Approved
Decree of the Government of the Republic of Kazakhstan from « » 2022
No.

DEVELOPMENT PROGRAM OF NON-PROFIT JOINT STOCK COMPANY «AL-FARABI KAZAKH NATIONAL UNIVERSITY» FOR 2022 - 2026

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for 2022 - 2026	

**Section 1. Program Passport** 

Name of the	«Al-Farabi Kazakh National University» for 2022-2026							
Program	(							
Basis for	1. Law of the Republic of Kazakhstan «On Education».							
development	2. Law of the Republic of Kazakhstan «On Science».							
	3. Law of the Republic of Kazakhstan «On State Youth							
	Policy».							
	4. Law of the Republic of Kazakhstan							
	«On the commercialization of the results of scientific and (or)							
	scientific and technical activities».							
	5. National Development Plan of the Republic of							
	Kazakhstan until 2025, approved by Decree of the President							
	of the Republic of Kazakhstan dated February 15,							
	2018 No. 636.							
	6. The national project «Quality Education «Educated							
	Nation», approved by the Decree of the Government of the							
	Republic of Kazakhstan dated October 12,							
	2021 No. 726.							
	7. The national project «Technological breakthrough							
	through digitalization, science and innovation», approved by							
	the Decree of the Government of the Republic of Kazakhstan dated October 12, 2021 No. 727.							
	8. Kazakhstan for 2022-2026, approved Decree of the							
	Government of the Republic of Kazakhstan dated May 25,							
	2022 No. 336.							
	9. Comprehensive plan «New Almaty»							
	for 2020-2024, approved by the Decree of the Government of							
	the Republic of Kazakhstan dated January 31,							
	2020 No. 23.							
	10. Strategic development plan of the non-profit joint-							
	stock company «Al-Farabi Kazakh National University» for							
	2021-2024							
State body	Ministry of Science and Higher Education of the Republic							
responsible for the	of Kazakhstan							
development	OI IXIZUMISUUI							
Target	«Al-Farabi Kazakh National University» into a world-class							
Programs	research university							
Tasks	i .							
	1. Integration of scientific activity and educational							
Programs	process at all levels of higher and postgraduate education.							
	2. Formation of a promising model of university							
	education and provision of academic leadership.							
	3. Increasing the contribution of university science to the							
	socio-economic development of the country.							

	4. Creation of an effective corporate governance model to							
	ensure sustainable development of the University.							
Implementation	2022 - 2026							
timeline								
Target indicators	of educational programs included in the top 300							
	international ratings is 2.8%.							
	2. The share of students in postgraduate education programs							
	(undergraduates, doctoral students) of the total contingent of students - 27%.							
	3. The proportion of faculty members (hereinafter referred							
	to as teaching staff) who completed training and internships,							
	including in the top 300 organizations of higher and (or)							
	postgraduate education (hereinafter referred to as OVPO) of							
	the QS WUR international rating, is 17%.  A The share of financing of research and development work.							
	4. The share of financing of research and development work							
	in the total amount of costs for research and development							
	work in the Republic of Kazakhstan, taking into account the renewal of laboratory equipment - 9.7%.							
	5. The share of citations of publications of scientists in the							
	Scopus database from the total number of citations of scientists of the Republic of Kazakhstan in Scopus is 21%.							
	6. The share of projects carried out jointly with the OVPO							
	and research organizations of the Republic of Kazakhstan, of the total number of scientific projects - 26%.							
	2 0							
	7. The share of teaching staff, students and employees involved in the corporate							
	1							
	governance system is 19%.  8. The share of income from commercial activities in the							
	total income of the University - 10%.							
Comment	•							
Sources and	Required Funds  The required extre budgeters funding for							
amounts of funding*	The required extra-budgetary funding for							
	2022-2026 will be 46,353,570.4 thousand tenge, of which:							
	attracted extra-budgetary investments - 37,332,943.4							
	thousand tenge, own funds - 9 020 627.0 thousand tenge,							
	including in the context of 2022-2026:							
	in 2022 - 23,357,404.0 thousand tenge, of which:							
	attracted extra-budgetary investments - 22,074,566.0							
	thousand tenge,							
	own funds - 1,282,838.0 thousand tenge;							
	in 2023 - 13,437,785.85 thousand tenge, of which:							
	attracted extra-budgetary investments - 11,976,709.85							
	thousand tenge,							
	own funds - 1,461,076.0 thousand tenge;							
	Own runds - 1,701,070.0 mousand tenge,							

in 2024 - 5,264,176.55 thousand tenge, of which: attracted extra-budgetary investments 3 281 667.55 thousand tenge, own funds - 1,982,509.0 thousand tenge; in 2025 - 2,095,670.0 thousand tenge, of which: own funds - 2,095,670.0 thousand tenge; in 2026 - 2,198,534.0 thousand tenge, of which: own funds - 2,198,534.0 thousand tenge.

