



SUSTAINABLE DEVELOPMENT

SUSTAINABLE DEVELOPMENT REPORT

95 ЖЫЛ



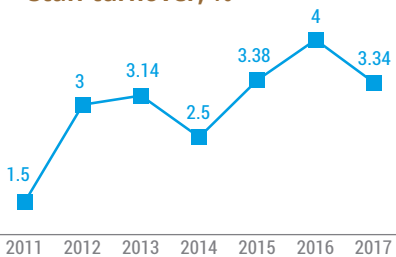
ЕмбіМұнайГаз
АКЦИОНЕРЛІК ҚОҒАМЫ



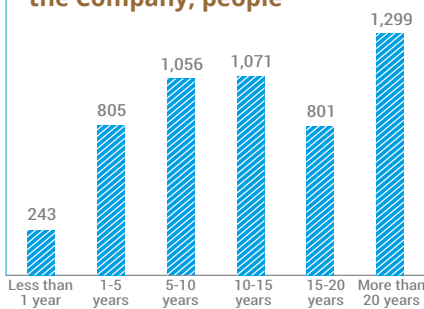
Personnel structure as of January 1, 2018



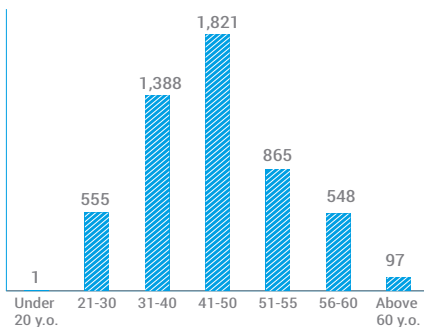
Staff turnover, %



Personnel length of service in the Company, people



Personnel age groups, people



HR policy

The Personnel and Remuneration Department is constantly working to develop the labor organization system, forms and systems of labor remuneration, material and moral incentives in the Company and its production units. Measures are taken to improve labour rate setting based on the application of inter-industry and industry-related labor standards. The Company performs work to increase labor productivity, including through maintaining an optimal headcount.

As of January 1, 2018, the Company's headcount was equal to 5,439 people. The actual number was equal to 5,275 people, including 4,166 men and 1,109 women. Staff turnover in 2017 amounted to 3.34% with a target value of not more than 6%.

Due to the fall in global oil prices and the need for cost optimization, regular work positions of non-core unskilled labor are currently reduced and outsourced. In the period from 2014 to 2017, 164 jobs in Embamunaygas JSC were outsourced.

The Company implements a program of early retirement from 58 years old for employees, who have worked most of the period of service in harsh conditions of the oil industry and who have health problems. Since the start of the program implementation, from 2014 till 31.12.2017, 162 employees had retired ahead of schedule.

The basis of the Company's stability is labor dynasties. Today, Embamunaygas employs representatives of more than 20 dynasties, in which three or more generations have committed to difficult oil-industry professions. The total work experience of some of them exceeds 200 years.

Personnel training and development

Personnel training and development in Embamunaygas are carried out with the aim to form and maintain the required level of personnel qualification taking into account the demands and prospects for strategic development of the Company.

The following types of training are conducted in the Company:

- 1) training in technical subjects;
- 2) training in financial and economic subjects;
- 3) language learning;
- 4) training in general subjects;
- 5) training under master's, specialized and modular programs;
- 6) training in technical methods and skills applied at the workplace;
- 7) training in occupational health, safety and environmental protection;
- 8) compulsory compliance training.

The following training methods are mainly used:

- 1) short-term training, including corporate training;
- 2) on-the-job training;
- 3) traineeship in other structural units of the Company or in other companies;
- 4) online learning using the possibilities of the Internet and/or other communication means;
- 5) participation in conferences, round-table discussions, forums, symposiums, congresses, exhibitions, which, along with the gaining experience and personal enrichment, promote the familiarization with the latest achievements and technologies, new approaches and ideas, successful experience and

developments of other companies, as well as the establishment of advantageous relations between the Company and its partners.

