automation project</li> </ul>	<ul> <li>contributions to the state budget amounted to KZT 57 billion</li> <li>10,528 jobs were created</li> <li>collective agreement was signed</li> <li>automation initiatives: IT infrastructure for new initiatives, corporate dashboards, IT security, equipment for checkpoints</li> <li>heads of sites now spend up to 50 percent less time for daily reports data collection</li> <li>salary increase</li> </ul>

UN SDGs	o Our o	contribution	Main activities for 2022
	<b>Goal 9</b> : Build resilient infrastructure, promote inclusive and sustainable industrialization and foster	• implement projects for further development of infrastructure in Aksu, Bestobe and Zholymbet villages	<ul> <li>KZT 440 million allocated for charitable social infrastructure development projects</li> <li>free medical examinations for people living in Stepnogorsk and the villages of Bestobe, Aksu and Zholymbet</li> <li>facilitation of an early intervention centre for exceptional children opening</li> <li>renovation of the face of the kindergarten</li> <li>survey of the building condition was carried out for 53 houses in Aksu village</li> </ul>
12 RESPONSIBLE AND PROJUCTION	<b>Goal 12</b> : Ensure sustainable consumption and production patterns	<ul> <li>reduce water consumption by increasing the use of recycled water</li> <li>reuse and recycle of the generated wastes</li> <li>implementation of measures aimed at improving energy efficiency</li> </ul>	<ul> <li>the total amount of recycled and reused water wa 18 million m<sup>3</sup></li> <li>use of waste rocks for construction works (in-field roads, dams of tailings storage facilities, platforms ramps, foundations for future infrastructure buildings, etc.).</li> </ul>
	<b>Goal 13:</b> Take urgent action to combat climate change and its impacts	<ul> <li>keep track of the Company's carbon footprint (Scope 1)</li> <li>plan measures to reduce greenhouse gas (GHG) emissions</li> <li>implement measures to improve energy efficiency</li> </ul>	<ul> <li>amount of GHG emissions was 131,518 tonnes of CO2e</li> <li>analysis of the main sources of GHG emissions</li> <li>environmental monitoring</li> <li>commencement of work on feasibility study development to reequip the Akmola hub boile houses to electric power</li> </ul>
manage fo	<b>Goal 15</b> : Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably prests, combat ation, and halt and reverse	<ul> <li>there are no natural reserves or other specially protected natural lands on the territories of our production projects or the territories bordering thereon</li> <li>take biodiversity impacts into account when planning future activities</li> </ul>	<ul> <li>reclamation of the Manybai uranium open pit deposit</li> <li>measures to minimise the risks associated with potential contact of birds with water surfaces</li> <li>participation in landscaping, gardening and sanitation month in Stepnogorsk</li> </ul>

UN SDGs	Our contribution	Main activities for 2022
land degradation and halt biodi loss	• ongoing monitoring of the project's impact on flora and fauna	• <b>2,640 trees</b> were planted in all regions of operation
<b>Goal 17:</b> Strengthen t means of implementat and revitalize the Glob Partnership for Sustain Development	tion development initiatives bal • participate in ESG partnership projects with	<ul> <li>accession to the UN Global Compact</li> <li>ESG club membership (cofounders of the club)</li> <li>scientific and technical work on purification of open pit water from natural radionuclides at the Manybai open pit</li> <li>implementation of projects on social and economic support of Akbakai, Aksu, Bestobe, Zholymbet villages and Stepnogorsk</li> </ul>

## 3.3 Stakeholder engagement

#### GRI 2-29, 413-1

We conduct dialogue and build relationships with stakeholders based on the principles of mutual respect and partnership, information transparency, regular interaction and honest adherence to our commitments.

AK Altynalmas JSC provides a full production chain from exploration and mining of gold, its transportation and processing to the sale of finished products. Due to our complex structure and activities, we interact with a wide range of stakeholders. Therefore, to communicate effectively with them we have built a system of interaction focused on achieving the UN SDGs and harmonising interests of all stakeholders.

# The Company uses a standardised stakeholder identification and engagement process according to AA1000 SES international standards:



The importance of building transparent and trustworthy relationships with all stakeholders has become particularly relevant in 2021, when the worldwide COVID-19 pandemic and quarantine requirements still continued to have a significant impact on business activities, business trips and people-to-people relationships. Thanks to the Company's commitment to the fundamental principles of partnership and consistent improvements, we have been able to continue our cooperation with stakeholders, conducting consistent and transparent dialogue and enhancing mutual trust.

All corporate business units of the Company participate in stakeholder cooperation initiatives based on their competences, roles and responsibilities.

The Company's key stakeholders are the Company's employees, management and shareholders, state bodies, public organisations, partners, mass media, financial institutions and other groups.

Interaction is carried out through meetings, roundtables, training and other public events, as well as through official public communication channels. The Company relies on the principles of relevance, significance and openness of information provision when reporting on its activities.

Shareholders	Personnel	Trade union	Subsidiaries
<ul> <li>regular meeting of shareholders</li> <li>-annual report</li> <li>-meetings and negotiations</li> <li>-web page</li> <li>-exhibitions</li> <li>-forums and presentations</li> </ul>	-internal meetings -web page -trainings and seminars -corporate activities -corporate media -information boards -survey and questionnaires	-internal meetings -web page -information boards -trainings and seminars -corporate activities -corporate media - survey and questionnaires	- annual report -internal meetings -correspondence and requests -corporate activities -corporate media
Local communities	Business partners	Suppliers	NGOs, associations, international organizations
-annual report -media posts -meetings with representatives of local communities -information board -public hearings	-web page -press release -press conferences and briefings -annual report -conferences and meetings	-annual report -web page -procurement methods and information on procured GWs -meetings with business partners suppliers -revision of supplier claims	-annual report -business/membership agreements signing -press release -press conferences public hearings
Mass media	Governmental authorities	Financial institutions	
-annual report -press releases -press conferences -forums	-participation in activities of governmental labor bodies -correspondents and requests -cooperation with state authorities in terms of legal and regulatory control	-meetings -forums -regular reports -round tables and high-level meetings -web page -working groups	

# **3.4 Material topics**

## GRI 3-1, 3-2, 3-3

Pursuant to GRI standards, the Company has performed a materiality assessment of topics that are important for internal and external stakeholders. The assessment consists of three steps: benchmarking, collecting stakeholders' opinions and compiling a list of material topics. Two main requirements were considered in the assessment: significance of economic, environmental or social impacts and influence on stakeholders' judgements and decisions. The benchmark analysis also considered the requirements of rating agencies regarding the disclosure of material topics and compared disclosed indicators among peer companies.

The Company conducts materiality assessment every 3 years. Since the last assessment was conducted in 2021, the list of material topics is still relevant until 2023.

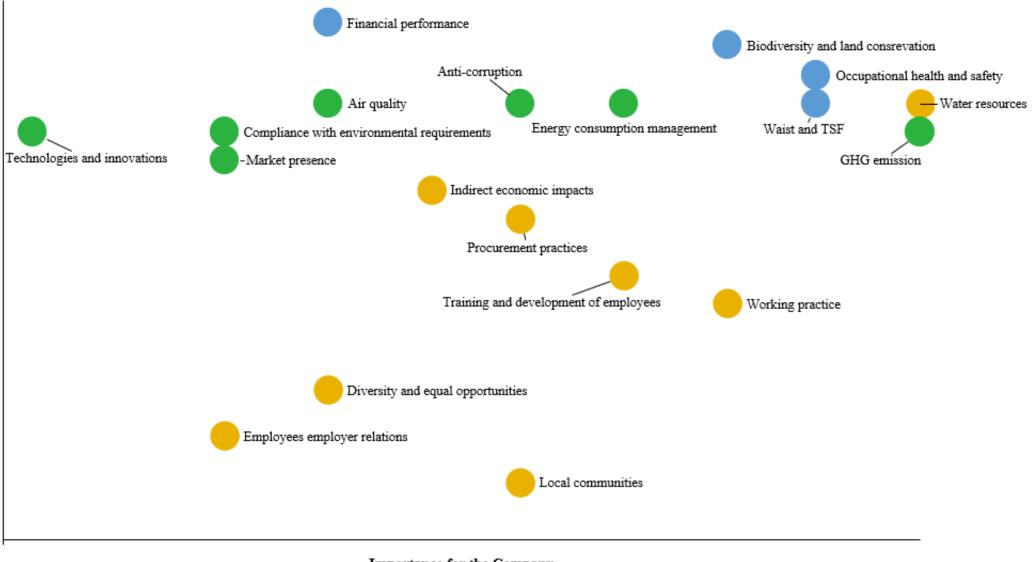
1. Benchmarking	2. Stakeholders' opinions	3. List of material topics		
<ul> <li>analysis of public information about the Company</li> <li>comparative analysis of material topics disclosed by peer companies</li> </ul>	<ul> <li>online survey among internal and external stakeholders</li> <li>interviewing the Company's management regarding the materiality of economic,</li> </ul>	<ul> <li>finalising the list of material topics</li> <li>approval of a material topics list</li> </ul>		

1. Benchmarking	2. Stakeholders' opinions	3. List of material topics		
• - analysing requirements of ESG rating agencies	environmental or social impacts on the environment, economy and society			

The results of internal and external indicators on the horizontal and vertical axes of the matrix were used to construct the materiality matrix. The rating scale used in the matrix ranges from 1 to 5 points.

An online survey was prepared for stakeholders. Representatives from the Company's shareholders, suppliers, associations, local state bodies, banks, partners and customers participated in this survey. Each sustainability topic was asked to be rated on a scale from 1 to 5 in terms of importance, where 1 - "not important", 2 - "of minor importance", 3 - "of medium importance", 4 - "of relatively high importance", and 5 - "of highest or critical importance".

Based on the results of the 2021 materiality assessment, 19 topics were disclosed under the GRI Standards, for which a materiality matrix is presented below and this matrix will be valid until 2023.



Importance for the Company

Importance for stakeholders

## 4. CONTRIBUTION TO SOCIAL AND ECONOMIC DEVELOPMENT

#### 4.1 Procurement activities

#### **GRI 2-6, 204-1**

The Company conducts procurement activities based on the principles of transparency, competitiveness, fairness and efficiency. The Company has set transparent principles and evaluation criteria for all procured goods, works and services (GWS) and potential suppliers. Reasonable requirements and equal opportunities for participation in the procurement process are provided.

#### Key indicators:

- In terms of subsoil use, in 2022, GWS was procured to the amount of KZT 104 billion:
  - 85% overall share of local content in procurement
  - 99% share of local content in procurement of services
  - 46% share of local content in procurement of goods

#### Our guidelines:

- Rules for the procurement of goods, works and services by subsoil users and their contractors for operations associated with solid minerals production, as approved by Order No. 355 dated May 21, 2018.
- Rules for synchronising the operation of e-procurement systems for solid minerals with the operation of the register of goods, works and services used in subsoil use operations and their manufacturers by Order No. 359 dated May 22, 2018
- Procurement Policy
- Procedure on Health, Safety and Environment Management in contracting organizations
- Regulation on Safety, Health, Sanitary Inspection and Environmental Protection in contractors
- Other internal documents referring to the Commercial Office and its structural units

The Company has built an efficient procurement system and organisational structure, which allows to regulate procurement processes in a detailed and timely manner. Procurement support is the responsibility of the Commercial Office, which includes:

- Logistics and Customs Support Department
- Stock Management Department
- Process Development Division
- Sales Division
- Procurement Control Division

Furthermore, the Commercial Office includes the Commercial Department, which consists of:

- Services Procurement Division
- Inventory Procurement Division (which is divided into Materials Procurement Site and Equipment Procurement Site)
- Consolidation and Analysis Division (which is divided into Planning Site and Reporting Site)

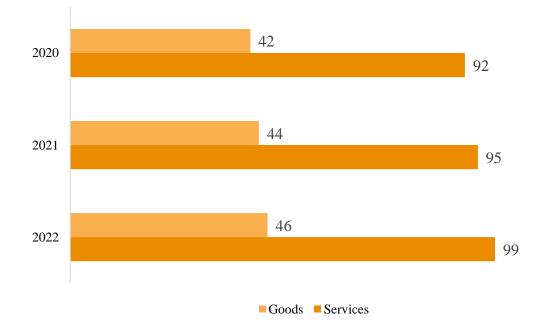
The current procurement management structure ensures effective cooperation with suppliers and a wellestablished supply chain due to the organised distribution of functional responsibilities.

## Support of local manufacturers

The Company selects its suppliers in one of the following ways:

- by procurement via Commodity Exchange (approved by state bodies for procurement by subsoil users)
- by a single source method (if permitted by the rules of procurement for subsoil users)
- open tendering method

One of the fundamental principles of GWS procurement is to support Kazakh manufacturers and focus on increasing the local content of GWS procured. In 2022, AK Altynalmas JSC procured goods, works and services for a total amount of KZT 104 billion, including 86% of local content in GWS.



## Share of local suppliers in procurement, %

## **Cooperation with local suppliers**

The Company has approved a standard document with general terms and conditions for procurement agreements, which is applicable for all procurement agreements concluded by the Company.

According to the current terms and conditions of AK Altynalmas JSC procurement agreements, suppliers are required to read the Company's Code of Conduct, comply with anti-corruption principles and avoid conflicts of interest during execution of the agreement.

Besides, the terms and conditions of agreements with suppliers require suppliers to comply with all current and relevant requirements of the legislation of the Republic of Kazakhstan in the field of safety, environmental protection and internal regulations related to the Company's activities, environmental safety, fire safety, protection of people and territories from man-caused emergencies, comply with the Procedure for Safety, Health and Environmental Protection Management in the Company's contractors.

The Company's representatives take part in events for local suppliers organised by regional Akimats. Furthermore, the Company's Managing Director for Commerce holds regular in-person meetings with suppliers on their issues and complaints.

Suppliers also have the option to address complaints on an anonymous basis through the Company's hotline, which is managed by Compliance Service. The Compliance Service also keeps a list of unreliable suppliers. The data for this list is provided by the Commercial Department, as well as by production units that are direct users of the goods, works and services procured.

In 2022, the Company, in cooperation with its Strategic Partners, came to an agreement to provide employment opportunities for people living in the regions of operation.

## **Optimisation of procurement activities**

The Supermarket project and the project to maintain an insurance stock were implemented to improve the efficiency of procurement management processes and to ensure uninterrupted supply of the Company's inventory.

The list of required stocks and its minimum level have been determined under the Supermarket project, as well as conditions have been created for storing the required quantity of goods and materials in the supermarket format. The Supermarket procurement process allows to procure low-value goods without participation of the Initiator, which saves time for the Company's production units.

An updated AK Altynalmas JSC Procurement Policy and following internal documents were developed to improve the Company's procurement system for the development of fair competition, increase the level of publicity and transparency of the procurement system, as well as to comply with the principles of sustainable development and introduce ESG factors into procurement activities:

- Procurement Procedure
- Procedure for Managing Stock Items and Catalogue of Prices, Goods and Services
- Procurement Planning Procedure
- Procedure for Procurement Requests Initiation and Generation
- Methodology for Development of Terms of Reference for Procurement
- Supplier Relationship Management Procedure
- Methodology for GWS Suppliers Evaluation
- Regulation on the Tender Commission and Expert Commission
- Regulation on Commercial Affairs Committee
- Methodology of Suppliers Selection when Procuring Goods, Works and Services

#### Plans for 2023:

- Assessing suppliers, including on ESG criteria, to build long-term partner relationships
- Optimisation of stock for efficient management of working capital
- Further optimisation and development of procurement process automation

In 2023, AK Altynalmas JSC commenced work on the design and construction of a Fresh Market farm shop in Stepnogorsk, which will positively impact a social aspect of the region. The project concept envisages the involvement of local producers to sell natural and quality locally produced agricultural products (dairy products, meat products, bread products, vegetables, fruits, etc.) without intermediaries. The Company will also gratuitously provide suppliers with a pavilion for placing their own products. The pavilion will be equipped with all necessary specialised trade equipment, such as deep-freeze chambers, chiller cabinets, cash registers, etc.