«Al-Farabi Kazakh National University» (hereinafter - the University, the Company) from the republican budget for 2022-2026 will amount to 99,371,075 thousand tenge, of which:

funds from educational activities under the state order - 84,000,000 thousand tenge,

from academic mobility - 382,000 thousand tenge, from scientific activity - 14,989,075 thousand tenge; including in the context of 2022-2026:

in 2022 - 19,874,215 thousand tenge, of which:

state order - 16,800,000 thousand tenge,

academic mobility - 76,400 thousand tenge,

science - 2,997,815 thousand tenge;

in 2023 - 19,874,215 thousand tenge, of which:

state order - 16,800,000 thousand tenge,

academic mobility - 76,400 thousand tenge,

science - 2,997,815 thousand tenge;

in 2024 - 19,874,215 thousand tenge, of which:

state order - 16,800,000 thousand tenge,

academic mobility - 76,400 thousand tenge,

science - 2,997,815 thousand tenge;

in 2025 - 19,874,215 thousand tenge, of which:

state order - 16,800,000 thousand tenge,

academic mobility - 76,400 thousand tenge,

science - 2,997,815 thousand tenge;

in 2026 - 19,874,215 thousand tenge, of which:

state order - 16,800,000 thousand tenge,

academic mobility - 76,400 thousand tenge,

science - 2,997,815 thousand tenge.

Additional funds from the republican and local budgets are not required.

Financing for the implementation of the Program is planned from extrabudgetary funds, attracted investments and own funds.

<sup>\*</sup> The amount of funding for the Development Program will be determined when forming the republican budget for the coming periods and clarifying the republican budget for the corresponding period

#### **Section 2 Introduction**

In the National Development Plan of the Republic of Kazakhstan until 2025, the main goal of the national priority «Quality Education» is «the development of human capital to implement a new course of development for the country».

Within the framework of this priority, a transition will be made «from insufficient communication between science and production to the introduction of progressive technological solutions of domestic science in the production and industrial sector with access to the global scientific space». It also provides for «full provision of facilities equipped with equipment that meets the best world standards» and «an increase in the share of private investment in science».

Along with this, the country's OVPO has been tasked with becoming «smart universities and creating an educational digital ecosystem». In general, the market of educational services should remain predominantly OVPO, which provide quality education and meet international standards.

In accordance with the requirements of the Science Development Concept of the Republic of Kazakhstan for 2022-2026, as well as in order to support the University as having the greatest scientific potential, the Company provides integration of science, business and production through the transformation of the Al- Farabi Kazakh National University to the research university.

World-class research universities specialize not only in the preparation of competitive specialists, but also in the implementation of a wide range of scientific research and its further commercialization. It is research universities that become points of growth, drivers of the knowledge-intensive economy and hubs of the scientific and innovative system. The degree of development of the scientific and innovative system forms the basis for sustainable economic growth and is a necessary condition for the full participation of the country in the global division of labor.

The Society is a multidisciplinary university that effectively carries out educational, scientific and innovative activities and the commercialization of scientific developments.

#### Section 3. Analysis of the current situation

In the system of higher and postgraduate education of the Republic of Kazakhstan, the Society plays a special role, being the country's leading multidisciplinary university that trains specialists at all levels of education in a wide range of areas.

The Society has 16 faculties and 68 departments, 8 research institutes, 29 research institutes and centers of natural science and technology, social and humanitarian profile.

The university has a highly qualified teaching staff with more than 3 thousand people, including: 9 academicians of the National Academy of Sciences of the Republic of Kazakhstan, 598 doctors of science in the profile, 858 candidates of science.

461 doctors of PhD . More than 35% of teachers speak a foreign language, including IELTS and TOEFL certificates.

The Society implements more than 640 undergraduate, graduate and PhD educational programs, which are coordinated with employers and international partners. On the basis of the University, the Educational and Methodological Association of the Republican Educational and Methodological Council operates in 9 areas of training.

The transformation of educational programs is being carried out taking into account the needs of the modern labor market and the involvement of employers, the use of foreign experience in the creation of educational programs, recognition by professional communities and certification.

Within the framework of direct agreements between partner universities of near and far abroad, the University conducts training for joint and double-degree programs. For a number of programs, partner universities occupy leading positions in the international QS ranking WUR (Osaka University, Japan - 72nd place, Ghent University, Belgium - 135th place, La Sapienza University, Italy - 171st place, etc.).

International accreditation of educational programs is one of the key mechanisms for ensuring the quality of education. Thus, about 90% of educational programs have been accredited by Kazakhstan and foreign accreditation agencies. There are a number of educational programs awarded with the EUR - ACE  $\circledR$  label .

According to the information received from the State Center for the Payment of Pensions, in 2020, the employment rate of graduates of the University for undergraduate studies was 90%, while the employment rate for master's programs reached 93%, and for doctoral studies - 100%.

In 2021, the University entered the top 201-250 in terms of graduate employability in the QS ranking of the best universities in the world. According to the indicator «The share of employed graduates», the university ranks 55th in the world. This testifies to the high competitiveness and demand for graduates of postgraduate education in the labor market.

The University is implementing a program to attract foreign professors and scientists with high rates of publication activity. This provides an opportunity for joint publications in high-ranking publications and the organization of scientific internships for students in leading scientific centers of the world.

The university is becoming a center for the export of educational services for students from near and far abroad. The contingent of foreign students has grown 70 times: from 33 in 2016 to 2400 in 2021.

The scientific and innovative infrastructure of the University includes 2 scientific laboratories for collective use, 8 accredited laboratories, a science and technology park, a commercialization office, a business incubator, start-up companies and small innovative enterprises.

There is a dynamic to increase funding for research work: 2018 - 4.6 billion tenge, 2019 - 4.8 billion tenge,

2020 - 5.8 billion tenge, 2021 - 4, 53 billion tenge. The structure of financing is presented as follows: grant - 39%; program-target - 12%; international - 29%; negotiable - 19%.