With the aim to ensure training and development of mid-level managers, the Company conducts modular training. During 2015–2017, 247 employees completed training according to this methodology. The following programs were implemented:

- ▶ modular training program for senior technical staff (shop/site managers);
- ▶ modular training program for mid-level technical staff (shop/site foremen);
- ▶ modular training program for geologists;
- ▶ modular training program for power engineers;
- ▶ modular training program on labor standardization and remuneration;
- ▶ modular training program for HR employees;
- ▶ modular training program for specialists in the field of occupational health and safety (introduced since 2017).

In 2017, 4,918 employees completed mandatory safety training courses, 974 employees – vocational training, 478 employees – advanced training, seminars and training courses.

Foreign education

Education under the Master's degree program in the Russian State University

Since September 2016, three employees have been studying at the Company's expense under the Master's degree program in the Russian State University of Oil and Gas (National Research University) named after I.M. Gubkin (RF, Moscow) in the field of Oil and Gas Business, "Hydrocarbon Systems Modeling Technologies" program.

The Company also pays for learning in the additional discipline "Profiled foreign language", accommodation in the campus of the Russian State University, flights and monthly scholarships.

Training and exchange of experience of gas treatment plant employees in the Russian Federation

From May 10 to 25, 2017, 55 new workers of the gas treatment and sulphur production shop of Zhylyoimunaygas OGPD were trained in Maktaminsk branch of Tatneft Personnel Training Center (RF, Almet'yevsk). These workers will serve a new complex gas treatment plant intended for the utilization of associated petroleum gas from Prorva group of fields with a designed capacity of 150 million cubic meters per year. Training was conducted in accordance with approved programs, which included theoretical classes and on-the-job practical training in the oil and gas industry. Trainees were provided the opportunity to study in detail the gas refining process and technological equipment, pumps, compressors, instrumentation, and to take part in the preparation for the professional skills competition among employees of Tatneftegazpererabotka Administration at the training ground.

In the period from October 16 to October 26, 2017, 17 new workers of the gas treatment and sulphur production shop of Zhylyoimunaygas OGPD completed similar training in Maktaminsk branch of Tatneft Personnel Training Center.

Refresher courses were organized for engineers and technicians of the gas treatment plant in training centers of Moscow, St. Petersburg and Ufa:

- ▶ five courses on engineering, programming and implementation of systems based on SIEMENS controllers (SIMATIC S7: ST-7PRO1, ST-7PRO2, TIA-SYSUP1200–1500, S7-TECHN, S7-WinCC), SIMATIC Training Center, Moscow;
- ▶ "Pumps and compressors – operation issues", Progress-Center LLC, St. Petersburg;
- ▶ "Main pipeline electrochemical protection. Operation, diagnosis, repair of electric plants at enterprises in oil and gas and petrochemical industries", Institute of Continuing Professional Education of Ufa State Petroleum Technological University.

Exchange of experience in the PRC

From May 17 to 24, 2017, seven employees (engineers and technicians) of the gas treatment and sulphur production shop of Zhylyoimunaygas OGPD were sent to the PRC, Tianjin city, to exchange experience at the existing facilities used for sulphur production by LO-CAT direct oxidation technology.

Personnel reserve formation and development

The actual objective for Embamunaygas JSC is the formation of a personnel reserve for the replacement of executives of structural divisions.

Goals of personnel reserve formation

- ▶ assurance of long-term staff protection of the Company through the availability of candidates for appointment to senior positions, as well as assurance of management succession;
- ▶ identification and development of promising employees to use their potential for achieving the Company's strategic goals to the maximum possible extent;
- ▶ increasing the Company's employee engagement by providing an opportunity for development and career growth;



- ▶ formation of an attractive image of the Company as an employer that promotes the attraction and retention of highly potential employees by providing an opportunity for development and career growth.