Thus, the farm shop will:

• ensure food security in the region by providing opportunity to sell the products at below-market prices

- provide a market basket for local residents
- develop agricultural production in the region of operation
- provide employment opportunities for local people
- meet the demands of the urban citizens for quality locally produced food products

# 4.2 Technologies and innovations

## 2022 key projects:

- Start up of the Wencomine system for dispatching open-pit mining operations at the Aksu-2 project and Dolinnoye deposit of the Pustynnoye project
- Automation of field documentation on geomechanical logging of core and pit walls at Aksu-2
- Improvement and optimisation of SAP systems development of custom reports and special functions to meet business requirements
- IT infrastructure installation of fibre-optic communications lines (hereinafter "FOCL") at the Aksu-2 and Dolinnoye deposit production sites
- Implementation of a SIEM system for security information management

## Our guidelines:

- Procedure on Business Project Management
- Regulation on the Management of Automation and Digitalisation Programmes and Projects
- Regulation for the Operational Project Management Process
- International Standard for Project Management
- Other internal documents referring to the Digitalisation Office and its structural units

Digital transformation is a priority area in the Company's development strategy. AK Altynalmas JSC is one of seven model factories within the Model Digital Factories project, which aims to stimulate the introduction of Industry 4.0 technologies.

2022 was focused on optimisation of operations and increasing the efficiency of the use of existing IT solutions in the Company.

In general, AK Altynalmas JSC, as a company, aims to build an integrated planning and accounting system for its processes, including the development of an optimal production plan, safe and maximally efficient processes at production sites, and the provision of high-quality and timely data for management decision-making.

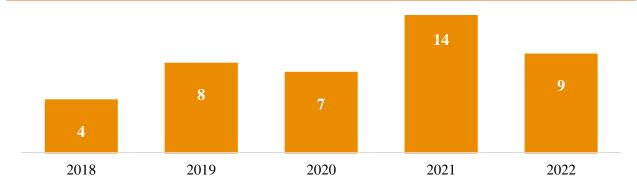
Major projects have been implemented as part of the digitalisation programme to provide production sites with high-speed communications through the installation of FOCL and Wi-Fi.

# 2022 achievements

Dispatching of open-pit mining operations at the Aksu-2 and Dolinnoye projects	The main function of the system is to track mining operations online without loss in data quality. The key enablers here are online monitoring of mining equipment operations, reducing the time it takes to exchange data between systems and people, and improving the quality and speed of data for accounting and analytics. Mining Planning Engineers use Datamine Studio OP software to plan the operations (on a weekly, daily, shift basis) based on the equipment availability. The mining plan is the trigger for the development of new levels, blocks, equipment, dumping points and includes information to update the mining manuals. The mining plan is then uploaded to the Mineadvisor system, which then transfers them to Wenco for operational management. The information from Wenco is also transmitted to Mineadvisor, where it is stored and used for reporting purposes.
IT infrastructure	Dispatching open pit mining operations based on the Wencomine solution requires full wireless coverage at the locations where the equipment is operating. Wi-Fi implementation works for Aksu-2 open pit mine to implement the Wencomine open pit mining dispatching system were completed in 2022. Antenna-mast structures were installed at the Pustynnoye project, as well as a Wi-Fi network was implemented for the Dolinnoye deposit at the server part of the open pit at the mining sites. We also provided the central warehouses with Wi-Fi for warehouse inventory control in SAP and upgraded the CCTV servers at the projects.
Automation of field documentation on geomechanical logging of core and pit walls at Aksu-2	Mobile devices for geomechanists were introduced to logging of cores and mine workings in the field. Geomechanical database was developed, as well as automated processes for monitoring the stability of pit walls and dump. This solution will allow to prepare representative data for building a 3D geotechnical model.
Development of SAP S/4HANA and SAP HCM	<ul> <li>Integration of payments with the banking system via Host-to-Host technology was implemented.</li> <li>Function for contract indexation was developed</li> <li>Loan processes are set up taking into account discounting and different types of deposits</li> <li>Dynamic replenishment of procurement limits function has been implemented</li> <li>Supermarket concept was implemented as part of procurement process</li> <li>Replication of the warehouse management system to central warehouses and transit warehouse</li> <li>Transactions on the barcode data collection terminal at the central warehouses were implemented</li> <li>Different types of reports for the financial block, commercial block, and personnel are implemented</li> </ul>

SIEM system	SIEM (Security Information and Event Management) is a security information and event management system that integrates and analyses security data from various sources in real time. SIEM systems provide the means to monitor, detect, and respond to potentially malicious activity in information systems. SIEM system implementation is an important step for the Information Security division's work.
Basics of information security training for employees	Training employees on the basics of information security is an integral part of the Company's overall security strategy. It helps mitigate risks, strengthen protection against cyber threats and create a culture of security, which is the foundation of the Company's robust information infrastructure.

Since 2018, \$42 million has been invested in the digitalisation of the Company's operations.



# Information security

Achievement of the Company's strategic goals is closely related to the management of information, which is an important resource. The Company has defined key objectives to ensure information security within the Company, among employees, and all third parties accessing data:

- protection of information from actual and potential threats
- minimisation and containment of consequences in the event of threats
- development of corporate culture in terms of information security

Information security in the Company is implemented according to policies and the approved information security management system (ISMS). This system complies with the requirements of ISO/IEC 27001 international standard Based on this system the Company improves its security level on a regular basis.

The Company regularly conducts information security audits, identifies risks and develops mitigation measures to manage information security risks appropriately.

# Plans for 2023:

<ul> <li>SAP TORO</li> <li>Equipment and process card database was implemented in SAP. The planning now is set up 18 months in advance;</li> <li>Pilot testing of quarterly planning processes and operational planning for the Pustynnoe project assets are planned in a near future;</li> <li>Integration with lower-level systems for transmission of information on downtime, defects, and operating time is also planned.</li> </ul>		<ul> <li>Anticipated effects:</li> <li>Reduction of unscheduled equipment downtime;</li> <li>Reduction of equipment failures and malfunction;</li> <li>Cost optimization for maintenance and repair;</li> <li>Minimum of production risks related to equipment operation;</li> <li>Improving transparency in maintenance and repair management business processes;</li> <li>Increasing the coverage of maintenance and repair activities in terms of material and technical resources.</li> </ul>
<ul> <li>Automation of management reporting</li> <li>Optimization of period end closing processes;</li> <li>Revision;</li> <li>Automation of management reporting forms and their visualization based on BI tools.</li> </ul>		Anticipated effects: <ul> <li>Shorten the time required to prepare management reporting</li> </ul>
SAP/4Hana upgrade • Технический апгрейд системы собственными силами Tech	┝	Anticipated effects: <ul> <li>Improved stability of S/4Hana performance</li> </ul>
<ul> <li>Improvement of SAP system</li> <li>Improvements to business processes, integrations, and reporting are carried out</li> </ul>	<b> </b>	<ul><li>Anticipated effects:</li><li>Improved functionality and quality of business processes and users experience</li></ul>
Integration with external laboratories <ul> <li>Exchange of geological sample data with external laboratories</li> </ul>		<ul> <li>Anticipated effects:</li> <li>Reduced risk errors when sending samples and processing analytical results;</li> <li>Improved results and data transfer speeds;</li> <li>Sample status awareness for predicting ore quality;</li> <li>Automatic detection of deviations.</li> </ul>
<ul> <li>Information security</li> <li>SIEM (Security Information and Event Management) system expansion</li> </ul>		<ul> <li>Anticipated effects:</li> <li>Improved threat detection;</li> <li>Improved data analysis;</li> <li>Expanded threat context;</li> <li>Expanded response functions;</li> <li>Improved compliance with security requirements.</li> </ul>
<ul> <li>Information security</li> <li>Implementation of a system for protection of automated network process control system</li> </ul>	<b> </b>	<ul> <li>Anticipated effects:</li> <li>improved security;</li> <li>reduced risks of production failures;</li> <li>Improved productivity and efficiency;</li> <li>Compliance with requirements and regulations;</li> </ul>

## 4.3 Cooperation with regions

## GRI 203-1, 203-2, 413-1, 413-2

AK Altynalmas JSC is particularly focused on social support of the regions. The company is committed to contribute to the development of the regions where it operates by implementing social projects. The Company closely cooperates with local executive authorities to improve the quality of people's lives.

#### Key indicators:

- Voluntary social projects **KZT 1 billion**
- Mandatory payments for social and economic development of regions of operations KZT 281 million
- Establishment of Altynalmas MetLab laboratory in Stepnogorsk Mining Engineering College

- 53 houses in Aksu village were inspected for serviceability upon the request of the local executive authorities
- Construction of a multifunctional sports recreation space in Aktogay district
- Repair of the front of the Botakoz kindergarten in Zholymbet village
- Total renovation of the Qamqorlyk Early Intervention Centre for exceptional children in Stepnogorsk.
- Provision of sewing machines to the women of Zholymbet village
- Publication of "Kazakhaltyn. Golden Pages of History" book and organising events in honour of the 90th anniversary of Kazakhaltyn MMC JSC

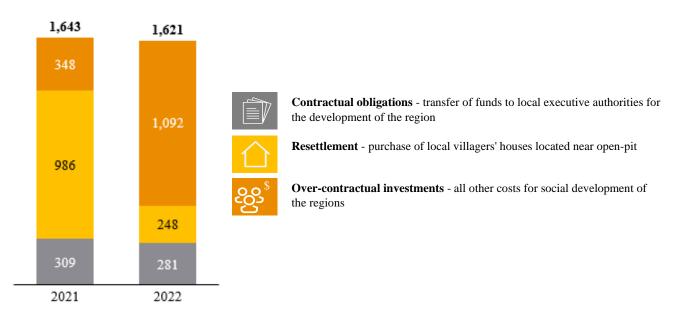
Being one of the largest gold mining companies and operating in four regions of Kazakhstan - Zhambyl, Karaganda, East Kazakhstan, Akmola - AK Altynalmas JSC has a significant impact on the social and economic development of these regions by creating employment opportunities and contributing to local budgets.

The Company's management assesses the Company's activities in the social sphere. Social Cost Allocation Methodology was developed to enable the Company to assess the resources spent and the results of social projects, where stakeholders' opinions are taken into account.

Under the terms and conditions of subsoil use contracts on an annual basis, the following is allocated by AK Altynalmas JSC at the end of each year:

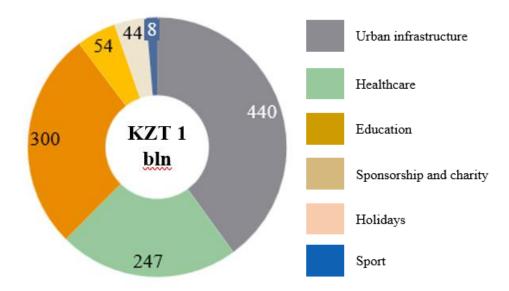
- education 1 percent of net profit
- for social and economic development of Akmola region 1% of the investments amount
- for R&D 1 percent of total income from contractual activities

## Social investments of AK Altynalmas JSC, KZT million



AK Altynalmas JSC transfers funds to regional budgets for social and economic development pursuant to subsoil use contracts. The amount of mandatory contributions for 2022 was KZT 281 million. In addition, the Company voluntarily provides social assistance to the needy social groups. The amount of contributions for 2022 was KZT 1 billion under voluntary social projects.

## Over-contractual investments in social projects by categories, KZT million



Social investments are oriented towards the projects that are of most significance to the local people, such as healthcare, development of urban infrastructure, education, sports and culture.

AK Altynalmas JSC implements projects on construction and repair of premises and fronts of buildings, road lighting, repair and fencing of parks, improvement of settlements.

As part of the development of science and education, the Company annually participates in the Road to School campaign designed to help low-income and large families buy school supplies. The Company also sponsors local residents to enrol in educational institutions and to participate in competitions.

In 2022, the Company implemented projects related to sports - construction of sport recreation spaces, purchase of equipment and sports uniforms, renovation of the school's sports hall and organisation of a judo sports day.

The Company annually takes an active part in environmental and cultural events and organises holidays in the regions. It also pays great attention to veterans of World War II and the Afghan War, widows of World War II participants, homefront workers, retirees, single mothers, and veterans of the Company, providing the necessary financial aid and presenting gifts on holidays. The Company also provides financial support to the citizens of the village by purchasing coal to heat their homes. Company representatives participate in public hearings in the regions, to build a constructive dialogue with residents on matters of sustainable development and to make joint decisions on environmental and social issues and requests of the population.

We strive to implement charitable projects and programmes to address social issues that are of social importance to local people. Local people, public associations and state bodies and experts in the field of public and social policy are involved in these activities. An ongoing dialogue with local executive authorities on social issues is facilitated by the Company's Government Relations Department.

# During 2022, the Company implemented the following key projects in the regions where it operates:

Resettlement of Aksu village people	AK Altynalmas JSC recognizes that mining activities have an impact on the local community in the regions where it operates, that's why it pays great attention to the requests of local residents and local executive authorities. Thus, 33 houses were purchased and 20 houses were assessed for major repairs to reduce the potential impact of open-pit mining operations to the area of these houses location. The Company strives to assess and respect the rights and needs of local people according to laws and international standards in effect.
Establishment of scientific and technical laboratory Altynalmas MetLab	The company works closely with Stepnogorsk Mining Engineering College, which is a strategic partner for training, retraining and skills development programmes. AK Altynalmas JSC implemented the Altynalmas MetLab project in 2022. The project aims to train beneficiation specialists using modern laboratory production equipment. The laboratory demonstrates sample preparation processes as in a real gold processing plant with crushing and grinding of gold ore. The AltynalmasMetLab project is designed to develop and improve research and development activities in the region, international scientific and technical relations, generally improve the efficiency of the college, and form a system for sharing best practices.

In the autumn of 2021, a medical examination of residents was initiated by the Mediker Industrial and Viamedis medical companies. Kazakh Research Institute of Oncology and Radiology of the Ministry of Health of the Republic of Kazakhstan and the Head of the Research Laboratory of Health and Environment were also involved in the examination. A total of 1012 people were examined, which is the required number of examined people to form an opinion on the general health status of the local people.

Monitoring of health and environmental conditions in Stepnogorsk and Aksu, Bestobe and Zholymbet villages In 2022, the environmental condition in the region was monitored by sampling water, soil and air for pollutants.



The Company sponsored the installation of a new front of the building of the Botakoz kindergarten in the Zholymbet village, Akmola region.

Repair of the front of the Botakoz kindergarten



AK Altynalmas JSC supported the establishment of Qamqorlyk Early Intervention Centre by financing the major repairs at Stepnogorsk Multidisciplinary City Hospital. An opening of centre for babies up to 3 years old with cerebral palsy and neurological disorders was held in the summer of 2022. The centre gives children free rehabilitation, helping them to acquire and develop unformed functions and skills, as well as diagnostic audiological examination and electroencephalography of the brain on the most advanced equipment.



AK Altynalmas JSC financed the major repair of Qamqorlyk Early Intervention Center for children with special needs

## Plans for 2023:

- Establishment of Association of Entrepreneurs and Industrialists in cooperation with local entrepreneurs and industrialists in Stepnogorsk
- Construction of a sports recreation space in Ortaderesin village
- Construction of 2 outdoor sports training complexes in Aksu village
- Acquisition of physiotherapy equipment for the outpatient clinic in Zholymbet village
- Further support of social and economic development and infrastructure projects in Aksu, Zholymbet and Bestobe villages
- Social support to Karaganda and Zhambyl regions

## **5. EMPLOYEES WELFARE**

## 5.1 Health and safety

Health and safety of employees are the top priority in AK Altynalmas JSC. To achieve zero injuries, we constantly improve our health and safety system in compliance with the best international practices.