Purposeful work is being carried out to improve the quality of scientific research of young scientists and, as a result, the potential of the University. The number of doctoral students increased by 2.5 times: from 479 in 2016 to 1243 in 2020

Since 2014, the University has been implementing the «Integration of Education and Science» project with 10 research institutes of the Ministry of Science and Higher Education of the Republic of Kazakhstan (hereinafter - MNHE). The Society, together with the scientists of the Research Institute, prepares undergraduates and doctoral students in a wide range of scientific areas. Over the years, over 550 people have completed their studies in joint educational programs, 147 doctoral students have been trained.

For the purpose of further integration, on February 2, 2022, the University entered into agreements with the Republican State Enterprise «Gylym ordasy» and 1 8 research institutes: Institute of Economics, Institute of Archeology named after A.Kh. Margulan, Institute of Oriental Studies named after R.B. Suleimenov, Institute of Information and Computing Technologies, Institute of History and Ethnology named after Ch.Ch. Valikhanov, Institute of Literature and Art named after M.O. Auezov, Institute of Mathematics and Mathematical Modeling, Institute of Mechanics and Engineering Science named after U.A. Dzholdasbekov, Institute of Philosophy, Political Science and Religious Studies, A. Baitursynov Institute of Linguistics, Institute of Zoology, Institute of Plant Biology and Biotechnology, Institute of Geography and Water Safety, Institute of Biological Safety Problems, Institute of Molecular Biology and Biochemistry named after M.A. Aitkhozhin, Mangyshlak Experimental Botanical Garden.

All these institutes are subordinated to the Science Committee of the MNVO.

At all levels of training, the integration of scientific research and the educational process is carried out. Special courses have been introduced aimed at developing competencies for conducting scientific research (Scientific Writing, Organization and planning of scientific research, Academic writing, Scientific research methods).

There is an increase in the number of scientific internships for doctoral students in foreign universities and research centers. About 85% of scientific internships are carried out in OVPO and scientific centers of far abroad countries, the remaining 15% - in neighboring countries. At the same time, more than a third of the universities that the bases of internships in the 300 of are are top the QS WUR ranking.

The amount of funding for research work allocated to attract students to research on a paid basis is 10% of the total grant funding for research work.

An indicator of the effectiveness of scientific research is the level of publication activity of the OVPO in high-ranking journals. Thus, the University is the first OVPE in Kazakhstan, publishing more than 1000 articles annually in Scopus rating publications.

In order to integrate the University into the global scientific and educational space, 187 international scientific projects were implemented: 2018 - 42, 2019 - 50, 2020 - 50, 2021 - 45.

In order to convert the results of research and development work (hereinafter referred to as R&D) into the real sector of the economy, the University has created a technological corridor «from generating an idea to its commercialization». Innovative enterprises and spin-off companies have been created, small-scale production of high-tech products has been launched. There are a center for process innovations and a center for remote sensing of the Earth. The University launched the first Kazakh nanosatellites into space – «Al-Farabi-1» and «Al-Farabi-2».

The university is a leader in national rankings, both institutional and educational program rankings. Entry into the world rankings of OVPO QS WUR and THE WUR contributed to the dynamic promotion of the University at the international level.

The functioning of the University was carried out in accordance with the Development Strategy for 2017-2021. The next stage is the transformation into a world-class research university on the basis of the Society's Development Program until 2026 (hereinafter referred to as the Program).

The Program contains a set of activities interconnected in terms of resources and timing, covering changes in the structure, content and technologies of the educational, research and innovation processes in the VET, the management system and financial and economic mechanisms.

The definition of goals and objectives for the upcoming period of development is carried out in the context of the strategic objectives of the development of the Republic of Kazakhstan, defined in the Strategy «Kazakhstan-2050», the National Development Plan of the Republic of Kazakhstan until 2025, the National Project «Quality Education «Educated Nation», the National Project «Technological a breakthrough through digitalization, science and innovation», the Concept for the Development of Education in the Republic of Kazakhstan for 2022-2026, the Strategic Development Plan of NJSC «Al-Farabi Kazakh National University» for 2021-2024 and other documents of the State Planning System.

Along with this, it is necessary to take into account the issues of the education and science system that need to be addressed, which also influenced the organization of the educational process in the context of the COVID -19 pandemic .

Despite the successes achieved, there are a number of areas in the educational and scientific activities of the Society, the development of which is provided for by the Program. Thus, the academic and research potential of the University does not fully correspond to the strategic objectives of the development of higher and postgraduate education and science. Educational programs require further updating in accordance with the priorities of the country's socio-economic development.

The material and technical infrastructure requires a radical modernization in order to meet modern requirements for organizing the educational process and conducting scientific research. It is necessary to improve the social and living conditions of students in hostels.

The level of digitalization and the introduction of modern technologies in all areas of activity do not contribute to the dynamic development of the University. In general, it is required to increase the University's contribution to improving the quality of education and science, as well as the development of national human capital.

#### Section 4. Purpose, objectives and ways of achieving the Programs

Goal: transformation of the Society into a world-class university.

To achieve this goal, the following tasks will be solved.

## Task 1. Integration of scientific activity and educational process at all levels of higher and postgraduate education.

The level of development of science-intensive technologies is currently the basis of the economic condition and scientific and production potential of the country. The integration of education with science and production is a dynamic multicomponent system, a single educational space of OVPO, science and production.

The University will act as the central link in the integration processes in the field of science, education and production. The research university form is a successful form of integrating education, science and business. When implementing research programs, the University will develop scientific and applied research and development commissioned by the production sector, as well as carry out work on the development of innovative infrastructure, the creation of scientific and innovative centers, technology parks, which are the link between education, science and production.