In March 2014, the Rules for personnel reserve formation were approved, and in the period from August to October 2014, a project was implemented to form the Company's personnel reserve. A total of 304 candidates took part in the integrated assessment: 252 candidates for assignment to the planned personnel reserve and 52 candidates for inclusion in the prospective personnel reserve. Based on the results of the integrated assessment, 87 employees were included in the personnel reserve, 62 employees in the planned personnel reserve and 25 employees in the prospective personnel reserve.

For the purpose of personal development and professional growth of employees included in the personnel reserve, the Personnel Management and Development Department (PMDD) has developed individual development plans (IDP), pursuant to which theoretical and practical training activities are conducted.

Appointment of employees to senior positions for 2015–2017:

- ▶ planned personnel reserve – 24 employees;
- ▶ prospective personnel reserve – six employees.

Single personnel reserve (SPR)

In 2016, nine employees of the Company from among directors, deputy directors of departments of the management staff and executives and chief engineers of production structural units were selected for inclusion in the single personnel reserve of NC KazMunayGas JSC.

In August 2017, three SPR reservists undertook a master's degree of the Kazakh-British Technical University (KBTU) under the MBA program "Effective Management in the Oil and Gas Industry". Tuition payment for SPR reservists is made at the expense of NC KazMunayGas JSC.

Employee engagement

Organization and holding of a competition "Best in Profession – 2017"

The first round of the competition was held in each production unit of Embamunaygas JSC for 13 basic working professions; the second round was held among the first round winners on the basis of Zhaiykmunaygas OGPD and the third round – among the winners of the group of companies of NC KazMunayGas JSC. Employees of Embamunaygas JSC took part in the competition for 10 working professions.

Following the results of the third round, Alibek Amanzhanovich Gabdulgazyev, a reservoir pressure maintenance operator of Dossormunaygas OGPD, took the third place. According to the collective agreement, he is paid a 10% bonus.

Organization and holding of the V Anniversary Forum of Young Specialists of KazMunayGas EP JSC on the basis of Embamunaygas JSC

Within the framework of the Forum of Young Specialists, on the initiative of the management of Embamunaygas JSC, a scientific and practical conference was held, during which five employees of the Company presented the implemented projects, seven employees presented new projects on the following subjects: "Development of oil and gas fields", "Geology", "Engineering and technology of oil and gas production".

Awards and incentives for employees

In 2017, 406 employees were awarded and rewarded for their labor achievements. Pursuant to the Decree of the President of the Republic of Kazakhstan, Anuar Yerkinovich Zhaksybekov, Chairman of the Management Board of Embamunaygas JSC, was awarded the Kurmet Order.

Social projects

Within the framework of its contractual obligations, the Company allocates great amounts of funds for social projects to train local specialists. Since 2015, the Company has been implementing a dual training project and a scholarship program.

Within the framework of the dual training project, over the last three years, 69 students of Atyrau University of Oil and Gas and ARES Retrochnic Higher School have completed on-the-job training in the Company's production units. Apart from diplomas, they received work record books.

Following the results of training under the dual training program:

- ▶ 69 trainees were assigned the qualification "Oil and gas well diagnostics operator";
- ▶ 19 trainees received the second qualification "Dehydration and demineralization plant operator";
- ▶ 20 four-year students of Atyrau University of Oil and Gas continue learning by the profession "Oil and gas production operator";
- ▶ 16 trainees were employed by Embamunaygas JSC.

Within the framework of the scholarship allowance program, the Company provides funds for payment of tuition fees for four students of APEC Retrotechnic Higher Technical School from socially vulnerable groups and for children of EMG's employees, pays monthly scholarship allowance in the amount of a minimum wage established by the legislative acts for a corresponding year, arranges on-the-job training, as well as employs graduates if there are relevant vacancies.