## Key indicators:

- The Company's LTIFR was 0.27 in 2022
- 7,467 number of facility inspections
- Certification according to **ISO 45001:2018**

#### KPI targets:

- We strive to achieve high performance by being responsible, honest, ethical and empathic with our colleagues
- The first and foremost thing we ensure is the complete safety of people and the environment

**GRI 403-1** 

## Our guidelines:

- AK Altynalmas JSC Golden Safety Rules
- Health and Safety Policy
- Instruction and procedures on health and safety
- Procedure on Health, Safety and Environmental Protection Management in contractors
- Vehicle Safe Operation Procedure
- Procedure for Incidents Root Cause Analysis;
- Regulation on Industrial Control
- Other internal documents on health and safetys

#### **Compliance with international standards**

• ISO 45001:2018 Occupational Health and Safety Management System

We are profoundly convinced that all incidents and injuries connected to labour activities may be prevented by building up and developing a world-class safe production culture. Our approach to health and safety (HS) is based on the commitment of all levels of management to prioritise safety, create a culture of zero tolerance, and conduct effective risk assessment and management.

HS issues are supervised by the Safety, Health and Environmental Protection Committee under the Board of Directors.

Currently, two projects, Pustynnoye and Akbakai, as well as the Head Office of AK Altynalmas JSC, are certified according to ISO 45001:2018.

## GRI 403-1, 403-4, 403-7

The Company has implemented a health and safety management system pursuant to the requirements of the Labour Code of the Republic of Kazakhstan. The system covers 100% of employees of the Company and its structural units.

Integrated HS system is a system of 1st, 2nd, 3rd level committees for HS, environmental protection and sanitary inspection of AK Altynalmas JSC (Safety Committee 1, 2 and 3).

- Safety Committee 1 a Company management-level committee chaired by the Chairman of the Executive Committee. The Committee is held quarterly attended by the Managing Directors and Heads of the Company's Departments
- Safety Committe 2 a committee at the Company's projects level chaired by the Company's Directors for Operations. The committee meeting is held at least once per rotation attended by heads of structural units and line personnel<sup>12</sup>
- Safety Committe 3 a committee at the level of structural units, project sites of the Company, chaired by the heads of structural units and sites, held with the working personnel at least once per rotation.

The Company's Golden Safety Rules have been developed according to AK Altynalmas JSC's HS Policy. These Rules define the key requirements for safe performance of work based on the experience of leading mining companies in the field of industrial safety. These Rules apply to all employees of the Company's structural units, representatives of contractors (subcontractors) and visitors of the Company's projects.

AK Altynalmas JSC keeps on successful implementation of the major project Sana Safety - Conscious Safety. In 2022, the project team developed and started implementation of three new HS procedures. The following procedures have been developed and approved:

- 1. Procedure on Internal Audit of HS Management System
- 2. Rules on Material and Oversize Handling with Motor Vehicle
- 3. Safety Rules for Working at Height

Training material was developed for each procedure and the project team trained all line managers.

In 2022, to maintain and improve the effectiveness of the previously developed and implemented procedures, the project team has been carrying out practical mentoring of the Company's blue-collar employees and additional training on the following modules:

- 1. Risk assessment
- 2. Behavioural base safety
- 3. LOTO Lock out Tag out
- 4. RCA Rout Cause Analyses

The following procedures were implemented in 2022 as part of the ongoing optimisation of the health and safety management system:

- Safe Work at Height procedure
- Load Handling Works procedure
- Health and Safety Management Internal Audit procedure

The following outcomes are expected from this project - increased commitment of managers and involvement of all employees in adhering to high international safety standards, increased responsibility of line managers for safety, effective two-way communication, a process of continuous training and development of employees' safety skills, and a new approach to investigations and incident reporting.

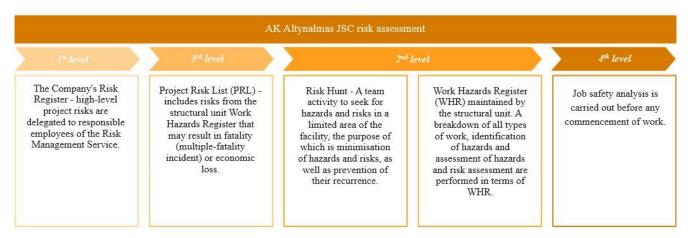
<sup>&</sup>lt;sup>12</sup>According to the Labour Code of the Republic of Kazakhstan, one rotation may not exceed 15 calendar days.

The Company plans to take measures improving labour conditions and technical re-equipment as part of preventing health and safety impacts. For harmful factors, the impact of which cannot be prevented or mitigated to an acceptable level, the Company uses collective protective equipment (hereinafter - "CPE") and personal protective equipment (hereinafter - "PPE").

## Health and safety risk management

#### **GRI 403-2**

The Company has implemented the Hazard Identification, Assessment and Management of Health and Safety Risks procedure, which regulates unified requirements for hazard identification, assessment and management of health and safety risks. The process is based on the legal requirements of the Labour Code of the Republic of Kazakhstan and the requirements of ISO 45001:2018.



Measures to eliminate and mitigate risks depending on the level of risk are designed according to the hierarchy of controls as follows:

- elimination measures to modify the work in such a way that the hazard is completely eliminated
- **substitution** measures to modify the work to replace a hazardous factor with a less hazardous one
- engineering means design solutions that prevent the risk from occurrence
- **administrative controls** procedures to control the hazardous factor
- **PPE** personal protective equipment. Least effective measure

Implementation activities regarding elimination and/or mitigation of risks are reviewed by the heads of the Company's structural units at least once a quarter. Following an incident root cause analysis (hereinafter - "IRCA"), recommendations and corrective actions are also developed to address all root causes identified in the root cause analysis and prevent recurrence of similar incidents in the future.

The committee prepares a lessons learnt information bulletin within 24 hours after completing the IRCA and report. The information bulletin on lessons learnt is provided by the Head of the IRCA Commission for the Company's structural units and contractors information.

The Company has developed and implemented a Stop work authority procedure, which stipulates that all employees and contractors of the Company have the right to stop work if there is a threat to their own life or health, as well as a threat to other employees, without repercussions in the form of disciplinary action.

When the stop work authority is applied, information regarding work suspension matters and associated results shall be registered within the project structural unit and, depending on the reason of application, within the Company.

Number of inspections of facilities conducted over the fast three years						
Indicator	2022	2021	2020			
Total number of facilities inspections conducted	7,467	6,071	5,772			

## Number of inspections<sup>13</sup> of facilities conducted over the last three years

## Health

GRI 403-3, 403-6

Following are the functions of health services that contribute to the identification and elimination of hazards and minimisation of risks:

- daily monitoring of pre-shift and post-shift medical examinations
- preparation and organisation of annual health examinations, preparation of a health improvement plan for employees
- organisation of production control followed by the provision of an action plan
- inspections of structural units with further issuance of prescription statements

The Company ensures access to health care services for all employees by means of introducing electronic systems for periodic medical examinations, organising annual medical examinations at the project sites, and providing a single hotline for emergency medical calls at the projects. All employees and facilities of the Company are insured according to the requirements of the legislation of the Republic of Kazakhstan. Employees undergo mandatory periodic medical examinations.

The following medical services are provided to employees as required by the laws of the Republic of Kazakhstan:

- emergency medical aid by aeromedical units and ambulance
- pre-hospital medical care in a day care medical office
- qualified medical care in a rotational medical office
- Compulsory medical examination, including daily pre-shift and annual periodic medical examinations
- In case of a pandemic medical surveillance of personnel
- Immunoprophylaxis against epidemiological diseases
- voluntary medical insurance

Pursuant to Article 273 of the Code of the Republic of Kazakhstan on Public Health and the Healthcare System, the medical data of employees shall not be disclosed to third parties.

## Consultation and participation of employees on HS matters

**GRI 403-4** 

<sup>13</sup> Internal Control and Production Control

As part of the HS, Environmental Protection and Sanitary Inspection Committees, employees participate on HS matters through SC2 and SC3, as well as by means of trade unions and employee representatives. Trade unions and employees representatives participate in:

- incidents investigations
- discussions regarding amendments and modifications (if any) to the collective agreement
- discussions regarding new legislative initiatives and their impact on the Company's operations
- hazards identification and assessment of risks and opportunities for improvement
- provision of continuous improvements
- certification of production facilities for working conditions
- conciliation commission meetings

#### Health and safety training

#### GRI 403-5, 404-1

All employees of the Company at all projects and at the Head Office are 100% trained on HS by specially developed programmes and in set periods. Additional industrial safety training is also provided for specialists working at hazardous production sites. Trainings for hazardous activities are conducted based on the training schedules of project employees and upon the requests from production sites. In 2022, 55 hours of training was provided for white collar employees, while 26.4 hours of training was provided for blue collars.

#### **Management of contractors**

#### **GRI 403-8**

The Company has a procedure to manage safety for contractors. The procedure is designed to establish requirements for contractor qualifications in the field of HS, clear responsibilities, ensure active interaction between the Company and contractors, and continuous monitoring of contractor performance in this area. All contractors subject to the requirements of the procedure undergo a qualification assessment to verify that the selected organisations meet the Company's expectations and requirements.

#### **Occupational injuries**

#### **GRI 403-9**

14 incidents took place in 2022, a 40% increase compared to 2021 (10 accidents). By type of incident, the breakdown for 2022 is as follows:

#### Number of occupational incidents among employees

For all employees	2022	2021
Total number of recorded occupational injuries (incidents)	14	10
LTIFR <sup>14</sup>	0.27	0.23
Total number of occupational injuries with severe outcomes (excluding fatalities)	5	6
Total hours worked	10,224,908.8	8,646,208

<sup>&</sup>lt;sup>14</sup>The rate calculation formula is (total time lost due to injuries) \* 200,000 / (total hours worked).

Fatalities	1	0
LTAFR	10	0

Number of occupational incidents among contractors

For all employees who are not full-time employees but whose work and/or workplace is supervised by the Company	2022	2021
Total number of recorded occupational injuries	5	9
Total hours worked	4,904,170	3,406,323

Based on the results of investigations pursuant to the requirements of the Labour Code of the Republic of Kazakhstan and analysis of the root causes of incidents, the main types of occupational injuries are the falls, impact of moving objects and components, effects of harmful and hazardous production factors and substances, and motor vehicle crashes (MVCs).

Unfortunately, there was one fatality in the reporting period. Bad weather conditions led to the loss of power supply lines - two overhead lines contacted and the overcurrent protection relay tripped the vacuum circuit breakers. A work order was issued for repair work, and after the work was completed, an application was made to reactivate the disconnected lines. After that, work on restoration of the circuit in the central distribution substation began, a line disconnector had to be switched on in the control cabinet. When the cabinet was assembled (vacuum circuit breaker was switched on first) the ON button was pressed, but there was no activation. The diagram on the cabinet door indicated that the bottom busbar was live. It is assumed that the employee knew this. Employee did not isolate the source of hazardous energy and attempted to manually adjust a mechanism that prevented a vacuum circuit breaker from tripping, which ultimately resulted in a fatal accident.

The Company takes corrective measures following the investigation of each incident. These measures are meant to prevent and/or avoid similar occupational incidents, thus reducing the probability of their occurrence in the future. In 2021, procedures for motor vehicle safe operation were implemented and trainings was conducted on health and safety, industrial safety at hazardous production facilities, pressurised vessels, working at heights, and working in confined spaces.

## **Emergency preparedness and response**

The Company currently has emergency readiness procedure in place to respond to unexpected incidents in an appropriate manner. The Company's projects, which are hazardous production facilities, have developed emergency response plans (hereinafter - "ERP") for different sites. The ERP includes measures for rescuing people, evacuation routes, measures for eliminating incidents and preventing their development, actions of employees in case of emergencies, as well as actions of emergency rescue service units and site personnel. The operational part of the ERP is scrutinised by the personnel of the relevant sites. Regular and emergency drills are conducted for each ERP position according to the approved schedule.

Preparation for appropriate response to incidents is carried out in the following steps:

- identification of possible incidents based on the results of identification of risks and hazardous factors, as well as development of organisational and technical measures to prevent incidents in the Company's Hazardous Industrial Facilities Safety Declaration
- development and approval of the ERP
- development and implementation of plans and schedules for employees trainings and emergency drills

## 5.2 Human resources management

AK Altynalmas JSC values its employees and strives to become one of the best employers in Kazakhstan. To achieve this goal, we continuously improve working conditions, motivate our employees and provide equal opportunities for career development.

## Key indicators:

- 10,528 headcount as of December 31, 2022
- **22%** staff turnover rate
- 2,812 number of employees hired
- 17% share of women in the total number of employees

## 2022 goals:

- Improving the efficiency of Personnel performance: scaling up automation of the target setting process in SAP Success Factors system, the ability to set annual and quarterly goals, development and implementation of the KPI library
- Transformation of corporate culture: renewal and promotion of values through the Altyn Sheber Recognition program and training program
- Headcount optimization
- Digitalization of HR processes and implementation of HR analytics
- To reduce staff turnover rate

## Our guidelines:

- Regulatory and legal acts of the Republic of Kazakhstan
- Labor Code of the Republic of Kazakhstan
- The Company Charter
- Resolution of Executive Committee
- Regulation on Human Resources Department
- The Integrated Management System Manual
- Accounting policy
- Recruitment policy
- Regulations on Employee Performance Management System
- Regulations on Employees Remuneration
- Regulations on Bonuse Payments
- other internal documents where the Human Resources Department and its structural units are assigned as responsible parties

AK Altynalmas JSC takes responsibility for creating proper working conditions for employees, providing opportunities for their development and respecting their rights. Human resources matters in the Company are managed by the Human Resources Department, which is managed by the Chief People Officer and is in charge of the recruitment, onboarding and development of the Company's human resources, including employee training, performance management, corporate culture development and remuneration management. According to its HR policy, the Company seeks to attract and develop talented and motivated employees who share corporate values and are able to effectively address current and future challenges.

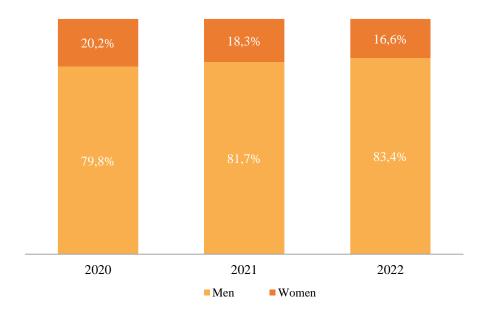
#### Staffing

At the end of 2022, the headcount was 10,528 employees. The Company does not tolerate any discrimination, distinctions, exclusion and preference in the realisation of employees' rights. Every employee has the right to equal payment for equal work, without any discrimination. Due to the Company's expansion and headcount growth, in 2021 staff turnover was 25% including Kazakhaltyn MMC JSC projects, which is 10% higher than in 2020. In 2022, employee turnover is 22%, which is 3% lower than in 2021.