In addition, close integration with «Gylym Ordasy» and research institutes will expand the scope of cooperation of the University and significantly increase the range of integration issues to create new research groups for scientific support of the primary tasks of state development. The University has developed a mechanism for collecting technological tasks of the real sector to increase the investment attractiveness of scientific projects. To this end, it is necessary to expand the base of research laboratories and centers for collective use. In general, the integration of education and science will lead to an increase in the contribution of Kazakh science to the socioeconomic and socio-political development of the country.

In order to integrate education, science and innovation, it is necessary to fully involve teaching staff and students in research activities and the implementation of scientific projects.

To solve the strategic tasks of university science, it is necessary to intensify the process of commercialization of scientific results and interaction with the real sector and business. Scientific research should be oriented as much as possible to the actual needs of the economy and society.

Further integration into the global scientific space will be carried out through the participation of University scientists in international teams based on the world's leading scientific and laboratory complexes in strategic innovation areas.

In order to develop international collaboration, the number of scientific internships for scientists will increase, which will increase the level and quality of research work, knowledge of foreign languages, and develop publication activity.

The University will expand cooperation with leading Kazakhstan and international OVPO and research organizations in order to carry out scientific projects in the most relevant areas.

The implementation of these measures will contribute to the internationalization of scientific activities and further integration of the University into the international research space.

## Task 2 . Formation of a promising model of university education and provision of academic leadership.

In order to train competitive personnel capable of working in conditions of high uncertainty, measures will be taken to diversify educational services and introduce new training formats.

The actualization of educational programs will be carried out on an ongoing basis, taking into account the strategic objectives of state development. Based on the existing potential of the University and cooperation with strategic Kazakh and foreign partners, the interdisciplinarity of educational programs will be ensured.

The university will implement a set of educational programs for bachelor's, master's and doctoral studies, which will ensure the training of the most sought-after personnel. A national portfolio of educational programs will be formed and high satisfaction of stakeholders with University graduates will be ensured.

Educational programs will be developed taking into account professional standards and focused on the formation of complex competencies of graduates. Students will be oriented towards the development of «disruptive thinking» (breakthrough ideas).

The organization of education at the University will be provided on the basis of the integrated use of digital technologies. The development of complex digital educational resources, including virtual simulators, will be carried out jointly with the IT sector. Programs for the development of digital competencies and project management skills will be implemented for teachers and students.

The growth of joint international programs, the development of a system of exchange and collaboration between teachers and students, including internships at leading foreign universities at the expense of extrabudgetary funds, will be ensured. Top foreign professors and scientists will be attracted to the University for the positions of professor-researcher and associate professor-researcher at the expense of paid services.

Effective interaction with employers and active involvement in the development of educational programs will be ensured, taking into account the current and future needs of the labor market. The educational programs will include practice-oriented disciplines based on joint teaching by the faculty of the University and representatives of the real sector and business.

Employment of graduates will be oriented to Kazakhstan and international enterprises, organizations and companies in priority sectors for the socio-economic development of the country.

An increase in the civil and professional activity of students and employees of the University will be provided. In order to strengthen Kazakhstan identity and values, interuniversity student discussion platforms will be created.

The strategic partnership of the University will be focused on the leading foreign educational institutions and research centers that form the potential for sustainable global development. Double degree programs will be implemented with foreign partner universities included in the top 300 of the international QS WUR ranking.

To expand the export of educational services, foreign branches of the University will be created at the expense of extrabudgetary funds.

Taking into account the ongoing challenges of the pandemic and the post-pandemic period, online academic mobility at its own expense and student cooperation within the framework of international programs such as Erasmus, Mevlana, Orhun, IAESTE, Flagman will be actively developed in parallel.

Through the participation of the University in the development of strategic and program documents of the country, a contribution will be made to the development of national capacity in the field of forecasting and scenario planning.

The implementation of these measures will help improve the quality of the country's human capital and further promote the University in national and international rankings.

#### Task 3. Increasing the contribution of university science to the socioeconomic development of the country.

The scientific policy of the University will be based on increasing the research potential and developing scientific schools, such as plasma physics, chemistry of macromolecular compounds, mathematical and computer modeling, biotechnology, molecular biology and genetics, public health, history and archeology, psychology, etc. in the field of fundamental and applied research.

Scientific developments will be focused on the priorities of socio-economic development. The collection of technological tasks from the state and real sectors will be carried out.

Interdisciplinary research groups will be created, which will focus on identifying priority areas of university science.

The development of scientific potential and the concentration of resources in priority areas of scientific and technological development will ensure the investment attractiveness of the results of scientific research and the development of technology transfer and commercialization. When preparing applications for scientific grants, the connection with the real sector through the co-financing mechanism, the solution of technological problems, the possibility of using the infrastructure of design bureaus, incubation, acceleration, and more will be taken into account.

The creation of scientific and innovative laboratories for collective use, centers of excellence in the field of high technologies and research will ensure the advanced development of priority research areas of the University.

In order to improve the research competencies of teachers and students, trainings will be organized on the use of integrated methods of scientific research and training

in the skills of preparing scientific publications and applications for grants with the involvement of leading experts from Kazakhstan and international organizations.

The creation of an Internet platform for the promotion of scientific results will increase the investment attractiveness and demand for the University's research projects.

The development and implementation of a system for stimulating innovative activity will increase the involvement of the teaching staff in research activities.

