



SUSTAINABLE DEVELOPMENT GOALS REPORT

2025

Shakarim University





**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the Results and Achievements of
SDG № 1 – No Poverty
for 2025**

Semey, 2026



Introduction

The goal of Shakarim University NJSC within the framework of SDG 1 is to reduce poverty and expand access to quality education and resources for all population groups.

The main objectives of the University include:

- ❖ ensuring equal opportunities for education and professional development for students from low-income families;
- ❖ supporting scientific research and innovative projects that contribute to economic development and social sustainability;
- ❖ creating conditions for engaging students and faculty in international and social initiatives aimed at poverty eradication;
- ❖ developing infrastructure and resources that ensure accessibility of educational and social programs for all.

1. Educational Activities

The University implements educational programs aimed at supporting students from vulnerable and low-income groups. Within courses and elective programs:

- ✓ opportunities are provided to obtain quality education regardless of financial status;
- ✓ scholarship and grant programs are organized for students in need [of financial support](#);
- ✓ educational and awareness-raising activities are conducted to improve financial literacy and professional skills.



[A financial literacy training session](#) held in April 2025 for faculty members and students of the Higher School of Business, with the participation of Bolat Aibatuly Kystaubayev, Deputy Director of a Halyk Bank branch, contributes to increasing participants' financial awareness and developing skills in rational money management. The development of financial literacy enables students and faculty members to make more informed economic decisions, plan budgets, and reduce the risk of financial vulnerability, thereby strengthening the economic resilience of individuals and families.

The Minor «Fundamentals of Financial Literacy», consisting of three 5-credit courses, is aimed at developing practical knowledge and skills that enable students to make informed financial decisions. Mastering these competencies contributes to greater economic independence and reduces the risk of financial vulnerability.



Seminars on «Fundamentals of Financial Literacy» are aimed at improving students’ financial literacy, developing personal finance management skills, and mastering the principles of financial security. For example, an open joint lecture entitled “Financial Risks and Protection Against Them” was delivered by PhD Saulet Yerkinqyzy, mentor of the “Qaryzsyz Qogam” project in Abai Region, and PhD Arailym Orazgaliyeva, Associate Professor of the Department of Economics and Business.

2. Scientific and Innovative Activities

In the field of science and innovation, the university:

- ✓ develops projects aimed at socio-economic development of the region and supporting vulnerable groups of the population;
- ✓ supports students and young scientists in research activities, creating opportunities for implementing innovations that contribute to poverty reduction;
- ✓ implements applied projects focused on improving the quality of life of the population.

Startup project competitions for faculty members and students, as well as internal grant competitions for university staff, are held annually.

Student scientific clubs operate on a permanent basis, including the Adam Smith Club, whose purpose is to develop economic thinking and foster an active civic position among students in the context of ongoing economic processes in society.

3. Internationalization and International Cooperation

To achieve SDG 1, the university:

- ✓ participates in international educational and scientific projects that support access to knowledge and resources for all participants;
- ✓ facilitates the exchange of experience with foreign universities on issues of student social support and the development of poverty reduction programs;
- ✓ supports the participation of students and faculty members in international grant and research initiatives.

Shakarim University closely cooperates with its [international partners](#), expanding the boundaries of education and science.

For example, in 2025, an [agreement](#) was signed with Northwest A&F University within the framework of the strategic initiative of the President of Kazakhstan aimed at strengthening cooperation with the People's Republic of China in the fields of science and higher education.

In 2025, the university participated in the [Times Higher Education Impact Rankings](#) for the first time and was ranked 1001+ worldwide for SDG No. 1, demonstrating the university's systematic and consistent work in this area.

4. Social Development and Student Environment

The university creates an [inclusive student environment](#) by ensuring:

- ✓ participation of all students in cultural, sports, and social activities regardless of their financial situation;
- ✓ organization of volunteer and social programs aimed at supporting low-income families and local communities;
- ✓ raising students' awareness of social responsibility and sustainable development.



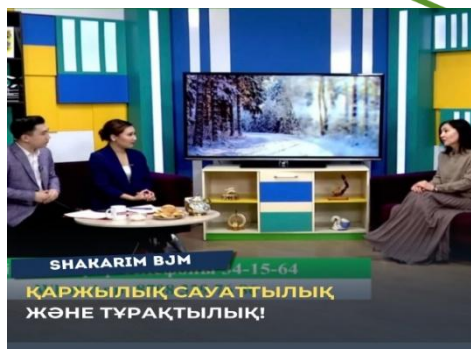
On December 10, 2025, the university hosted the [regional forum «SmartFinanceExpo 2026: Navigation in the New Tax Code of the Republic of Kazakhstan»](#), for representatives of small and medium-sized businesses and students.

Participants received up-to-date knowledge about new tax legislation provisions, contributing to greater financial literacy and entrepreneurial competence. The forum helps improve the economic well-being of participants and reduces the risk of financial vulnerability.