	2022	2021	2020
AK Altynalmas JSC	10,525	10,540	6,709
Total staff turnover	22%	25%	15%
by gender:			
Women	1,745	1,929	1,487
Men	8,780	8,611	5,222
by age:			
Under 30	2,436	2,578	1,545
30-50	6,196	6,031	3,771
Over 50	1,893	1,931	1,393

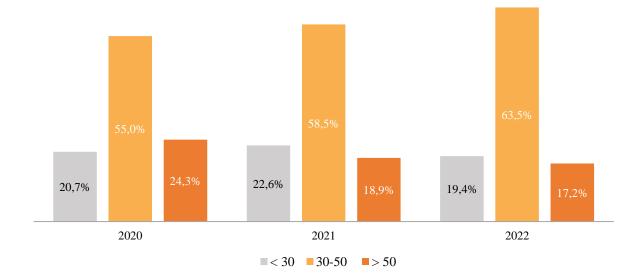
## Total headcount and staff turnover

The percentage of women in 2022 is 16.6% of the total number of employees. The lack of gender balance among employees is a reflection of the mining industry, where large proportion of the workforce is represented by male due to the hazardous and physically demanding working conditions. Nevertheless, we have diversity initiatives and strategies in place to attract and promote talented employees regardless of race, religion, age, gender, disability or other characteristics. The staffing structure of the entire Company and its management team reflects diversity in terms of age.



## Percentage-based separation of employees by age

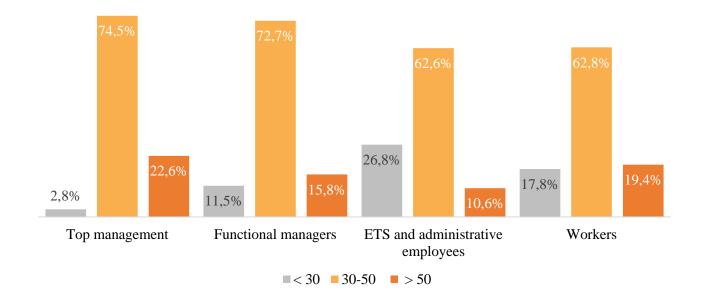
Ratio of employees in different age categories did not change significantly (see graph above). The proportion of employees between 30-50 has grown steadily over the past three years, with a 5% increase in 2022 in particular. The over-50 category fell by 1.7%, while the under-30 category fell by 3.2%.

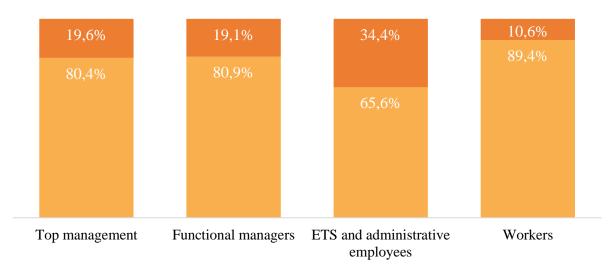


# Number of employees by employee categories

The headcount of the companies incorporated in AK Altynalmas JSC at the end of the reporting period decreased from 10,540 to 10,528 employees. The number of workers decreased from 8,492 to 7,437 (12.4% decrease), functional unit managers number decreased from 654 to 619 (5.4% decrease), and senior managers decreased from 70 to 56 (20% decrease).

Indicator	Top management	Functional managers	Specialists	Workers
Number of employees	56	619	2,416	7,437





#### Men Women

Labour relations in the Company are regulated by the Labour Code of the Republic of Kazakhstan, as well as other local regulations. AK Altynalmas JSC takes responsibility for ensuring compliance with labour rights, providing employees with benefits and guarantees stipulated by the labour legislation. Each employee is hired pursuant to the laws of the Republic of Kazakhstan. The employer must notify the employee of material changes in the Company's activities no later than 15 calendar days in advance, unless the labour or collective agreements provide for an earlier notice period.

#### **Talent attraction**

#### **GRI 401-1**

The main factors of the Company's recruitment policy are a transparent and fair approach, provision of equal opportunities and unbiased assessment in selection process. To attract qualified personnel, the Company promotes a positive image, applies a comprehensive personnel search system (SHL international competence assessment system), and carries out activities to find talented graduates of educational institutions. Various recruitment sources are used, such as recruitment websites, social media, a professional contacts network, and an internal recruitment programme called Invite a Friend.

The following standards and principles of personnel recruitment are established to create an efficient and transparent system of personnel recruitment and onboarding in the Company:

- the Company offers equal opportunities for all candidates to participate in the recruitment process if they meet the requirements of the vacancy and the position profile
- All recruitment and hiring decisions must be objective, fair and transparent, they must be implemented by ensuring that both the line manager and a representative of the HR Department are involved in the recruitment process.
- no discrimination on any grounds such as race, colour, religion, gender, age, ethnicity, sexual orientation, political views or social status is permitted in the recruitment and hiring processes. The principle of non-discrimination is a mandatory requirement for all structural units of the Company
- The Company has an onboarding programme to help new employees quickly integrate into the Company and start working efficiently.

• The Invite a Friend referral programme was introduced to promote the employer's brand, reduce staff turnover, and create a unified corporate culture (uniting people with common values). The programme has cash rewards depending on the level of the employee hired

#### Number of employees hired and staff turnover

The number of employees recruited (2,822) decreased significantly from the year before (5,977) due to the expansion of the company in 2021.

Indicator	2022	2021	2020
Total	2,822	5,977	852
Men	2,491	4,784	679
Women	321	2,513	173

The following measures are taken to reduce the staff turnover rate in the Company:

- Payment of financial aid under the collective agreement and provision of social benefits
- Improved recruitment, onboarding and mentoring processes

Indicator	2022	2021	2020
Tota; staff turnover	22%	25%	15%
Men	22%	27%	16%
Women	22%	16%	10%
Under 30 years	26%	23%	11%
Between 30 and 50	21%	24%	16%
Over 50 years	22%	29%	18%

## Mentorship programme

The Company's Regulation on Mentorship defines a unified procedure for organising and conducting mentorship work, the rights and obligations of mentors and the employees assigned to them. More than 164 employees were selected and sent to the Mentor School for further knowledge and experience sharing with young trainees.

The mentorship is aimed at practical training and preparation of trainees to work independently at production facilities. It is based on a unified system of transferring experience, skills and knowledge. The mentoring period is determined for the trainee by the head of the structural unit jointly with the mentor on an individual basis for a period of one to three months. To be admitted to independent work, a trainee must receive a positive recommendation from the head of the structural unit, as well as the conclusion of the qualification commission on admission to independent work.

## Social benefits

#### GRI 2-30, 401-2, 401-3, 407-1

Social support for employees is an integral part of the Company's HR management system. AK Altynalmas JSC strives to create the most comfortable working conditions and favourable social and psychological atmosphere possible.

The Company's social benefits include the following social advantages (over and above those established by law):

- catering services
- transport services
- financial aid for funeral
- financial aid upon retirement
- birth allowance
- organisation of mass cultural events
- mobile phone payments
- New Year gifts for employees' children
- voluntary medical insurance for employees once their probation period is over
- additional meal and taxi during overtime work

Every employee is granted with the right for parental leave pursuant to the Labour Code of the Republic of Kazakhstan. 147 employees took maternity/paternity leave in 2022.

# Number of employees who took parental leave

Indicator	Total	Men	Women
Number of employees who took maternity/paternity leave during the reporting period	147	1	146
Number of employees who continued to work after the end of maternity/paternity leave that lasted for up to three (3) years	35	-	35
Number of employees who resumed to work at the end of maternity/paternity leave and continue to work for 12 months after returning to work	2	-	2

## **Cooperation with trade unions**

The key milestone for 2022 was the collective agreement signed with AK Altynalmas JSC in July. The following was also accomplished in 2022:

- 1. Participation in certification of 44 positions at the projects.
- 2. Reimbursement of treatment in health resorts located within the territory of the Republic of Kazakhstan clause was included in the Collective Agreement with assistance from trade unions. This clause is primarily applied to the Company's employees who got occupational disease or injury at work, as well as to employees working in harmful working conditions as per 3.1 to 3.4 harmfulness levels pursuant to Labour Code of the Republic of Kazakhstan.
- 3. Conditions for targeted social assistance were included in the Collective Agreement at the initiative of the social partners

Such events as Metallurgists' Day, Miners' Day, and Builders' Day were celebrated in 2022 with special awards and cash bonuses for employees. Furthermore, cash bonuses were given to women for International Women's Day, as well as gifts to children for New Year.

There are two trade unions and one representative body in AK Altynalmas JSC:

- KasipKorgan industry trade union. It comprises 1,318 employees (22% of the Company's employees)
- Kazprofmetal industry trade union. It comprises 1,157 employees (19% of the Company's employees)

- Kasip-Kazakaltyn trade union, which includes 363 employees
- Altynalmas' employees' representative body, comprising 2,667 employees (45% of the Company's employees)

# Strategic human resources management outcomes for 2022

## **HR** digitalisation

- Implementation of HR analytics and creation of dashboards on the Power BI platform
- Staff turnover report and staff classifier report are prepared in the Power BI interactive dashboard format and integrated with SAP HCM.
- Automation of monthly bonus calculation is done in SAP HCM
- Implementation of Altyn Sheber professional competition
- Support of **Professionalism** value
- Introduction of an additional motivational tool for blue-collar occupations (80% of the staff)
- Annual selection of winners per project (12-20 nominees)
- Ceremony for awarding letters and certificates of commendation
- To increase performance efficiency
- Shaping the talent pool from among the winners of the competition
- Development of the mentorship programme for blue-collar occupations
- Reducing the turnover of qualified staff
- Reducing occupational injuries (the condition of no disciplinary infraction)

Unified additional payment percentage

• A unified additional payment percentage was established for Aksu-2, Pustynnoye and Akbakai projects

Signing of the collective agreement

• 8422 employees signed the collective agreement. It is 80 percent of the total number of employees.

## "Women in mining"

• As part of the Company's women employees leadership development programme, Women - Haul Truck Operator pilot project was initiated in 2022. Under this project, women employees started trainings to become tractor operators and C1 category drivers.

## Trade unions:

There are two trade unions and one representative body in AK Altynalmas

# Plans for 2023:

- Improvement of remuneration strategy
- Implementation of the recognition program
- Implementation of the LLP "Kazakhaltyn Technology" action plan
- Development of social relations
- Introduction of a referral programme

- Reassessment of positions due to changes in organisational structure
- Development of a talent pool concept for production staff

## Remuneration

#### GRI 201-1, 202-1, 405-2

AK Altynalmas JSC strives to provide fair remuneration to its employees according to their contribution to the success of the Company. The main components of the remuneration system are fixed remuneration (base salary), variable remuneration (monthly and/or annual bonus) and social benefits. The Company successfully keeps using the unified labour remuneration system based on the job grading system. This system implies fair remuneration regardless of gender, age, ethnicity, based only on objective factors such as qualifications, tasks complexity and level of responsibility.

Encouraging and rewarding high performing employees is critical to keep motivation levels high. The Company endeavours to ensure that its employees are paid at or above the market average. The average salary for the Company in 2022 was KZT 378,000 and 404,000 for men and women, respectively. Such rates are significantly higher than the minimum salary in the country (KZT 60,000) and the average salary in the region of Kazakhstan (KZT 285,000).

Average salary for the Company in 2022 (KZT)		Minimum salary in Kazakhstan in 2022 (KZT)		Average salary Kazakhstan in 2	$\mathbf{U}$
For men	For women	For men	For women	For men	For women
378,077	404,197	60,000	60,000	284,960	284,960

## Plans for 2023:

• Formation of personnel reserve for MD, DD position categories

## Performance management and employees motivation

#### **GRI 401-2**

2022 results:

- Communication sessions were held jointly with managers
- Staff of new projects were trained on goal-setting, the process of performance evaluation and the KPI system were explained

The employees Performance Management System (hereinafter - "PMS") (standardisation of goal-setting culture) was first introduced in the Company in 2020 through implementation of the balanced scorecard system of AK Altynalmas JSC and establishment of maps on key performance indicators of structural units and employees. The PMS objective is to ensure effective implementation of the Company's priority tasks and strategic initiatives. In 2020, the Company began preparations to automate HR management processes in SAP system, HCM and Success Factors (SF - talent management system). In 2022, HR analytics was introduced to the SAP system. Staff turnover report and staff classifier report are prepared in the Power BI interactive dashboard format and integrated with SAP HCM.

The following 4 consecutive phases are distinguished within the annual cycle of employees performance management:

- Phase I goals are set between January 1 and February 15 of the reporting year
- Phase II interim mid-year review of employees performance is to be conducted between July 1 and August 15 of the reporting year
- This phase is optional and is not mandatory
- Phase III end-year performance evaluation of employees in the period from December 1 to January 31 of the year following the reporting year
- Phase IV bonuses based on performance evaluation results

In 2022, approximately 981 employees were subject to an annual performance evaluation (600 employees in 2021), 95.6% of whom met their individual targets and were awarded an annual bonus (4.6% failed to meet the target - did not meet expectations and were not awarded bonuses). The base rate of remuneration depends on the category of personnel. The bonus part is individual for everyone.

Employees subject to annual employees performance evaluation in 2022			
AT - administrative and technical personnel: specialists, engineers	655 people - 62%		
ML - middle-level managers	276 people - 34%		
DD - Department Director, Project Manager, Head of Audit Service, Head of Risk Service	37 people - 3%		
MD - Managing Director	8 people - 1%		

OS category employees - operational staff, for whom, due to the specific nature of their activities, it is not possible to set annual performance targets only, so that two types of bonuses are established:

- a) Monthly bonus
- б) Annual bonus

Automation of monthly bonus calculation is carried out in the SAP HCM system. The maximum monthly bonus rate is 20% of the monthly base salary.

## Results of 2022 on employee's performance management

Communication sessions were held jointly with managers

Staff of new projects were trained on goal setting, the process of performance evaluation and the KPI system were explained

## Plans for 2023:

- Establishment of a training centre to improve the efficiency of mandatory training
- Development and implementation of a leadership development programme
- Introduction of a mentorship programme within the Woman in Mining project

# **5.3 Employees development**

Continuous training and comprehensive development of personnel is the key to the Company's success. We strive to create all necessary conditions for the professional growth of our employees.

# Key indicators:

- KZT 900 million invested in employees' training and support of educational organisations
- 28 employees got certification from the Institute of Leadership and Management
- 11 employees got diploma from the Institute of Leadership and Management

#### GRI 404-1, 404-2, 404-3

## Our guidelines:

- Regulation on Personnel Training and Development
- Regulation on Mentorship
- Regulation on Internal training

## **Personnel training**

The company values its employees and supports their commitment to continuous learning. Employees training and development is one of the top priorities of the Company's talent management activities. We deliver the best and most advanced educational practices in industrial safety, human rights, health and safety, as well as professional training. The Company implements programmes to develop leadership competencies, trains mentors and internal trainers. The Company's employees undergo mandatory and professional training on an annual basis.

The Company, upon pre-approval, provides financial support to employees wishing to pursue postsecondary, higher (higher professional), postgraduate education under programmes and specialities that are recognised and accredited by the Ministry of Education of the Republic of Kazakhstan.

The Regulation on the Company's Employees Training and Development defines a unified approach to the goals and objectives of training, regulates the main types and areas of training, the procedure for planning and organising the entire process from determining the need for training to providing feedback on the training received.

#### The principles of the Company's employees training system:

- **transparency** the training plan is developed based on the Company's needs and the assessment results of managerial, professional and corporate competences
- **systematisation** employees training and development must be systematic and planned rather than occasional. Training is based on the 70-20-10 principle (70% on-the-job training, 20% mentorship and coaching, 10% trainings and other learning programmes)
- **practical approach** employees training and development should focus primarily on the acquisition of professional and business skills
- **joint responsibility** responsibility for the training effectiveness is shared among the trainee, the trainer (teacher), the head of the structural unit and the Training and Development Department.

# **Types of training in the Company:**

• professional development

- mandatory training
- internal training
- management training
- academic training
- qualification upgrading training
- language training

Monitoring of the training and development process involves recording employees attendance at trainings and assessing the quality and effectiveness of the trainings provided to employees by means of questionnaires.