A system of grant support will be introduced at the expense of extrabudgetary funds of the University for the implementation of science-intensive and innovative projects with commercial potential.

On a regular basis, an assessment will be made of the impact of the results of scientific research of the University on the socio-economic development of the country.

The growth of the share of research and development of the University in the Kazakhstan and international markets will be ensured. In order to strengthen the research potential, an increase in grants financed by both Kazakhstan and international organizations will be provided.

A cardinal renovation of scientific laboratories and centers in priority areas of fundamental and applied research will be carried out. Equipping with advanced equipment and digital technologies will create a scientific and intellectual environment for the University. The modernization of the infrastructure to support the commercialization of scientific developments will also be further developed.

In order to implement world-class scientific projects, the scientific and laboratory base of the University will be certified in accordance with national and international standards.

Upgrading the equipment of scientific laboratories and centers of the University will contribute to the implementation of advanced scientific projects while increasing their effectiveness.

## Task 4. Creation of an effective model of corporate governance and sustainable development of the University.

In order to effectively implement the set goals and objectives, the organizational structure of the University will be modernized. A balance will be ensured between front and back offices and effective functional interaction of all structural divisions.

The development of the principles of academic freedom and integrity will increase the responsibility of the University for the quality of education.

Conditions will be created for the direct participation of teaching staff, students and employees in decision-making and their implementation in the main areas of development of the University by creating committees that form a single corporate governance system.

The formation of a positive corporate culture will ensure high motivation and involvement of employees in the implementation of the strategic objectives of the University's development.

The introduction of strategic HR and talent management will lead to an increase in human resources. The creation of an assessment center will ensure regular assessment and dynamics of the development of professional competencies of teaching staff and employees. An online platform for the professional development of teaching staff and employees will be created, which will allow the use of advanced advanced training technologies.

There will be a transition from the passive use of computer and communication technologies to the creation of a «smart» environment and University services. The introduction of digital management technologies will increase the efficiency and flexibility in making management decisions. The transition to digital workflow will form the "paper free university" system.

Optimization and digital reengineering of business processes will ensure a radical reduction in bureaucracy and increase the effectiveness of the administrative management of the University.

This Program is aimed at strengthening the innovation ecosystem of the University through the opening of the «Al - Farabi Center of Excellence scitech Center», which will be focused primarily on the sharing of its infrastructure by scientists from different fields of science.

Its main core will be the Center for Nanometrology and Materials Analysis (CeNaMA), an engineering module (Technical workshop) – scientific and innovative laboratories for collective use. In addition, laboratories for conducting advanced scientific research in the field of medicine, biology, etc. will be located on the territory of the Center, which at the moment cannot be located on the territory of the existing buildings of the University due to limited free space.

Much attention will be paid to the creation of a modern engineering and communication structure (exhaust systems, ceiling and desktop service modules for the supply and removal of communications, laboratory furniture, etc.). It is important to immediately build a modern infrastructure at the level of world analogues. This will contribute to the formation of a research eco-environment that creates physical and psychological comfort and demonstrates high competitiveness. Such working conditions, together with a good fleet of equipment, advanced scientific research, will attract progressive youth and strong scientists, which will automatically lead to an increase in the number of won projects, increased collaboration with other research centers and attractiveness for business structures and venture capital investment. In addition, the existence of such a center will have a positive impact on the learning environment, it will be possible to demonstrate the high achievements of science and technology directly in the laboratories, students will have the opportunity to practice and complete their theses on modern equipment.

Such a center will not be able to function efficiently enough without the support of the educational process, other scientific departments, which will provide, first of all, with personnel and scientific groundwork. The opening of such a center at the University has an obvious advantage, since it has 16 faculties and 68 departments, 8 research institutes of natural science and technology, 29 research institutes and centers of social and humanitarian profile.

There are two laboratories for collective use at the University: the National Nanotechnology Open Laboratory and the Engineering Laboratory, created more than

ten years ago in accordance with the 5 priorities of the country's scientific and technological development, among other laboratories based on various OVPO of the country.

The main goal of the laboratories is to provide access for conducting scientific research to domestic and foreign scientists, regardless of departmental affiliation and ownership of a scientific organization or higher educational institution, as well as to the private sector for conducting research and development work with further implementation of the results obtained into real life. sector of the economy.

The strategic partnership of the Society will be focused on advanced OVPO and research centers that form the potential for sustainable global development. To expand export opportunities, conditions will be created for opening foreign branches of the University at the expense of extrabudgetary funds.

The introduction of modern financial management tools and the efficient use of financial resources will ensure economic growth, expansion of commercial activities, increase in salaries of employees and modernization of infrastructure. Unproductive costs will be identified and minimized.

Attracting investments, along with traditional budgetary sources, will lead to structuring and gradual expansion of the University's budget in the strategic period.

Buildings and premises of educational and research laboratories and centers will be updated and modernized.

The implementation of these measures will contribute to the creation of an effective corporate governance model and ensure the sustainable development of the University.

#### Section 5. Target indicators for the implementation of the Program

Information on achieving the set goal within the specified tasks with target indicators is specified in Appendix 1 to this Program.

#### Section 6. Expected effect and results of the Program implementation

The implementation of the Program will increase the level of education, design work and research, recognized on a global scale.

The University, as a multidisciplinary educational and research center, will make the maximum contribution to the formation of the human (intellectual) potential of the country, the training of professional personnel capable of working at the forefront of research and technology.