Within the framework of its obligations under subsoil use contracts, Embamunaygas JSC allocated funds to pay tuition fees for 129 students. 306 students from domestic and foreign universities and colleges completed on-the-job training at the Company's fields.

Social support of employees

The Company's activities in the field of social protection are aimed at creating safe and comfortable labor conditions, ensuring the social protection of employees and their family members, pensioners as well as war and labor veterans. In 2017, Embamunaygas JSC allocated 3 billion tenge for the implementation of social programs.

The Company provides a high degree of social protection for its employees. A collective agreement provides for guarantees and benefits, compensatory payments and material assistance. Great attention is paid to the solution of vital problems of each employee: additional payments for health improvement to annual leave, maternity leave payments, monthly payments to employees on child-care leave until the age of one and a half years, a one-time payment in connection with employee's death for the organization of funeral, a one-time payment to the family of an employee who died as a result of an accident at work, payment for the rest of employees' children, sanatorium-resort therapy of employees, allowance for temporary disability, organization of cultural and sports events, catering for employees and so on.

The Company also provides social guarantees for voluntary health insurance in case of illness. In case of medical treatment and medical operations, if the cost of treatment exceeds the limit established by the insurance program, employees are provided with financial aid in accordance with internal regulations.

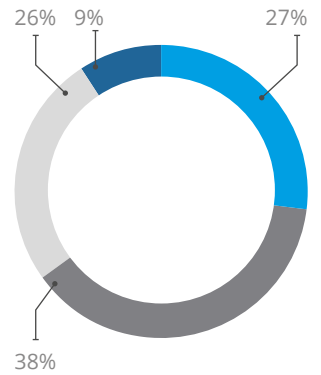
In 2017, social payments stipulated by the terms of a collective agreement amounted to 420 million tenge. In particular, 1,530 people received sanatorium treatment totaling to 264 million tenge, and the amount of 224 million tenge was allocated for rest of 1,136 children of employees. In 2017, the amount of 336 million tenge was allocated as material assistance to pensioners, including 117 million tenge for rehabilitation and rest of the Company's pensioners and veterans in sanatoriums of Kazakhstan.

Social policy

In 2017, EMG JSC celebrated its 95th anniversary. Since the establishment of Embaneft trust in 1922 through present, the Company has been making a significant contribution to the socio-economic development of the country and Atyrau region.

Since its transformation into a joint stock company in 2012 through December 31, 2017, Embamunaygas JSC, as part of its obligations under subsoil use contracts, allocated about 2.3 billion tenge for the infrastructure development in Atyrau region, paid taxes to the republican and local budgets in the amount of 695.6 billion tenge and allocated more than 2.3 billion tenge for sponsorship and charity.

Sponsorship and charity structure in 2017



- Sport support
- Assistance to public organizations
- Assistance to orphan homes
- Assistance to families in need



The Company allocates funds for the construction of kindergartens, housing for public sector employees, fitness and health centres, cultural centers and other social facilities in Atyrau oblast. In 2017, Embamunaygas JSC allocated 840 million tenge for the regional infrastructure development.

Funds allocated in 2016–2017 were used for the construction and commissioning of the following social facilities: a kindergarten for 100 children, five two-family houses in Sagyz and Tashchagyl villages of Kyzylkogy district, a secondary school named after O. Sargunanov for 300 students in Makat district, an additional building to Kulynshak kindergarten and a community center for 200 seats in Tushchykuduk and Zhanbai villages of Isatay district. The construction of social facilities is in progress: a secondary school for 424 students, a kindergarten for 290 children, a medical and obstetrical station and 10 houses for public sector workers in villages of Kyzylkogy district, a fitness and health centres for 160 people in Akkistau village of Isatay district.

Embamunaygas JSC annually provides sponsorship support to sports and public organizations, charitable assistance to children who need urgent surgical operations and rehabilitation as a result of serious diseases, and assistance to socially vulnerable groups. In general, in 2017, the Company provided sponsorship and charitable assistance in the amount of over 319 million tenge.