Average number of training hours per employee in 2022							
	ETS and administ	rative employees	Workers				
	Total number of training hours	Average number of training hours	Total number of training hours	Average number of training hours			
Men	58.15	93	581.48	101			
Women	12.97	74	104.89	85			
Total:	71.12	167	686.37	186			

# Professional development programmes

Type of programme/ assistance provided	Name of the programme	Brief information on the programme
Software training	Micromine	Planning and management of mining operations
Software training	DATAMINE	Planning and management of mining operations
Conveyor Operator	Conveyor Operator	The training course is designed for professional training, retraining and advanced training of specialists in this occupation
Truck crane operator	Truck crane operator	The training course is designed for professional training, retraining and advanced training of specialists in this occupation
Weighman	Weighman	The training course is designed for professional training, retraining and advanced training of specialists in this occupation
Sampler	Sampler	The training course is designed for professional training, retraining and advanced training of specialists in this occupation
Beneficiation Product Controller - training	Beneficiation Product Controller - training	The training course is designed for professional training, retraining and advanced training of specialists in this occupation

# Partnerships with educational institutions

AK Altynalmas JSC signed two memorandums on strategic cooperation with Stepnogorsk Mining Engineering College and Stepnogorsk Industrial and Technical College within the framework of initiatives to expand partnerships with educational institutions. It was agreed to support the development of technical and professional education systems in the following ways:

- cooperation in terms of training, retraining and professional development of the Company's production staff;
- renovation of the infrastructure of the educational institution;
- industrial practical training for students, retraining, professional development and internship for trainers on special disciplines and masters of industrial training;
- development of social partnership on the matters related to the rainings of qualified employees;
- establishment of a system for the best practices exchange, dissemination of the latest scientific, educational and production achievements.

No.	Name of education institutions
1.	Satbayev Kazakh National Technical University
2.	M.Kh.Dulaty Taraz Regional University
3.	Kazakhmys Polytechnic College PI
4.	The Technical and Economic College under Karagandy State Industrial University
5.	Karaganda State Technical University
6.	Taraz Humanities and Technical Studies College
7.	Themis College of Law
8.	Zhambyl Polytechnical College
9.	Almaty University of Power Engineering and Telecommunications
10.	Mining Engineering College, Stepnogorsk city
11.	Semey Electrotechnical College
12.	Karaganda Industrial University
13.	Maksat College
14.	Ualikhanov University

## 6. ENVIRONMENTAL STEWARDSHIP

#### **6.1 Environmental management**

AK Altynalmas JSC recognises that the Company's operations have potential negative impacts on the environment. Our approach is focused on mitigating, eliminating and offsetting negative impacts and promoting a sustainable environment in the regions where we operate.

# Key results for 2022:

- Training on amendments to the Environmental Code of the Republic of Kazakhstan was conducted at projects
- An external audit of the integrated management system at the **Akbakai**, **Pustynnoye** and **Head Office** projects was successfully conducted in compliance with **ISO 14001:2015** requirements
- The **second phase of the pre-certification audit** on compliance with the Cyanide Code was successfully completed by International Cyanide Management Institute.
- Internal audits of tailings storage facilities were conducted at all projects on the compliance with the requirements of international standards for hydraulic structures. Corrective action plan was drawn up based on the accepted results of audit to eliminate the violations identified
- Landscaping guidelines for each project were developed
- Biochemical and physical methods were introduced to reduce emissions of air contaminants

#### **GRI 3-3**

#### Our guidelines:

- The Environmental Code No. 400-VI LRK of the Republic of Kazakhstan dated January 02, 2021, and other regulatory legal acts in the field of environmental protection (hereinafter "EP") of the Republic of Kazakhstan
- Environmental requirements of international standards
- The Company Charter
- Internal regulatory documents regarding EP
- Executive Committee resolutions, orders, instructions and other regulatory documents
- Regulation on the EPD and job descriptions of its staff
- Environmental Policy
- Environmental objectives and action plans

The main principles of the Company's environmental activities are set out in the Environmental Policy:

- environmental safety of the Company's operations
- control over compliance of the Company's structural units with environmental legislation, instructions, standards and regulations on environmental protection
- control over implementation of the Environmental Programme
- consideration of any impacts accepted when developing strategic scope of activity related to the environmental decisions
- development and improvement of environmental education and consciousness of the Company's employees and contractors providing services for the Company
- zero tolerance for environmental risks
- transparency and accessibility to Company's environmental information for stakeholders, public and community

- efficient utilisation of energy and natural resources as part of the Company's production activities
- immediate decisions to reduce or eliminate negative impacts on the environment in emergency
- training and raising awareness of environmental management among the Company's employees and contractors so that they realise their role and responsibility for environmental impact
- pursue the use of low-waste or zero-waste innovative technologies
- compliance with the requirements of the environmental legislation of the Republic of Kazakhstan and international standards adopted by the Company
- adherence to the best international practices in the field of environmental protection
- continuous control over emissions

The responsibility for environmental issues management is assigned to the Company's Environmental Protection Department (hereinafter - "EPD"). EPD comprises two divisions, the functionalities of which are closely related but represent different areas:

Environmental Protection Operations Affairs	Environmental Protection Corporate Affairs		
Division	Division		
<ul> <li>industrial environmental control</li> <li>internal audits, inspections and checks</li> <li>control over environmental issues at production facilities</li> <li>implementation of the best environmental practices into production</li> <li>assistance to the Corporate Affairs Division in collecting the necessary input data and to the Company's production divisions in resolving environmental issues</li> </ul>	<ul> <li>environmental reporting</li> <li>supervising permit documents</li> <li>environmental designing</li> <li>introduction of international environmental standards</li> <li>environmental audits</li> <li>cooperation with state regulatory authorities</li> <li>supervising social environmental projects</li> <li>assessment and minimisation of the Company's risks</li> </ul>		

The Company recognises that its operations are associated with a number of environmental risks and is committed to implement the requirements of the Environmental Management System (hereinafter - "EMS"), which help to identify and control such risks and enable efficient utilisation of resources and energy. The EMS at the Pustynnoye and Akbakai projects, as well as at our Head Office, are certified to ISO 14001:2015 (GOST R ISO 14001-2015). The comments issued following the external audit in 2021 for compliance with ISO 14001:2015 have been addressed and corrective actions in terms of environmental protection have been implemented.

AK Altynalmas JSC has also successfully passed the external audit of the integrated management system

conducted by Intertek in 2022 for compliance of the Company's operations at Akbakai, Pustynnoye and Head Office projects with the requirements of ISO 14001:2015.

The environmental impact assessment is carried out with special care when planning and designing each project. Data collection and regional studies are conducted throughout the year to identify all sensitive aspects and risks, develop detailed action plans and implement the best project-specific mitigation procedures and technologies, including, but not limited to, dust, cyanide, waste management plans, reclamation and abandonment projects.

## Assessing effectiveness and setting environmental objectives

One of the main mechanisms for environmental impact assessment is the process of industrial environmental control (hereinafter -"IEC"). As part of this process, the Company carries out the following measures in terms of environmental components quality control:



Measures	Periodicity
<ul> <li>Instrumental measurements of noise and vibration levels in the impact areas</li> <li>Radiation monitoring</li> <li>Soil monitoring</li> </ul>	Annually
Air sampling stationary and fugitive sources of emissions impact area	Quarterly
Groundwater sampling from monitoring wells for chemical analysis	Quarterly
Water sampling from drinking water wells for bacteriological analysis	Quarterly
Measurements of pollutants emission at SPZ edge	Quarterly
Instrumental measurements of mobile sources of air pollution (heavy equipment and light vehicles)	Quarterly

IEC is carried out by competent external laboratory that is certified according to the state certification requirements of the Republic of Kazakhstan. The equipment used for IEC measurements is verified annually.

AK Altynalmas JSC approaches the environmental policy and objectives with a sharp focus on topical issues of environmental protection and sustainable development, taking into account external and internal factors, global trends, best practices and stakeholders expectations. Reviewing, discussing, and adopting the environmental objectives as an internal document is carried out at the beginning of the calendar year. An analysis of previous year's performance is conducted at the end of the calendar year. According to the procedure, the internal document specifying the environmental policy and objectives belongs to the first tier of the document hierarchy and is developed using the approved form and agreed

upon by the relevant structural units of the Company within the established timeframe. The environmental policy is approved by all members of the Executive Committee, and environmental objectives are approved by the supervising member of the Executive Committee on an annual basis.

When developing environmental objectives (water resources, land and biodiversity preservation, emissions, waste management), such factors as the Company's strategy (adopted by members of the Executive Committee and agreed by the Board of Directors) are taken into account, i.e. the Company's strategy is cascaded to the environmental goals and priority environmental objectives that have been identified during operation and must be met according to the requirements of the environmental legislation of the Republic of Kazakhstan, the requirements of international standards ISO 14001:2015 and the requirements of the ESG principles.

# Plans for 2023:

- Audit of all Company's projects for compliance with ISO 14001:2015 requirements
- Training of EPD employees on the environmental risk management
- Amendments and additions to the Register of Environmental Risks and Aspects
- Reviewing projects for compliance with permit requirements and developing a Corrective Action Plan
- Inspection of hydraulic structures condition at all projects
- Waste sorting
- Construction of sites for temporary storage of production waste and storage of inventories at all projects
- Organise site for municipal solid waste sorting, storage and further disposal/transfer to thirdparty companies
- Preparation of a report on greenhouse gases for 2022 according to the state methodology and verification, as well as calculation using MineLCA software.
- Development and approval of the Automated Monitoring System projects at Akmola region sites
- Planting of greenery at industrial sites and within the Sanitary Protection Zone
- Organisation and control of utility wastewater management activities at the Zholymbet Project
- Development of Green Rules
- Organisation and holding of an environmental competition for the most environmentally friendly project with 100% performance in terms of environmental protection.
- Study of the Pustynnoye, Aksu-2, Aksu QH, Zholymbet and Akbakai projects production factors impact on biodiversity and environmental components of the adjacent territory

# **6.2 Environmental liability**

AK Altynalmas JSC strictly complies with the environmental legislation of the Republic of Kazakhstan. Environmental protection is one of the priority areas of the Company's operations at its production sites. The Company strives for the sustainable use of natural resources, as well as the prevention and reduction of environmental pollution resulting from its activities.

**GRI 2-27** 

# Key indicators for 2022:

- Environmental impact payments were KZT 5.4 million
- **KZT 680.6 million** invested into environmental protection initiatives

# • KZT 1.3 million was paid to the republican budget as tax deductions for environmental emissions

The Company's Safety, Health and Environment Regulation for Contractors is in place to regulate contractors SHE management, safe operations, prevention of occupational diseases, prevention of industrial and environmental emergencies, environmental pollution, and industrial incidents.

The Company implements international standards and best available technologies (BAT) and operates in line with the principles of its internal environmental policy, applying the principles of the Environmental Guide.

In 2022, fines for non-compliance with environmental legislation were only KZT 5.4 million for the entire Company's enterprises.

The Company also increases its investments in environmental protection measures on an annual basis. A total of KZT 680.6 million was invested in Altynalmas environmental activities in 2022, compared to KZT 490.4 million in the previous year.

## Environmental investments, KZT million

	2022	2021	2020	2019
Atmospheric air protection and climate change issues	41.0	74	91.1	56.9
Wastewater treatment	18.2	160	161	7.2
Waste management	74.3	37	40.3	51.8
Protection and rehabilitation of soil, ground water and surface water	522.1	12.7	26.4	36.1
Other environmental activities <sup>15</sup>	25.1	207.0	44.0	28.5
Total	680.6	490.4	201.9	180.4

#### 6.3 Climate change and emissions

Climate change impacts and has subsequent effects on the environment. Our plans are guided by principles that call for urgent action to combat climate change and its impacts.

# Key indicators for 2022:

- 131,518 tonnes of CO2e total greenhouse gas emissions under Scope 1
- 0.25 tonnes of CO2e/oz gold emission intensity
- The amount of air emissions was 8,112.2 tonnes

#### GRI 305-1, 305-4

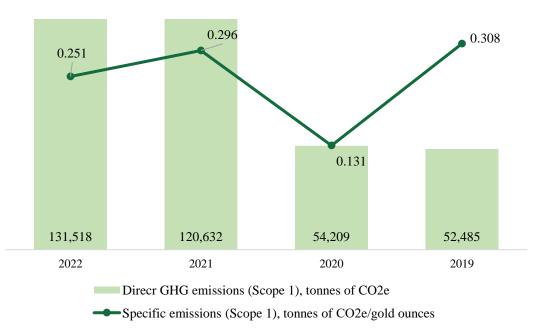
Mining activities are inherently energy intensive. Further operational efficiency improvement, such as reduction of energy consumption and corresponding reduction of greenhouse gas emissions, is a key objective for the Company.

<sup>&</sup>lt;sup>15</sup>Includes investments to reduce noise and vibration emissions, biodiversity and landscape preservation, radiation safety and other areas.

The issue of reducing the Company's carbon footprint was brought to the forefront in 2022. The 2022 GHG emission calculation for all of the Company's projects revealed emissions of 131,518 tonnes of CO<sub>2</sub>e, with an emission intensity of 0.24 tonnes of CO<sub>2</sub>e per ounce of gold produced.

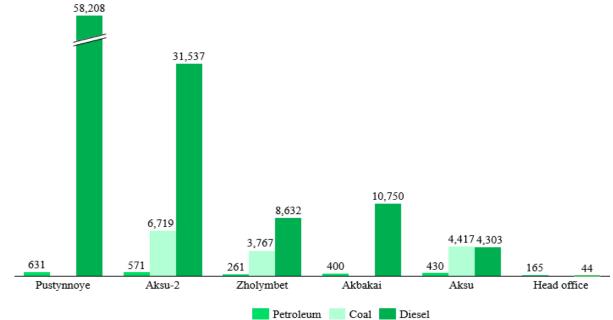
#### Greenhouse gas emissions

	2022	2021	2020	2019
Direct greenhouse gas emissions (Scope 1), tonnes of CO <sub>2</sub> e	131,518	120,632	54,209	52,485
Specific greenhouse gas emissions (Scope 1), tonnes of CO <sub>2</sub> e/gold ounces	0.251	0.296	0.131	0.308



The increase of greenhouse gas emissions in 2022 compared to the previous year is related to the increase in production at the Aksu-2 and Aksu QH projects and the corresponding increase in energy consumption at these projects.

#### Direct greenhouse gas emissions (Scope 1), tonnes of CO2e



The major greenhouse gas emissions come from the Pustynnoye project and Akmola hub projects. The significantly larger amount of greenhouse gas emissions at the Pustynnoye Project (58,208 tonnes of CO<sub>2</sub>e from diesel) is caused by the large number of transport vehicles that use diesel fuel and wide network of roads throughout the territory of the project. At the Aksu-2 (31,537 tonnes CO<sub>2</sub>e from diesel) and Akbakai (10,750 tonnes CO<sub>2</sub>e from diesel) projects, significant greenhouse gas emissions are also associated with operation of diesel equipment. At Aksu (4,417 tonnes of CO<sub>2</sub>e from coal and 4,303 tonnes of CO<sub>2</sub>e from diesel) and Zholymbet (3,767 tonnes CO<sub>2</sub>e from coal and 8,632 tonnes CO<sub>2</sub>e from diesel), there are two sources of greenhouse gas emissions - coal and diesel. The reason is that the projects have both coal-fired boilers for heat supply and diesel equipment.

#### Monitoring of air emissions

#### **GRI 305-7**

Minimisation of air emissions of pollutants (hereinafter - "pollutants") is an important aspect of AK Altynalmas JSC's environmental protection activities. The company strives to reduce the negative impact of its own production on air quality by constantly introducing technological improvements.