By the end of the implementation of the Company Development Program in response to the challenge of the advanced development of the scientific and technological potential of Kazakhstan in the context of radical technological transformations, the University will strengthen the status of the leader of the national higher education system and receive international recognition as a leading educational and research center. an organization that matches the high standards of the best research universities in the world.

The action plan for the implementation of the Company's development program for 2022-2026 is given in Appendix 2 to this Program.

#### **Section 7 Required Resources**

Sources and amounts of funding\*

The required extra-budgetary funding for 2022-2026 will be 46,353,570.4 thousand tenge, of which:

attracted extra-budgetary investments - 37,332,943.4 thousand tenge,

own funds - 9 020 627.0 thousand tenge,

including in the context of 2022 - 2026:

in 2022 - 23,357,404.0 thousand tenge, of which:

attracted extra-budgetary investments - 22,074,566.0 thousand tenge,

own funds - 1,282,838.0 thousand tenge;

in 2023 - 13,437,785.85 thousand tenge, of which:

attracted extra-budgetary investments - 11,976,709.85 thousand tenge,

own funds - 1,461,076.0 thousand tenge;

in 2024 - 5,264,176.55 thousand tenge, of which:

attracted extra-budgetary investments - 3 281 667.55 thousand tenge,

own funds - 1,982,509.0 thousand tenge;

in 2025 - 2,095,670.0 thousand tenge, of which:

own funds - 2,095,670.0 thousand tenge;

in 2026 - 2,198,534.0 thousand tenge, of which:

own funds - 2,198,534.0 thousand tenge.

\*The amount of funding for the Development Program will be determined when forming the republican budget for the coming periods and when clarifying the republican budget for the corresponding period

To implement the investment project, own funds and other funds not prohibited by the legislation of the Republic of Kazakhstan will be attracted.

Thus, in 2022-2024, it is planned to gradually increase extrabudgetary spending to improve the quality of education and modernize the scientific and intellectual infrastructure. Estimated financial costs of attracted extrabudgetary investments will amount to 9,997,943.4 thousand tenge, including by years:

2022 - 2 940 0 66.0 thousand tenge;

2023 - 3 77 6 20 9, 85 thousand tenge;

2024 - 3 281 667.55 \_ thousand tenge.

The period and cost of the implementation of activities is indicated in Annexes 3 and 4 to this Program.

The estimated volume of attracting extra-budgetary funds for the reconstruction and construction of dormitories is 27,335,000.0 thousand tenge.

The university provides for the reconstruction of 14 student dormitories with a total area of 84649 m 2 at the expense of the investor. The design capacity is 4,865 beds. The amount of investor financing is 6,335,000.0 thousand tenge.

To provide students in need with places in the dormitory, the University provides for the construction of 6 9-storey dormitories with a high level of comfort for 6000

beds. The volume of financing at the expense of the investor is planned in the amount of 21,000,000.0 thousand tenge.

In addition, it is planned to allocate own funds for updating the material and technical base of the university and purchasing fixed assets, including computer equipment, updating teaching, laboratory and production equipment, book provision and electronic educational resources, furniture, other fixed assets and intangible assets in the amount of 9,020,627.0 thousand tenge, including:

in 2022 - 1,282,838.0 thousand tenge; in 2023 - 1,461,076.0 thousand tenge; in 2024 - 1,982,509.0 thousand tenge; in 2025 - 2,095,670.0 thousand tenge; in 2026 - 2,198,534.0 thousand tenge.

The total income of the Company from the republican budget for 2022-2026 will amount to 99,371,075 thousand tenge, of which:

funds from educational activities under the state order -84,000,000 thousand tenge;

from educational activities under 00,000 thousand tenge; from academic mobility - 382,000 thousand tenge; from scientific activity - 14,989,075 thousand tenge; including in the context of 2022 - 2026: in 2022 - 19,874,215 thousand tenge, of which: state order - 16,800,000 thousand tenge, academic mobility - 76,400 thousand tenge, science - 2,997,815 thousand tenge; in 2023 - 19,874,215 thousand tenge, of which: state order - 16,800,000 thousand tenge, academic mobility - 76,400 thousand tenge, science - 2,997,815 thousand tenge; in 2024 - 19,874,215 thousand tenge, of which: state order - 16,800,000 thousand tenge, academic mobility - 76,400 thousand tenge, academic mobility - 76,400 thousand tenge, science - 2,997,815 thousand tenge,

in 2025 - 19,874,215 thousand tenge, of which:

state order - 16,800,000 thousand tenge,

academic mobility - 76,400 thousand tenge,

science - 2,997,815 thousand tenge;

in 2026 - 19,874,215 thousand tenge, of which:

state order - 16,800,000 thousand tenge,

academic mobility - 76,400 thousand tenge,

science - 2,997,815 thousand tenge.

Additional funds from the republican and local budgets are not required.