Emba oil workers always paid special attention to socially vulnerable groups, and the Company started a series of events under the auspices of the anniversary by conducting special events for children: in the building of Atyrau regional children's hospital the management of EMG JSC handed over medical equipment to the staff of the medical facility. The Company organized a charity event "Heat of the soul" which was attended by 350 children with disabilities. The sports and family festival "Altyn Uya" was held for the first time in Atyrau fitness and health centre in honor of the 95th anniversary of Embamunaygas Joint-Stock Company. Holding charitable New Year events has already become a tradition in the Company. For the last three years, EMG JSC has organized New Year events with theatrical performances and gifts for children staying in medical and specialized institutions on holidays. Charitable New Year events have already been held in eight children's medical and specialized institutions.

In 2017, Embamunaygas JSC held solemn events devoted to the 90th anniversary of B. Sagingaliyev, an honored oil worker of Kazakhstan, laureate of the State Prize of the Republic of Kazakhstan. A commemorative tablet was solemnly opened in the house where B.S. Sagingaliyev had previously lived with his family.



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Environmental protection

Embamunaygas JSC pays great attention to environmental protection issues. The Company is constantly working to monitor environmental components (air, water, soil, etc.) and effectively reduce a negative impact of production on the environment.

Data on emissions and waste

Indicator	Unit of measurement	2015	2016	2017
From stationary sources (emissions),	t	5134,325	5017,922	5120,115
including from gas flaring	t	2554,934	2511,26	2991,914
From discharge	t	34,188	50,028	35,454
Waste volume (disposed)	t	7193,785	3308,975	3007,91
Waste volume (recycled)	t	7199,71	12216,0914	11995,53
Volume of accumulated waste	t	13 742	8243,475	5465,629
Gas flaring volume	thous. m ³	85 043,3	87 188,3	100 538,2

In June 2017, the Company launched a major project – installation of an associated gas treatment plant at Prorva group of fields with a capacity of 150 million m³ per year. The project was implemented within the framework of the program for 100% utilization of associated gas.

The Company works systematically to minimize environmental damage and pays special attention to reducing production waste. Embamunaygas JSC allocates considerable funds to implement projects aimed at cleaning of historically contaminated areas and recycling of oil-contaminated soils. The recycling is carried out using KASC-30M installation manufactured by Kalottikone (Finland). The recycled soil is used in the construction and repair of roads at fields. Soil is also recycled with the involvement of outside organizations using an effective and environmentally friendly biological method. In addition, the utilization of auxiliary production waste (waste lamps, oils, etc.) is carried out by transferring to specialized enterprises.

Within the framework of rational use of fresh water, in 2016 the Company started work for research and further use of groundwater for production needs at facilities of Embamunaygas JSC in the territories of the South Emba basin and Kainar massif, including the estimation of groundwater reserves in Albian-Cenomanian sediments. The implementation of this program will allow the Company to reduce its dependence on the consumption of Volga River water for industrial and social needs.

To protect coastal and aquatic ecosystems against harmful impact, a protective dam is being constructed in the territory of Prorva field of Zhylyoimunaygas OGPD, as well as monitoring of flooded wells is carried out.

The Company conducts scientific research, survey and other developments in the field of environmental protection. The Company also studies methods for utilization and neutralization of harmful industrial substances and vehicle emissions, develops automated production of pollutant monitoring and control systems, which is especially important in view of the huge length of the Company's production facilities, as well as regulates and standardizes production waste disposal processes and implements other measures.

The Company also provides environmental education among its employees and the population of the region and works to improve the qualification of HSE specialists.

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Health, safety and environment policy

Embamunaygas JSC being a national oil and gas company is completely aware of the full responsibility to employees and society for creating and maintaining a safe work environment at all stages of production activities and considers the preservation of people's life and health and environmental protection as the basic priorities of its activities.