When making decisions related to air quality, the Company endeavours to address the interests and expectations of all stakeholders. The Company cooperates with local communities, authorised state regulatory authorities, local executive bodies, public environmental organisations, shareholders and business partners by familiarising them with the project documentation on the proposed activity during public hearings, involving stakeholders in sampling and familiarising them with the results of independent laboratory analyses.

Operating facilities that have an impact on air quality are continuously monitored by AK Altynalmas JSC specialists in the field of environmental protection as part of the Industrial Environmental Control. The Company implements new technologies to reduce the negative impact on air. Thus, all projects utilise the latest generation of aspiration units to capture dust at the crushing and sorting plants and other production and municipal facilities, with an efficiency of over 95%. Greenery is planted within the SPZ. While this report is drafting, preparations (documentation, technical part) are in progress for implementation of automated monitoring stations system at the Akbakai project. The system is designed for continuous real-time monitoring of air emissions within the SPZ.

In 2022, the amount of air pollutants emissions at the facilities of AK Altynalmas JSC was 8.411 tonnes. The main reason of air emissions growth over the last year is the increase of project production capacities.

As a result of environmental protection activities, the following pollutants were captured and neutralised:

- inorganic dust with silicon dioxide (20-70%) 17,866 tonnes
- inorganic dust with silicon dioxide (up to 20%) 0.01 tonnes
- inorganic dust with silicon dioxide (over 70%) 1,652 tonnes
- hydrochloride 0.0006 tonnes
- hydrocyanide 73.7 tonnes

# **Pollutant emissions, tonnes**

	2022	2021	2020
NO <sub>x</sub> emissions	103.5	69.1	49.8
SO <sub>x</sub> emissions	195.5	93.0	59.5
Solids emissions	7,230.9	4,703.0	4,556.1
CO emissions	390.9	256.2	196.1
Volatile organic compounds	166.5	40.4	33.6
Others	323.9	115.8	108.5
Total	8,411.2	5,277.5	5,003.6

The main production processes polluting air at the Company's production sites are:

- 1. Mining operations (drilling and blasting, mining, haulage and storage of ore)
- 2. emissions from stationary sources of emission (emissions from fixed equipment, installations, buildings, structures and other mechanisms that produce pollutants)
- 3. operation of auxiliary facilities (gas stations, heating stations, boiler facilities, etc.)

# 6.4 Improvement of energy efficiency

To minimise its environmental impact and reduce its environmental footprint, the Company focuses on initiatives that reduce and optimise energy utilisation.

# Key indicators:

- 6% reduction in electricity consumption
- 2.94 GJ/tonnes per ounce<sup>16</sup> intensity of electricity consumption per unit of production

GRI 3-1, 302-1, 302-3

# Our guidelines:

- Law No. 588-II of the Republic of Kazakhstan On Electric Power Industry dated July 9, 2004
- Law No. 541-IV of the Republic of Kazakhstan On Energy Conservation and Energy Efficiency Improvement dated January 13, 2012
- Rules for Electric Energy Utilisation approved by Order No. 143 of the Minister of Energy of the Republic of Kazakhstan dated February 25, 2015
- Rules for Electrical Installations approved by Order No. 230 of the Minister of Energy of the Republic of Kazakhstan dated March 20, 2015
- Safety Rules for the Operation of Electrical Installations approved by Order No. 253 of the Minister of Energy of the Republic of Kazakhstan dated March 31, 2015
- Safety Rules for Operation of Consumers' Electrical Installations approved by Order No. 222 of the Minister of Energy of the Republic of Kazakhstan dated March 19, 2015
- Rules for Technical Operation of Electric Power Plants and Networks approved by Order No. 247 of the Minister of Energy of the Republic of Kazakhstan dated March 30, 2015

<sup>&</sup>lt;sup>16</sup>An ounce of gold - 524,000 tonnes.

Total energy consumption for 2022 - 1.5 million GJ.

• Rules of Technical Operation of Consumers' Electrical Installations approved by Order No. 246 of the Minister of Energy of the Republic of Kazakhstan dated March 30, 2015

The Company sees the ongoing efforts to improve effectiveness of energy utilization as one of its objectives in the area of environmental protection and production efficiency. AK Altynalmas JSC collects and analyses data on energy consumption and energy efficiency indicators, monitors performance and identify opportunities for improvement.

The Company has three main energy management objectives, which are defined as key performance indicators at the sites energy divisions level:

- high equipment availability rate
- lockout/tagout and control of hazardous energy sources (hereinafter "LOTO") at the Company's projects
- implementation of Standard Operating Procedures (hereinafter "SOP")

LOTO matrixes are used to ensure safe working practices. SOP - standard operating procedure is an instruction describing how to perform certain work according to production rules. The SOP introduction is aimed at ensuring not only safety but also the quality of the work.

The Company conducts energy audits every five years to fulfil the government's energy conservation policy and to assess the potential for energy conservation and energy efficiency improvement.

An automated commercial electricity metering system (hereinafter - "ACEMS") was implemented at the main substations of Akbakai and Pustynnoye projects. The ACEMS is an electricity metering tool that provides transparency in data collection. This system helps to improve metering accuracy and reduce imbalance by enabling simultaneous readings.

Fuel types <sup>17</sup>	2022	2021	2020
Coal	235,427	539,088 <sup>18</sup>	-
Diesel Fuel	1,305,733	1,157,368	704,935
Petroleum	33,282	25,940	16,789
Total	1,538,480	1,722,397	721,725

# Volume of consumed energy from non-renewable fuel sources, GJ

The total volume of energy consumed from non-renewable sources has been increasing steadily over the last three years. The significant increase resulted from joining the Akmola region projects, where coal is the main fuel for boiler facilities. The significant increase in consumption of diesel fuel is mostly caused by the joining of new projects.

# Aksu-2:

The increase in petrol and diesel consumption in 2022 is driven by the factory operating at full capacity. It is also to be highlighted that new vehicles, production-purpose and auxiliary equipment have been acquired. During the winter season between October and April, the consumption of diesel fuel increases due to the use of boiler facilities as heating plants.

<sup>&</sup>lt;sup>17</sup> Diesel fuel and petrol are used at the Company's projects for mobile equipment.

<sup>&</sup>lt;sup>18</sup>Last year's calculations did not include data for Aksu QH tailings processing plants and therefore some data have been revised in the table and do not match the figures from the 2021 Report.

## **Electricity consumption**

	2022	2021	2020	2019
Electricity, GJ	2,425,502	1,579,485	750,875	670,901
Specific electricity consumption, GJ/tonne of product <sup>19</sup>	151,594	162,834	123,907	116,679

Total consumption of electricity increased by 65% in 2022 compared to last year and totalled 2.4 million GJ. The increase in energy consumption is caused by the continuous expansion of production. In June 2020, AK Altynalmas JSC commissioned the Dolinnoye processing plant located at the Pustynnoye project. The Company also built buffer camps at the Akbakai and Pustynoye projects. These camps served as quarantine isolation facilities for employees arriving on rotational shifts. The introduction of this initiative also contributed to the increase in energy consumption during the pandemic. The Akmola region projects - Aksu Quartz Hills, Zholymbet and Aksu-2 - were joined in 2021. Electricity consumption is calculated according to design and historical data due to the specifics of the process. In 2022, the Aksu-2 project has seen an increase in output, which means an expansion of contractors and opperation of additional equipment. Pustynnoye project had increased consumption due to new additional equipment. Also, the 2022 calculations include data on energy consumption of Kazakhaltyn Technology LLP's tailings processing plant. The Zholymbet tailings processing plant had an increase in energy consumption due to the expansion of production.

# Total electricity consumption decreases, GJ<sup>20</sup>

Tailings processing plant	• Installation of an energy efficient lighting system (photo relay)
Pustynnoye project	<ul> <li>Changing the lighting to optimal LED luminaire types</li> <li>Replacement of pumps at the Balkhash Vodovod pumping station with energy efficient pumps</li> </ul>
Aksu QH project	• Changing the lighting in mine workings to LED lamps - 4,297 lamps
Zholymbet project	<ul> <li>Optimisation of the heating system for electric receivers during the winter heating season by exhausting of hot air from screw compressors</li> <li>Changing the lighting to LED type floodlights, lamps and luminaires</li> </ul>

The list of implemented energy efficiency measures for 2022 includes the following:

# Plans for 2023:

- Maintenance of hot water boilers in the boiler facility at the tailings processing plants
- Installation of photo relays on the lighting system of the tailings processing plant TSF

<sup>&</sup>lt;sup>19</sup>The tonnes of doré alloy produced were used in the calculation.

<sup>&</sup>lt;sup>20</sup>The Aksu-2 project is a new project, the processing plant was commissioned in 2021, therefore no energy conservation measures were planned from November 2020 to December 2021. The Aksu QH and Zholymbet projects joined the operations in the second half of 2021.

- Replacement of boiler No.2 in the boiler facility, as well as network pumps to improve heat supply to the Aksu QH project facilities and reduce the number of electric heating devices (electric and air heaters) used for additional heating.
- Thermal insulation of the dormitory at Aksu QH shaft No. 41

# 6.5 Water resources

The issues of efficient use of water resources and responsible water consumption are priorities for AK Altynalmas JSC. We strive to reduce our consumption of clean water and thus minimise our impact on the ecosystem of the Republic of Kazakhstan.

Key indicators for 2022:

- 9 million litres total amount of water consumed
- 18 million litres total amount of recycled and reused water

# Water consumption and abstraction

# GRI 303-1, 303-3, 303-5

AK Altynalmas JSC recognises proper water management at all sites as an important environmental priority and is committed to detailed assessment, target setting, monitoring and implementation of corrective actions.

The Company's main impact on water resources is the amount of water consumed. But this factor is also minimised, as production facilities practice multiple reuse of process water, thereby increasing the volume of recycled water. There is no impact from the discharge of used water as no discharge to the terrain or natural water bodies is performed.

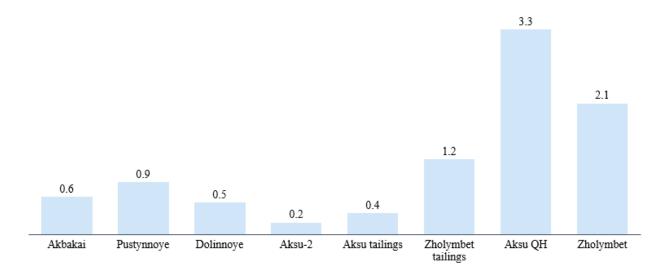
The following requirements are followed when the Company assesses impacts on water resources and sets concentrations of hazardous substances in water within the permissible levels:

- the Water Code of the Republic of Kazakhstan No. 481, dated July 9, 2003.
- sanitary rules on Sanitary and Epidemiological Requirements to Water Sources, Water Abstraction Areas for Domestic and Drinking Purposes, Utility and Drinking Water Supply and Places of Cultural and Household Water Use and Safety of Water Bodies. Order No. 26 of the Minister of Health of the Republic of Kazakhstan dated February 20, 2023.
- RND 211.2.03.01-97 Instruction on regulation of pollutants discharges into water bodies of the Republic of Kazakhstan
- Methodology for determining the rates of emissions into the environment, approved by the Order No. 63 of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated March 10, 2021
- other regulatory legal acts of the Republic of Kazakhstan on efficient use of the country's water resources

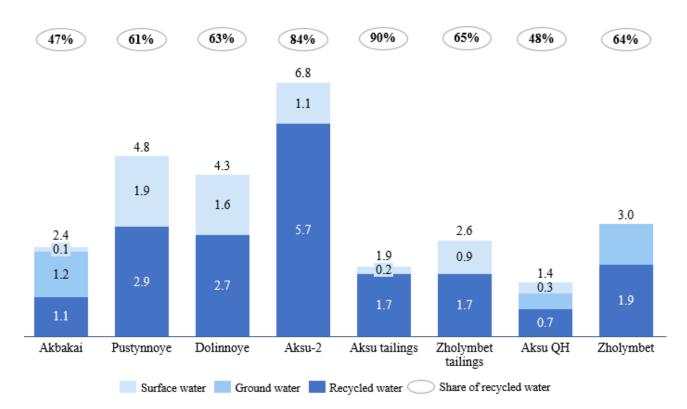
The Company also signs intentions in terms of ensuring the efficient use of water resources and reducing water losses pursuant to Article 72 of the Water Code of the Republic of Kazakhstan.

Ecologists of the EP Operations Affairs Division conduct awareness-raising activities among employees at the Company's projects on the careful use of water resources for both household and production purposes. In this regard, a concept for plastic water bottles reduction and further recycling has been developed.

# Technical water intake per tonne of ore processed, m<sup>3</sup>/tonne



Volume of water intake and recycled water, mln m<sup>3</sup>



The Company's production projects intake surface and underground water for production and household needs. The abstraction shall be made according to the obtained permit for special water use issued by the local department of the Committee for Water Resources under the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan. The water bodies used by the plants are not sensitive to anthropogenic impacts due to their size, function or vulnerability status as per the IUCN Red List of Ecosystems.

The method of water reuse allows to significantly improve water conservation without compromising product quality and human health, thus favourably affecting the Company's environmental and economic

performance. AK Altynalmas JSC uses advanced technologies to maximise the recovery of process water, which is returned to the technical process. 18 million m<sup>3</sup> of recycled and reused water was obtained at the Company's projects using the recycled water supply system.

# Water disposal

#### GRI 303-2, 303-4

Used contaminated water is disposed only to specially designed hydraulic structures (hereinafter - "HS") (evaporation ponds, tailings storage facilities, infiltration basins, etc.), thus preventing negative impact on the environment. Process water and domestic wastewater are not disposed to the terrain or natural water bodies.

Before disposing into the HS, domestic wastewater undergoes several stages of physical, chemical and biological treatment at specialised treatment facilities, which are in place at Akbakai, Pustynnoye and Aksu-2 plants. It is only at Aksu QH and Zholymbet plants domestic wastewater is collected in septic tanks and transported by specialised companies for further processing and treatment at wastewater treatment plants.

## Transfer of domestic wastewater to a third party, thousand m<sup>3</sup>

	2022	2021	2020
Total volume:	36	32	14

When identifying hazardous substances to be treated in wastewater, the Company prioritises them as required by the following regulatory and legal documents:

- 1. Rules No. 254 for Determining Rates of Allowable Anthropogenic Impact on Water Bodies dated July 16, 2021
- 2. Article 216 (Allowable Discharges Rate) of the Environmental Code of the Republic of Kazakhstan dated January 02, 2021
- 3. Methodology No. 63 for Determining Environmental Emission Rates dated 10 March 2021
- 4. List of pollutants, emissions of which are subject to environmental regulation, approved by Order No. 212 of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated June 25, 2021

The above-mentioned regulations require identification of marker substances in the discharged water after treatment. Marker pollutants are those substances or group of substances that are most significant for the emissions of a particular type of production or process. Using such groups of pollutants, it is possible to estimate the emission values of the pollutants in the group. The main hazardous water pollutant in the production processes of AK Altynalmas JSC is cyanide, which is used to dissolve and extract gold from ore and is toxic to aquatic fauna and flora.

#### Treatment of open pit water from natural radionuclides at the Manybai uranium pit

AK Altynalmas JSC in cooperation with an international company is conducting scientific and technical work on treatment of open pit water from natural radionuclides at the Manybay pit by the EPSE method. According to the results of laboratory tests, the purity of water against natural radionuclides reached 99.9% after the treatment. Thus, the Company plans to obtain up to 6 million m3 of treated water for the needs of the plant, treat open pit water from natural radionuclides and

reclaim the open pit according to the requirements of the environmental legislation of the Republic of Kazakhstan. Pilot tests of the water treatment unit are scheduled for the third quarter of 2023.

#### Cooperation with stakeholders in terms of water resources management

When making decisions related to water use, the Company endeavours to consider the interests and expectations of all stakeholders. Regarding water consumption for the Company's operations, stakeholders are representatives of the local community (residents of neighbouring communities), authorised state regulatory bodies, public environmental associations, local executive bodies, shareholders and business partners of the Company.