#### Attachment 1 to the Nonprofit Development Program «Al-Farabi Kazakh National University» for 2022 - 2026

# Information to achieve the set goal within the specified tasks with target indicators

No	Target indicators	Unit	In the planning period				d	
•		measu						
p/p		remen						
		ts	2022	2023	2024	2025	2026	
The	goal is to the perform the Conicty into a world	l aloga na				2025	2026	
	goal is to transform the Society into a world							
Ta	Task 1. Integration of scientific activity and educational process at all levels of higher and postgraduate education							
1.	of educational programs included in the top							
1.	300 international rankings	%	1.5	1.7	2.0	2.5	2.8	
2.	The share of projects carried out jointly							
	with OVPO and research organizations of							
	the Republic of Kazakhstan, out of the total	%	15.0	17.0	20.0	23.0	26.0 _	
	number of scientific projects							
	Task 2. Creating a promising model of univ	ersity ed	ucation	and pr	oviding	acade:	mic	
	leaders	-		· · · · · · ·		<b>,</b>	_	
1.	The share of students in postgraduate							
	education programs (undergraduates,	%	20	22	23	25	27	
	doctoral students) of the total contingent of		%	20	22	23	23	21
	students							
2.	The share of teaching staff who completed							
	training and internships, including those in	%	7	9	11	15	17	
	the top 300 OVPO of the QS WUR	/0	,		11	13	17	
	international ranking							
Tasl	k 3 . Increasing the contribution of universi	-	e to the s	socio-ec	conomi	c develo	opment	
	of the co	untry	1	T	T	T	T	
1.	The share of R&D financing in the total							
	amount of R&D costs in the Republic of	%	7.4	7.9	8.5	9.1	9.7	
	Kazakhstan, taking into account the	70	,	,.,	0.0	7.1	7.7	
_	renewal of laboratory equipment							
2.	The share of citations of publications of							
	scientists in the Scopus database from the	%	19	19.5	20	20.5	21	
	total number of citations of scientists of the		17	17.0		20.5		
	Republic of Kazakhstan in Scopus							
	Task 4. Creation of an effective model of	-	_	nance a	and sus	tainabl	e	
1.	development of t		SISILY			1		
1.	Share of teaching staff, students and	%	11	13	15	17	19	
	employees involved in the corporate	70	11	13	13	1 /	19	
	governance system							

2.	The share of income from commercial activities in the total income of the University	%	6.0	7.0	8.0	9.0	10.0
3.	Satisfaction with the system of higher and postgraduate education at the University	%	55	60	65	70	75

<sup>\*</sup>Note. Expenses for increasing the share of students in master's, doctoral programs, R&D funding, increasing the share of teaching staff who have completed training and internships will be determined when forming the RB for the coming periods and at the expense of paid services.

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Annex 2 to the Nonprofit Development Program «Al-Farabi Kazakh National University» for 2022 - 2026

## Action plan for the implementation of the development program N JSC «Al-Farabi Kazakh National University» for 2022 - 2026

No.		unit of		Direct	Outcom	e Indica	ators		
p/p	Name of events	measur ement	2021 (fact)	202 2	20 23	202 4	202 5	202 6	Completion Form
1	2	3	4	5	6	7	8	9	10
	And the integration of scientific activity and the e	ducational	process a	t all leve	ls of hig	her and	postgra	duate ed	ucation
1.	Increase in the number of teaching staff who have completed an internship in the top 300 OVPO of the QS WUR international ranking	Pers.	85	250	350	400	500	600	reporting information
2.	Increasing the share of invited foreign teachers and researchers	%	4.2	5	7	10	15	20	individual labor contracts
3.	Increasing the share of educational programs in which the teaching staff of the university and representatives of the real sector and business are jointly taught	%	10	20	30	35	40	45	educational programs
4.	Increasing the share of the implementation of scientific projects together with the OVPO and research organizations of the Republic of Kazakhstan	%	12	18.5	37.1	51.1	60.7	67.6	research results reports
5.	Increasing the share of R&D funding from the total university budget	%	22.7	24.8	26.5	28.4	30.4	31.0	contracts, budget requests
6.	Increasing the share of scientific projects carried out jointly with enterprises and business structures to solve technological problems	%	24	42.5	47.9	66.7	72.2	72.6	agreements, memorandums
	Formation of a promising model of un	niversity ed	lucation a	nd provi	sion of a	cademi	c leaders	ship	

_		ı	1				T	ı	
1	2	3	4	5	6	7	8	9	10
1.	Increasing the share of updated educational programs and topics of graduation theses with the involvement of stakeholders	%	30	35	45	50	60	65	educational programs
2.	Increasing the share of interdisciplinary educational programs	%	20	25	30	45	50	55	educational programs
3.	Increasing the share of graduate works completed in the format of applied projects in priority areas of socio-economic development	%	17	30	40	50	60	65	graduation work
4.	Increasing the share of teaching staff and students who have been trained and certified in the use of digital technologies and project management	%	2.7	15	40	60	70	75	certificates
5.	Increasing the number of complex digital educational resources used in the educational process	Unit	83	100	150	200	250	300	massive open online courses, virtual simulators, digital instruments
6.	Increase in the share of employed graduates in the year of graduation	%	87	80	82	85	87	90	reporting information
7.	Increasing the number of double degree programs developed with foreign universities included in the top 300 of the international QS WUR ranking	%	5	7	10	13	15	17	educational programs
8.	Increasing the share of teaching staff participating in the development of strategic and program documents in priority areas of the country's socio-economic and socio-political development	%	0.6	0.5	2	5	10	12	composition of working and expert groups
	Increasing the contribution of university	y science to	the socio	-economic	devel	pment	of the co	untry	
1.	Increasing the share of scientific projects and programs on grant and program-targeted financing from the total number of scientific projects in the Republic of Kazakhstan	%	13.7	15.2	15.5	15.8	16.2	16.5	research results reports