EMG JSC carries out a full production cycle, from exploration and production of hydrocarbons, their transportation and refining to provision of specialized services, striving to comply with the highest industrial safety standards and aim to improve continuously the HSE management system as a key element of production management.

The main objectives are:

- ▶ preservation of life and health of employees and surrounding people;
- ▶ assurance of assets integrity and equipment reliability;
- ▶ reducing the level of a negative environmental impact.

The basic principles are:

- ▶ compliance with the legislative requirements of the Republic of Kazakhstan, international and national standards, internal documents of EMG JSC in the field of labor protection, industrial and fire safety and environmental protection;
- ▶ continuous development and improvement of HSE management system based on the best achievements at the advanced international level;
- ▶ setting HSE goals aimed at a steady decline in frequency of occupational injuries and diseases, accidents and negative environmental impacts;
- ▶ formation of a high level of corporate culture in the field of HSE among employees;
- ▶ personal responsibility of each EMG's employee for compliance with HSE requirements;
- ▶ leadership and commitment of all level-managers of EMG JSC in the implementation of the HSE program;
- ▶ active involvement of EMG's employees in the implementation of HSE activities;
- ▶ identification and management of HSE risks at all stages of the production process;
- ▶ immediate notification, timely and objective investigation and registration of all occupational injuries and diseases, accidents and incidents in accordance with the legislation of the Republic of Kazakhstan and corporate documents, as well as objective determination of the reasons for the purpose of developing effective measures to prevent them;
- ▶ providing employees with guarantees of a legal right to refuse to perform work upon occurrence of a situation that reasonably creates a threat to life and health of employees or surrounding people;
- ▶ continuous training and professional development of employees in the field of HSE;
- ▶ assurance of constant readiness of personnel and production facilities for action and operation in emergency and extraordinary situations;
- ▶ introduction of safe and resource-saving technologies aimed at reducing emissions of pollutants and greenhouse gases and increasing energy efficiency;
- ▶ responsibility of contracting organizations for compliance with corporate HSE requirements;
- ▶ ensuring transparency and provision of information to the shareholder, partners, employees, state authorities, the public and other stakeholders regarding the aspects of EMG's activities in the field of HSE, reliability of information, its content and efficiency;
- ▶ conduct of regular assessment and analysis of effectiveness of the HSE management system for the purpose of determining the progress achieved and compliance with the HSE policy.

The HSE policy applies to all employees of the Company, as well as to employees of contractors providing services at EMG’s facilities, including transportation services on the terms specified in the contracts. The management of EMG JSC assumes responsibility for providing the necessary resources and conditions for HSE management.

Industrial safety is one of the priorities for the Company’s management. In recent years, a large-scale work has been performed with the aim to ensure work safety, primarily in the field of improving working conditions for employees: the construction of household facilities, canteens, administrative and household complexes, operator buildings for group installations, etc. The Company’s management pays great attention to the quality of purchased special clothing, special footwear and personal protective equipment.

Production activities of the Company’s structural units are associated with increased risks, and EMG is actively working to reduce the risks of accidents that are hazardous for employees’ life and health. In 2017, there were three accidents as a result of which four employees of the Company were injured, including one fatal case. After each accident, the Company establishes a commission to clarify the circumstances, identify the reasons and develop measures to eliminate such incidents and prevent their occurrence in the future.

In 2017, the amount of 852,000 thousand tenge was allocated to implement measures to ensure labor protection, industrial and fire safety as part of the production program. The action plan was fulfilled completely.

In the past year, a RBSO (Rules for Behavioral Safety Observation) program was introduced. 4,284 plan-cards were developed to improve safe working practices.

17 video clips on safe working practices have been developed, introduced and are visually demonstrated in the Company’s production and structural units.

According to the schedule for 2017, 8,147 people completed training and advanced training in occupational health and safety, industrial and fire safety.

In 2017, 131 internal documents were developed and updated for Embamunaygas JSC.

Injury rates