Cooperation with stakeholders regarding the use of water resources is carried out through the development of design documents, public hearings, measurements of pollutants within the framework of the industrial environmental control and as part of additional measurements at the request of local executive bodies. Stakeholders are increasingly interested in that matter, which demonstrates their concern for the environment in the regions where the Company operates. At the request of local people, the Company conducts additional measurements of the quality of the abstracted water involving independent laboratories and representatives of local communities. The results of the analyses are reported to the stakeholders at public hearings. Operating facilities that consume water resources are constantly monitored by the Company's specialists in the field of environmental protection (as part of the industrial environmental control) and sanitary inspection (as part of industrial sanitary inspection).

## 6.6 Waste and tailings storage facilities

The Company's production activities cause the generation of waste. Safe waste management and its disposal are the priority tasks for AK Altynalmas JSC.

**GRI 306-1** 

#### Key results for 2022:

- **86%** percentage of non-hazardous waste generated by production activities
- **1,850 tonnes** of waste was reclaimed and recycled
- 42.3% percentage of reclaimed waste
- **5.5%** percentage of recycled tailings waste
- 61 containers were installed for industrial and solid waste across all projects
- 12 sites with waterproof bases and fencing have been constructed in all projects
- 22 sites with waterproof bases and fencing have been equipped on all projects
- The second phase of the pre-certification audit for compliance with the International Cyanide Management Code was conducted
- Internal audits of tailings storage facilities were carried out at all Company's projects to verify compliance with the requirements of ANCOLD, ICOLD and other international standards in the field of hydraulic structures
- Domestic wastewater collection tank for disposal to the evaporation pond was installed at the Akbakai project.
- Analyses of transformer oil were carried out at the Akbakai project
- New domestic wastewater collection tank installed at Akbakai and Zholymbet projects
- Incinerators were acquired and introduced at the Akbakai project
- An audit of all storage sites and an inventory of existing waste volumes at all Company projects, as well as their classification, were carried out

#### GRI 306-2, 306-3, 306-4, 306-5

Production and consumption waste is managed pursuant to a waste management programme developed and approved by the Company's management. The waste management programme provides the establishment of a system of observation, collection, processing, accumulation and transfer of environmental information regarding the qualitative and quantitative composition of waste, as well as control over the condition of waste storage sites.

Waste is segregated at all project sites, and each site submits a waste generation report to EPD upon generation of a particular type of waste. Waste is removed on a regular basis upon accumulation by means of our own vehicles. Production and consumption waste logs are kept for each type of waste on an ongoing basis.

One of the innovations for 2022 is the introduction of segregated waste collection at the Company's Head Office in Almaty. Thus, since the introduction of segregated collection in 2022, waste paper (228 kg), glass (49.8 kg), plastic (97.9 kg), aluminium (14.8 kg) were separately collected and recycled by the Company's Head Office.

## Our guidelines:

- Environmental Code of the Republic of Kazakhstan dated January 02,2021; Section 19 "Waste"
- Sanitary Rules Sanitary and Epidemiological Requirements for Collection, Utilisation, Use, Decontamination, Transportation, Storage and Disposal of Production and Consumption Waste
- Industrial Safety Rules for Tailings and Sludge Facilities of Hazardous Production Sites
- Waste Classification approved by Order No. 314 of the Acting Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated August 06, 2021

To prevent the negative impact of waste on the environment, the Company takes the following measures to reduce the impact resulting from waste generation:

- segregated waste collection at the Company's sites
- the market is monitored on an ongoing basis to find potential buyers who may be interested in acquiring waste materials
- some types of waste, such as waste oil, black scrap, waste off-the-road tyres, etc. are being sold
- some of the Company's projects donate wood waste for the needs of the neighbouring villages
- rock wastes are used for construction works (haulage roads, tailings storage facility dams, platforms, ramps, foundations for future infrastructure buildings, etc.).
- incinerator units were acquired to minimise the disposal of production and consumption waste

Waste generation and reported generation volumes are directly related to production and household activities of AK Altynalmas JSC.

Initial resources	Types of activities
<ol> <li>packaging materials of parts from equipment, machinery, chemical reagents, food and other consumables used in the Company's production and household activities</li> <li>tanks for storing liquids such as used oil, fuels and lubricants, dyes, reagents and other liquid substances</li> <li>containers for storage of solid materials such as bulk reagents, wood waste in the form of wooden boxes, plastic reagent containers and other consumables</li> <li>used large and small-sized tyres from mobile equipment</li> <li>metal spare parts from vehicles and equipment</li> <li>air and oil filters from vehicles and equipment</li> <li>plastic from containers of consumables and food products</li> <li>paper and cardboard from consumables and food products packaging</li> <li>other types of resources that become waste after use</li> </ol>	<ol> <li>production activities:</li> <li>maintenance of equipment, vehicles and machinery involved in production operations</li> <li>mining, crushing and grinding of ore material</li> <li>metal recovery from ore, flotation and cyanidation of concentrate</li> <li>finished product release</li> <li>acceptance, storage, issuance of consumables from warehouse for production activity maintenance</li> <li>household activities:</li> <li>cooking and catering for employees of production projects</li> <li>household cleaning</li> <li>repair and maintenance of utility facilities</li> </ol>

In 2022, 785.6 tonnes (14.05%) of hazardous waste and 4,809.7 tonnes (8596%) of non-hazardous waste were generated. There is a 30% decrease in the volume of generated waste compared to the previous year.

#### Generated waste, tonnes

Waste type	2022	2021	2020
Hazardous waste	786	690	394
Non-hazardous waste	4,810	7,292	5,684
Total amount of waste generated	5,595	7,982	6,078

Environmental measures in 2022 resulted in 1,849.7 tonnes of waste generated being reclaimed, recycled and subjected to other recovering operations outside the Company's project areas. Reclaimed waste amount increased almost by four times because the Company concluded new contracts for the sale of secondary raw materials, established segregated collection, and provided additional sites for recyclable materials, which made it possible to collect waste separately. 3,745.6 tonnes of waste generated was sent for disposal. Waste management operations include incineration (with or without energy recovery), landfilling and other operations. In 2022, all waste management operations, except for incineration of waste, were carried out outside the Company's territory.

#### Waste management, tonnes

	2022	2021	2020	2019
Waste sent for reclamation	1,850	414	1,011	692
Hazardous waste	524	126.2	184	183
Non-hazardous waste	1,326	288	826	509
Waste sent for disposal	3,746	7,568	5,068	5,222
Hazardous waste	262	564	210	395
Non-hazardous waste	3,484	7,004	4,858	4,827

The Company ensures safe management of waste by transferring it to a third party under contractual agreements, the requirements of Article 339 Ownership of Waste and Responsibility for Waste Management of the Environmental Code of the Republic of Kazakhstan, and the Company's procedures regarding contractors.

Every waste transported from the Company's projects is accompanied by documents containing information on the waste transported (waste name, weight and unit of measurement, contract agreement number, transporter information, waste loading site). These documents serve as a database for recording waste data in terms of generation, transfer, recycling, etc. Once the waste is transported from the production site, the contractor performs waste transportation and disposal and provides confirmation documents on the disposal of the transported waste.

The Company's employees selectively visit third party facilities to monitor the waste management system to ensure that disposal/recycling/reclamation and other waste management activities are carried out according to the methods specified in the documents.

## Tailings storage facility management

Tailings are one of the most considerable waste flows generated during the mining process. Tailings are formed as the mined ore is crushed, grinded and processed through to separate valuable minerals from it, and typically consist of a suspension of fine mineral particles and water. This solution is either incorporated into the materials used to backfill open pits or underground workings, or is pumped as a slurry into a specially designed storage facility known as a tailings pond, or tailings storage facility. AK Altynalmas JSC uses a systematic and planned approach to monitor the tailings storage facilities and their sustainable operation to ensure the stability of the dams and prevent the seepage of contaminants into the local environment.

The Company has a total of nine tailings storage facilities - one each at the Pustynnoye, Akbakai and Aksu-2 projects and two each at the Aksu QH, Zholymbet and Bestobe projects. The design of tailings storage facilities complies with all requirements and standards of the Republic of Kazakhstan. An impervious barrier of the bed and slopes of dams is constructed by using geomembranes to avoid negative environmental impact during construction of tailings storage facilities. This measure is meant to prevent the penetration of pollutants into soil and groundwater. Observation and piezometric wells have been engineered to provide monitoring of the condition of tailings dams. Additionally, surface is controlled by wet dedusting method with 85% efficiency to reduce blowing of dry beaches of the tailings pond.

In 2022, tailings management was one of the Company's prioritised environmental topics. Thus, according to the previously adopted long-term target to implement the Global Industry Standard on Tailings Management (hereinafter - "GISM"), the Company conducted a detailed analysis of the GISM requirements and the Republic of Kazakhstan state requirements in the field of industrial safety for tailings storage facilities in 2022. According to the results of the analysis, the Republic of Kazakhstan

state standards were found to contain a more detailed set of requirements to ensure safe operation of tailings storage facilities than the GISM requirements. In addition, taking into account the fact that GISM does not currently have specific mechanisms for certification and implementation, the Company's management decided not to apply GISM certification at the tailings storage facilities of AK Altynalmas JSC's projects for this year. Notwithstanding this, the Company considers GISM certification as a long-term and strategic goal in the near future.

The weight of tailings waste treatment in 2022 was 783.867 million tonnes (about 5.55% of the total weight). The main reason for the decline in tailings processing from 25% of the previous year to 5.5% in 2022 was that the plant switched to mining body processing, which caused a sharp decline in tailings preformance.

# Total weight of tailings waste, tonnes

	2022	2021	2020	2019
Tailings waste	14,126,069	15,328,585	14,221,449	6,871,928
Total tailings waste processed	1,132,314	4,705,675	7,982,236	7,265,696
for Aksu-2 project	-	1,626,309	2,656,240	2,302,478
for Zholymbet project	98,203 <sup>21</sup>	1,750,310	2,355,058	2,301,272
for Bestobe project	1,034,111	1,329,056	2,970,938	2,661,946

# 2023 Goals

- Insinerator plant at Pustynnoye and Akbakai projects
- Hydraulic press installation at the Putynnoye, Aksu-2 and Zholymbet projects
- Construction of a new solid waste landfill at the Akbakai project
- Recycling of transformer oil spillage

# 6.7 Land and biodiversity conservation

Conservation of land and biodiversity remains one of our key priorities and we are committed to ensuring that wildlife and local habitats are protected for future generations at all stages of the mining life cycle.

# Key indicators for 2022:

- There are no specially protected natural areas within the territories of AK Altynalmas JSC's projects
- Measures to plant greenery in sanitary protection zones and organise phytobarriers were implemented
- The project for Manybay uranium open pit reclamation by filling it up with overburden from the Aksu deposit open pit was launched
- Dust phytocapture was implemented on Aksu Quarz Hills project

<sup>&</sup>lt;sup>21</sup> Secondary tailings

• Greenery planting was done on all projects and Regulation for Greenery Planting on the Projects Territory was developed

#### GRI 304-1, 304-2, 304-3

The total area of land owned, leased and managed by the Company is 13,842.7 hectares. There are no protected areas or other special natural areas on the territories of the Company's production projects or the territories bordering them. The Company's projects do not adversely affect biodiversity values recognised by a list of protected categories (e.g. IUCN Protected Area Management Categories, Ramsar Convention, national legislation).

## Our guidelines:

- Environmental Code of the Republic of Kazakhstan dated January 02, 2021; Section 16, Land Protection
- Law No. 175 of the Republic of Kazakhstan On Specially Protected Natural Areas dated July 07, 2006
- Land Code No. 442 of the Republic of Kazakhstan dated June 20, 2003
- Forest Code No. 477 of the Republic of Kazakhstan dated July 08, 2003
- Order No. RK DSM-32 of the Minister of Health of the Republic of Kazakhstan On Approval of Hygienic Standards for Safety of Habitat dated April 21, 2021

The production infrastructure of AK Altynalmas JSC is located on relatively small areas. The specific nature of the product and the regime of the facilities require fencing to prevent large animals from moving around the industrial sites. Risks associated with potential contact of birds with the water surface of the tailings storage facilities are minimised by the installation of deterrents resulting in very few birds entering the tailings storage facility areas. The areas where the Company's industrial facilities are located are generally not comfortable for valuable fauna to live there. The industrial sites of the Akmola hub are located in areas that have been under anthropogenic impact for almost 100 years and are not an active habitat for animals. Moreover, measures to plant greenery in sanitary protection zones and organise phytobarriers, which have been actively implemented by the Company in recent years, allow us to highlight a positive role in flora preservation.

The impacts of the Company's operations on biodiversity are considered when planning future business activities. The extent of impact, potential damage and consequences of the activity are assessed during the preparation of environmental documents (mining plan, environmental impact assessment, environmental protection section, maximum allowable emissions, maximum allowable discharges, etc.), which are approved at public hearings with the participation of representatives of local communities and authorised state regulatory bodies.

Ongoing monitoring of the project's impact on flora and fauna is carried out at current facilities according to industrial environmental control programme and activities are carried out according to the Environmental Action Plan, which shall be approved on an annual basis.

In 2022, a process was initiated to prepare for research and development (hereinafter - "R&D") to study the impact of the Company's production facilities on the biodiversity of the surrounding areas involving an independent specialised research institute.

The R&D format involves an in-depth study of the impact of industrial activities on components of the local environment with a particular focus on biodiversity. The work will be carried out over an extended period of time (up to 1.5 years) to cover all seasons with their climatic features. The scope of work also

includes comparative impact analyses with historical data available from industrial environmental control results.

# Deposit abandonment planning

During the reporting year, reclamation works were carried out at the Manybai open pit of the Aksu-2 project, as well as at the Zapadny and Vostochny open pits of the Akbakai project. In 2023 and 2024, reclamation work will continue at the Manybai and Zapadniy open pits.

The following regulatory and legal documents are used by the Company for planning the deposit abandonment:

- Environmental Code of the Republic of Kazakhstan dated January 02, 2021; Section 7 Abandonment of Operations with Adverse Impact on the Environment
- Instruction for Development of Abandonment Plan and Methodology for Calculation of Approximate Cost for Abandonment of Solid Minerals Extraction Operations, approved by Order No. 386 of the Minister of Investment and Development of the Republic of Kazakhstan dated May 24, 2018
- Methodology for Determining the Amount of Financial Assurance of Obligations to Abandon a Category I Operations Facility, approved by Order No. 356 of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated September 06, 2021

A separate project documentation - the Mining Operations Abandonment Plan - is envisaged for elimination of consequences of the operations. The following activities are described in the document:

- decommissioning of the mine and other production and infrastructure facilities located at the mining site
- reclamation of lands affected by mining operations
- gradual abandonment and reclamation activities
- other work to eliminate the consequences of mining operations
- estimating the approximate cost of abandonment activities

This documentation is the basis for the creation of a liquidation fund, which invested by natural resource user. Thus, it ensures that there will be no consequences for future activities. The affected land will be restored and returned to the economic turnover.

An important step in the abandonment process is the biological stage of reclamation. This stage is aimed at creation of a root layer on the surface prepared during the technical stage, preventing wind and water erosion of soils and removal of fine-grained soil from the restored surface. Implementation of the biological stage of reclamation allows to reduce dust emissions and improve the microclimate of the area. Containment of dusty surfaces is one of the important parts of environmental protection measures.

According to natural, climatic and geographical conditions of area where the object to be reclaimed is located, the biological stage includes sowing of perennial grasses on land surfaces, backfilled pits, rock dumps, stockpile areas, as well as on the industrial sites.