1	2	3	4	5	6	7	8	9	10
2.	Growth in the number of ongoing international scientific projects	Unit	50	86	104	124	149	176	agreements, memorandums
3.	Increasing the share of publications in rating journals indexed by Scopus from the total number of publications of scientists of the Republic of Kazakhstan in the Scopus database	%	22.1	20.5	21	21.5	22	22.5	publications indexed in the Scopus database
4.	Increasing the share of publications in publications indexed by Web of Science (Clarivate Analytics) from the total number of publications of scientists of the Republic of Kazakhstan in the Web of Science database	%	21.9	19	19.5	20	20.5	21	publications indexed in the Web of Science database
5.	Increase in the share of publications of authors with foreign scientists in the Scopus database from the total number of joint publications of scientists of the Republic of Kazakhstan in Scopus	%	23.8	20	20.5	21	21.5	22	publications indexed in the Scopus database
6.	Increase in the number of commercialized results of scientific and technical activities	Unit	13	18	27	41	53	55	contracts, acts of implementation
7.	Increase in the number of received patents and other titles of protection (industrial designs, utility models and copyrights)	Unit	160	438	526	631	757	760	patents, copyright certificates
8.	Increase in the number of postdoctoral students	Pers.	35	40	45	50	55	60	enrollment orders
9.	Creation of dissertation councils in the areas of personnel training (together with research institutes)	Unit	14	16	17	19	20	21	orders to create
10.	Increase in the share of accredited and certified laboratories in the total number of laboratories	%	11	11.2	13.1	15.9	18.9	19.0	certificates of certification and accreditation
11.	Creation of new scientific and innovative laboratories for collective use, centers of excellence	Unit		1	2	7	_	_	laboratories, centers
12.	Increasing the number of small innovative enterprises	Unit	10	18	23	30	50	55	small innovative enterprises

1	2	3	4	5	6	7	8	9	10
	Creation of an effective corporate governance model to ensure the sustainable development of the university								
1.	Increasing the share of teaching staff, students and employees involved in the corporate governance system	%	0.4	1.5	2	3	5	7	composition of committees and other corporate governance structures
2.	Opening of university branches abroad (annually)	Unit	1	1	_	1	_	1	branches abroad
3.	Increase in the share of teaching staff and employees who completed professional development courses at the university and third-party organizations	%	eleven	35	50	60	70	75	certificates
4.	Increasing the share of teaching staff and employees, using digital document management	%	25	20	40	fifty	60	70	Directum Office 365 Microsoft Teams One Drive
5.	Increase in the share of modernized buildings and premises of educational and research laboratories and centers	%	_	35	40	45	50	55	acts of work performed on the modernization of facilities equipment delivery certificates
6.	Increasing the share of students provided with places in dormitories out of the total number of those in need	%	36.64	35	40	45	50	55	student accommodation orders
	Investment expenditures from extrabudgetary funds								
1.	Investments in the development of human resources (training and training of engineering personnel and scientists)	thousand tenge	_	150,000. 0	150, 000. 0	200,0 00.0	_	_	reports

1	2	3	4	5	6	7	8	9	10
2.	The volume of investments in the development of scientific and educational laboratories for the purchase of research equipment	thousand tenge	_	2,790,06 6.0	201 8 370. 0	1,191 ,554. 0	_	_	delivery acts, reports
3.	Investments aimed at the construction of a new laboratory building	thousand tenge	_	-	1,60 7,83 9.85	1,890 ,113. 55	_	_	about reports
	Updating the material and technical base of the university at the expense of its own budget								
1.	Fixed assets, including computer equipment, educational and laboratory equipment, book supply and electronic educational resources, production equipment, furniture and other fixed assets and intangible assets	thousand tenge	-	1,282,83 8.0	1,46 1,07 6.0	1,982 ,509.	2,095, 670.0	2,198, 534.0	delivery acts, reports
	Investment expenditures from extrabudgetary funds for student dormitories								
1.	Investments aimed at the reconstruction of 14 student dormitories	thousand tenge	_	4,434,50 0.0	1 900 500. 0	_	_	_	commissioning acts
2.	Investments aimed at the construction of 6 student dormitories	thousand tenge	_	14,700,0 00.0	6,30 0,00 0.0	_	_	_	commissioning acts
	TOTAL: investment costs	thousand tenge		46 353 570.4					

#### Annex 3 to the Nonprofit Development Program «Al-Farabi Kazakh National University» for 2022 - 2026

	Period and cost of implementation of ac	tivities
No. p / p	Name of activities and components	Total, thousand tenge
	2022	
1.1	Purchase of equipment	2,790,066.0
1.2	Training, professional development and certification	150,000.0
Total		2 940 0 66.0
	2023	
2.1	Purchase of equipment	2018 370.0
2.2	Construction	1,607,839.85
2.3	Training, professional development and certification	150,000.0
Total	•	3 77 6 20 9, 85
	2024	
3.1	Purchase of equipment	1,191,554.0
3.2	Construction	1,890,113.55
3.3	Training, professional development and certification	200,000.0
Total		3 281 667.55 _
TOTAL		9997943.4

#### Appendix 4 to the Nonprofit Development Program «Al-Farabi Kazakh National University» for 2022 - 2026

Period and cost of the event							
No.	Name of activities and components	Amount, thousand tenge					
	2022	-					
1.1	Reconstruction of 7 student dormitories	4,434,500.0					
1.2	Construction of 3 student dormitories	14,700,000.0					
Total	•	19 134 500.0					
	2023						
2.1	Reconstruction of 7 student dormitories	1 900 500.0					
2.2	Construction of 3 student dormitories	6,300,000.0					
Total		8 200 500.0					
TOTAL		27,335,000.0					

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