# Plans for 2023:

- Reclamation activities at the Svetinskoye field, including restoration of the landscape to its original form
- R&D work at the Akmola Hub and Pustynnoye projects on Impact of Production Factors on Environmental Components and Biodiversity of the Adjacent Areas

- Comparative impact analyses against available historical data obtained from industrial environmental control
- Development of a pit abandonment design at the Zholymbet tailings processing plant
- Reclamation of open pit No. 5 at Zholymbet Project
- Reclamation of Manybai and Zapadny pits is in progress

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# 7. ABOUT THE REPORT

The Company brings to your attention its 2022 Sustainability Report (hereinafter - "Report"). The Report covers the activities and results of AK Altynalmas JSC in sustainable development. The previous Report was published in September 2022.

The e-version of the 2021 Report is available on the official website of AK Altynalmas JSC. The Company intends to continue the annual publication of non-financial reports, confirming its commitment to increase the transparency of its operations and demonstrate its economic, social and environmental performance and obligations.

The Sustainability Report has been prepared according to the Standards of the Global Reporting Initiative for Sustainable Development (GRI Standards). The application of the standards and the GRI Standard Elements Index are published in Appendix 1. Besides, the Report discloses information on the Company's contribution to the implementation of the prioritised UN Sustainable Development Goals and describes its activities in this field.

The process of Report preparation and revealing material topics is coordinated by the Company's ESG Department in active cooperation with all interested structural units.

#### **Revision of data**

Last year's calculations for energy consumption did not include data for Aksu QH tailings processing plants and therefore some data have been revised and do not match the figures from the 2021 Report.

#### **Scope of reporting**

The information on sustainable development presented in the Report applies to the activities of business units and subsidiaries of AK Altynalmas JSC (see Appendix 1).

Legal entities included in the Company's consolidated financial statements include all business units of AK Altynalmas JSC covered by the Sustainability Report 2022.

In other cases where the scope of reporting for certain indicators differs from that described above, information on the units included in the scope of reporting is provided additionally in the text of the Report.

#### Independent verification of the Report

The procedure of external validation of the Report for 2021 was not performed. However, the Company recognises the importance of external validation of sustainability information and is considering validating non-financial information in the future.

**GRI 2-4** 

**GRI 2-2** 

GRI <u>2-5</u>

**GRI 2-3** 

## 7.1 Contact Information

AK Altynalmas Joint Stock Company 15 Republic Square, Almaty, 050013 (A15X3C7), Republic of Kazakhstan

Tel.: +7 (7273) 500-200, +7 771 726-0081 E-mail: info@altynalmas.kz Webpage: <u>www.altynalmas.kz</u>

If you have any questions regarding this Report and the information it contains, please contact the AK Altynalmas JSC ESG Department: Timur Mursalimov Tel.: +77273500200 timur.mursalimov@altynalmas.kz Date of Report publication: October 2023

## 7.2 Appendix 1: Scope of reporting

**GRI 2-2** 

Name of subsidiaries	Principal activities	Ownership interest	Comment
Kazakhaltyn LLP	Mining and processing of gold- bearing ores	100 %	-
Aksu Technology	Mining and processing of gold- bearing ores	100 %	-
Kazakhaltyn Technology	Processing of tailings generated in the process of gold ore processing	100 %	-
Altynalmas Technology	Gold ore processing	100 %	-
AAEngineering Group	Design, construction and reconstruction of industrial facilities using advanced design modelling technologies	100 %	Financial, tax and personnel data only
Altynalmas Torgoviy Dom	Sale of precious metals and rare metal ore	100 %	Financial, tax and personnel data only
Akbakai Gold Resources	Geological exploration, mining and processing of ore, sale of precious metals	100 %	-
Aktogay Mys	Geological exploration, mining and processing of ore, sale of precious metals	100 %	-

Name of subsidiaries	Principal activities	Ownership interest	Comment
Asyl Resources	Geological exploration, mining and processing of ore, sale of precious metals ore re-treatment	100 %	-
Akbakai GMK	Provision of services for exploration, mining and processing of raw materials	99.61%	-
Altynalmas Regents	Sales of reagents	83%	-

7.3 Appendix 2: GRI Index Table

7.5 Appendix 2: GKI muex		1	
Standard and indicators	Description	Report page	<b>Report sections/Comments</b>
Common elements of repo	rting		
1. Summary of the compar	ny and reporting		
GRI 2: Common	2-1. Detailed information about the organisation	page 5	General information about the
elements of reporting		page 97	Company; Contact information
2021	2-2. Legal entities included in the organisation's	page 97	About the report;
	sustainability reporting	page 98	Appendix 1
	2-3. Reporting period, periodicity of reporting and	page 97	About the report;
	contact information	page 97	Contact information
	2-4. Changes to the information	page 97	Revision of data
	2-5. Independent validation of reporting	page 97	Independent verification of the Report
2. Activities and employee	s of the organisation		
GRI 2: Common	2-6. Information about the organisation's operations,	page 5	General information about the
elements of reporting	value chain and other business relationships	page 49	Company; Procurement activities
2021	2-7. Staff members of the organisation	page 64	Staff
	2-8. Non-staff members of the organisation	page 64	Staff
3. Corporate governance			
GRI 2: Common	2-9. Structure and composition of management	page 14	Corporate governance
elements of reporting	2-13. Delegating responsibility for impact management	page 23	Business ethics and compliance;
2021		page 36	Sustainable development risk
			management
	2-15. Conflict of interest	page 26	Conflict of interest management
	2-20. Procedure for remuneration setting	page 22	Remuneration and dividends
	2-21. Annual total compensation ratio		The indicator is not disclosed for
	_		personal information protection
			purposes
4. Strategies, policies and	practices		
GRI 2: Common	2-22. Sustainable development strategy statement	page 3	Chief Executive Officer's address
elements of reporting	2-23. Obligations set out in the organisation's internal	page 25	Human rights
2021	documents		

Standard and indicators	Description	Report page	Report sections/Comments
	2-24. Implementation of the assigned commitments	page 34	Our approach to sustainable
			development
	2-25. Mechanisms for mitigating negative impact	page 36	Sustainable development risks
			management
	2-26. Mechanisms for consulting and problem reporting	page 27	Feedback communication
	2-27. Legal compliance	page 79	Environmental responsibility
	2-28. Membership in associations	page 35	Participation in associations and
		page 37	international initiatives; Contribution
			to the UN Sustainable Development
			Goals
5. Cooperation with stake			
GRI 2: Common	2-29. Approach to cooperation with stakeholders	page 42	3.3 Cooperation with stakeholders
elements of reporting	2-30. Collective agreements	page 68	Social benefits
2021			
Material topics			
GRI 3: 2021 material	3-1. Procedures for determination of material topics	page 43	Material topics
topics	3-2. List of material topics	page 45	Material topics
Tax policy			
GRI 3: 2019 taxes	207-1. Approach to taxation	page 11	Taxes
	207-2. Tax management, control and risk management	page 11	Taxes
	207-3. Cooperation with stakeholders and management	page 11	Taxes
	of tax-related issues		
	207-4. Country-by-country reporting	page 12	Taxes
Economic performance			
GRI 3: 2016 economic	201-1 Direct generated and distributed economic value	page 9; page 10;	Financial and operational review;
performance		page 64; page 71	Direct economic value generated and
			distributed; Human resources;
			Remuneration of employees
Local communities			
GRI 203. Indirect	203-1. Investments in infrastructure and pro bono	page 52	Cooperation with regions
economic impacts 2016	services		

Standard and indicators	Description	Report page	<b>Report sections/Comments</b>
	203-2. Significant indirect economic impacts	page 52	Cooperation with regions
GRI 413: Local	413-1. Units implementing community cooperation	page 42; page 52	Cooperation with stakeholders;
Communities 2016	initiatives, community impact assessments and		Cooperation with regions
	community development programmes		
	413-2. Structural units with significant actual or	page 52	Cooperation with regions
	potential adverse impacts on local communities		
GRI 403: Health and	403-1. Health and safety management systems	page 57	Health and safety
safety 2018	403-2. Hazard identification, risk assessment and	page 63	Health and safety risk management
	incidents investigation		
	403-3. Health and safety services	page 64	Health
	403-4. Participation, consultation and communication to	page 62; page 65	Consultation and participation of
	employees on health and safety issues		employees on HS matters
	403-5. Health and safety training for employees	page 65	Health and safety training
	403-6. Prevention care and occupational health	page 64	Health
	403-7. Prevention and mitigation	page 62	Health and safety
	of impacts in the field of HS		
	403-8 Employees falling under the SHE management	page 65	Management of contractors
	system		
	403-9. Occupational injuries	page 66	Occupational injuries
Impacts on water resource	es		
GRI 303: Water and	303-1. Use of water as a public resource	page 92	Water consumption and abstraction
effluents	303-2. Management of impacts related to water disposal	page 94	Water disposal
2018	303-3. Water intake	page 92	Water consumption and abstraction
	303-4. Water disposal	page 94	Water disposal
	303-5. Water consumption	page 92	Water consumption and abstraction
Waste management	· · · · · ·		
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Standard and indicators	Description	Report page	Report sections/Comments
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Emissions			
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Biodiversity			÷
GRI 304: Biodiversity 2016	304-1. Production sites owned, leased or managed by the organisation and located in or adjacent to protected natural areas and areas of high biodiversity value outside protected natural areas	page 94	Land and biodiversity conservation
	304-2. Significant impact of the organisation's operations, products and services on biodiversity	page 94	Land and biodiversity conservation
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GRI 3: Material topics 2021	3-3. Significant topics management	page 76	Environmental friendliness
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GRI 3: Material topics 2021	3-3. Significant topics management	page 43	Risk management
Carbon and energy manag	gement	-	
GRI 302: Energy 2016	302-1. Internal energy consumption	page 84	Improvement of energy efficiency
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GRI 305: Emissions 2016	305-1. Direct greenhouse gas emissions (scope 1)	page 80	Climate change and emissions
	305-4. Intensity of greenhouse gas emissions	page 80	Climate change and emissions
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GRI 204: Procurement	204-1. Share of GWS procured from local suppliers	page 46	Procurement activities
practice 2016			
Employment			

Standard and indicators	Description	Report page	Report sections/Comments
GRI 202: Market	202-1. Ratio of standard entry-level salary for	page 71	Remuneration
presence 2016	employees of different genders to the established		
	minimum wage in the regions where organisation		
	operates		
GRI 401: Employment	401-1. Number of new employees and staff turnover	page 67	Talent attraction
2016	401-2. Benefits for full-time employees that are not	page 68; page 71	Social benefits; Performance
	available to temporary or part-time employees		management and employee motivation
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GRI 405: Sociocultural	405-1. Ethnic and sociocultural diversity among the	page 64	Staff
diversity and equal	company's staff and managers		
opportunities 2016			
Human rights			
GRI 406: Non-	406-1. Incidents of discrimination and corrective actions	page 27	Feedback communication
discrimination 2016	taken		
GRI 407: Freedom of	407-1. Units and suppliers whose right to exercise	page 68	Social benefits
association and collective	freedom of association and collective bargaining may be		
bargaining 2016	at risk		
Business ethics and anti-co	orruption		
GRI 205: Anti-corruption	205-1. Units subject to corruption-related risk	page 25	Corruption and fraud control
2016	assessments		
	205-2. Awareness of and training on anti-corruption	page 28	Compliance training
	policies and practices		
	205-3. Verified corruption cases and actions taken	page 25	Corruption and fraud control
Training and development	t		
GRI 404: Training and	404-1. Average annual number of training hours per	page 62; page 71	Health and safety trainig; Employees
education 2016	employee		development
	404-2 Skills development programmes designed to	page 71	Employees development
	support the employability of personnel		
	404-3. Share of employees subject to periodic	page 71	Employees development
	performance and career development assessments		

Abbreviations/	Meaning
acronyms	
AT	Administrative and technical staff
BI	Business intelligence
СО	Carbon monoxide
CO2	Carbon dioxide
CIL/CIP	Carbon-in-Leach/Carbon-in-Pulp
DD	Department director
EBITDA	Earnings before interest, taxes, depreciation, and amortization
EPC	Engineering, procurement and construction
ESG	Environmental social governance
GRI	Global Reporting Initiative
HCM	Human Capital Management
HR	Human resources
ICMI	International Cyanide Management Institute
ISO	International organization for standardization
IT	Information technology
IUCN	International Union for Conservation of Nature and Natural Resources
JORC	The Australasian Code for Reporting of Exploration Results, Mineral Resources
	and Ore Reserves
LOTO	Lockout tagout
LTD	Limited company
LTIFR	Lost time injury frequency rate
MBA	Master of Business Administration
ML	Middle level
NOx	Nitrogen oxides
OS	Operating system
RCA	Root cause analysis
SAP	System Application and Product in Processing
SF	Success Factors
SHL	Saville and Holdsworth Limited
SIEM	Security Information and Event Management
SOP	Standard operating procedure
SOx	Sulfur oxides
FFS	FFS
IRCA	Incident Root Cause Analysis
JSC	Joint-Stock Company
ACEMS	Atomated commercial electricity metering system
APCS	Automated process control system
GPW	Great Patriotic War
FOCL	Fibre optic communication line
GJ	Gigajoule
SCMR	Republic of Kazakhstan State Commission for Mineral Reserves
SMMO	State Municipal Management Organization
UEREM	Unitary Enterprise based on the Right of Economic Management
MMC	Mining Metallurgical Concern
GOST	Interstate standards
GISTM	Global Industry Standard on Tailings Management

7.4 Appendix 3: Abbreviations and acronyms

Abbreviations/ acronyms	Meaning
F&L	Fuel and lubricants
HS	Hydraulic structures
S&A	Subsidiary and affiliate company
EPD	Environmental Protection Department
MVC	Motor vehicle crash
ICP	Infantile cerebral paralysis
ICP	Polluting substances
PP	Processing plant
IS	Information security
IR	Information Resources
IS	Information System
ISO	International Organisation for Standardisation
IT	Information technologies
WC	White-collar employee
KazRIOR	Kazakh Research Institute of Oncology and Radiology
QH	Quartz Hills
NRC	Nomination and Remuneration Committee
SEPC	Safety and Environmental Protection Committee
KPI	Key Performance Indicator
CP	Checkpoint
KPI	Key Performance Indicators
RMC	Risk Management Committee
LEA	Local executive authorities
IUCN	International Union for Conservation of Nature
BAT	Best available technologies
R&D	Research and Development
RLA	Regulatory legal act
EIA	Environmental Impact Assessment
OPM	Open-pit mining
UN	United Nations
EP	Environmental Protection
Safety	Occupational Safety
Health	Industrial Safety
HS	Health and Safety
GHG	Greenhouse gases
UM	Underground mining
MAE	Maximum allowable emission
MPD	Maximum permissible discharge
PC	Personal computer
IEC	Industrial environmental control
RRD	Republican regulatory document
EPS	Environmental protection section
SRS	Sanitary rules and standards
SPZ	Sanitary protection zone
PPE	Personal protective equipment
CPE	Collective protection equipment
Media	Mass media
ivicula	191055 1110010

Abbreviations/	Meaning
acronyms	
ISMS	Information Security Management System
EMS	Environment Management System
MSW	Municipal solid waste
Tailings	Man-made mineral formations
Inventory	Goods and materials
M&R	Maintenance and repair
LLP	Limited Liability Partnership
GWS	Goods, works and services
ERM	Enterprise risk management
Full name	First and second name
DW	Domestic wastewater
SDG	Sustainable development goals
EDG	Electronic digital signature
EEG	Electroencephalography



AK Altynalmas JSC, 050013 (A15X3C7), Republic of Kazakhstan 15 Republic Square, Almaty Phome: +7 (727) 350-02-00 E-mail: info@altynalmas.kz Web site: www.altynalmas.kz