On February 17, 2025, faculty members of the Higher School of Business — Candidate of Economic Sciences A.K. Ibrayeva and PhD D.M. Akisheva — participated in [a live broadcast of the “Elge Salem” program on Semey TV channel](#). During the interview entitled “Learn to Manage Your Finances” issues of financial literacy, conscious personal financial management, and the development of responsible financial behavior were discussed.

Such an educational event contributes to increasing the economic awareness of the population and reducing the risk of financial vulnerability.





On January 30, 2025, Senior Lecturer of the Higher School of Business, Candidate of Economic Sciences, Aliya Kabyshevna Ibrayeva, [gave an interview on the «Greetings to the Homeland» program on the Semei TV channel.](#) The broadcast discussed financial literacy, budget planning, the effective use of financial instruments, and pathways to achieving financial independence. The event contributes to increasing public economic awareness and developing skills for the rational management of personal financial resources.

[The Olympiad in Financial Literacy](#) (April 9, 2025) for students in grades 10–11 is aimed at engaging young people in practice-oriented learning, developing skills in rational personal finance management, and fostering economic responsibility.



On April 15, 2025, the Higher School of Business at Shakarim University organized a city-level [Olympiad in the subjects of «Economics and «Finance» for students of general secondary schools in Semey under the title «Economic Education is the Best Capital».](#)

On November 13, 2025, [a Financial Literacy Olympiad dedicated to the National Currency Day — Tenge Day](#) — was held among 19 schools with the participation of 23 teams. The main objective of the Olympiad was to develop students' economic thinking skills, foster practical abilities in effective financial management, and enhance the level of financial literacy among young people.



On November 26, 2025, [the city intellectual QUIZ game «Business Open Doors»](#) was held for students of grades 10–11 in the city of Semey. The main purpose of the city intellectual game was to identify and develop students' creative abilities, foster interest in economics and finance, and improve financial literacy.



[Master classes on the theme «The Magical World of Art»](#) were conducted for the university's faculty and staff. The master classes covered three areas: sculpture, the “carpet embroidery” technique, and the Japanese visual art technique “Kinusayga”. The main feature of the event was that participants were able to try their hand and gain experience in creating handicrafts with their own hands.

In addition, the university regularly provides social support to vulnerable categories of students in order to ensure equal access to education and reduce social inequality. Thus, in 2025, five first-year students who were orphans received one-time financial assistance, while 38 students from the 1st to 4th years were granted monthly allowances (Order No. 684 dated October 6, 2025).

The social protection of students is one of the University's priorities. In 2025, 294 students received tuition fee discounts ranging from 20% to 100%, while 55 students received a 100% tuition fee discount.

5. Infrastructure and Resources for SDG 1

The development of [infrastructure and resources](#) includes:

- ✓ creating accessible classrooms, laboratories, and libraries;
- ✓ providing digital educational resources and online platforms for all students;
- ✓ organizing support and consultation centers for students in need of socio-economic assistance.

Our university creates an environment where financial status is not a barrier to talent.

Affordable Housing: The university operates five student residence halls with a total capacity of 1,174 places. Students from socially vulnerable categories (orphans and persons with disabilities of Groups I, II, and III) receive a 100% accommodation benefit. When allocating places, priority is always given to young people from low-income and large families.

Digital Environment: To eliminate the “digital divide” on campus, all dormitories and academic buildings are equipped with free Wi-Fi and modern coworking spaces for teamwork.

Library Resources and Electronic Subscriptions: [Libraries](#) and reading rooms operate in the academic buildings of the University, and electronic textbooks and subscriptions to global libraries are also available.

Social Support and Catering: Five cafeterias operate across the academic buildings, providing students with quality and affordable meals.

Health and Sports: The university operates medical centers that provide free healthcare services. The sports infrastructure includes two sports complexes

with swimming pools, wrestling halls, and football fields available to all students. The university also provides [a psychological support service and a resource center for the development of inclusive education.](#)

Conclusion

Shakarim University NJSC actively implements activities and programs that contribute to poverty eradication by providing access to quality education, scientific research, and social support for all categories of students. This demonstrates the university's commitment to SDG 1 – No Poverty and sustainable development.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the results in achieving SDG 2:
Zero Hunger and improved nutrition
for 2025**



Semey, 2026



Introduction

The goal of «Shakarim University» NJSC within the framework of SDG 2 is to ensure food security, improve nutrition quality, and reduce the number of people suffering from hunger and malnutrition.

The university's main objectives include:

- ❖ development of educational programs in food biotechnology, agricultural sciences, and nutrition;
- ❖ conducting scientific research and innovative projects in the fields of food safety, biotechnology, and sustainable agriculture;
- ❖ creating opportunities for international cooperation and exchange of experience in the field of food security;
- ❖ development of infrastructure and resources that ensure practical training of students and the conduct of applied research.

1. Educational Activities

The university implements [educational programs](#) aimed at training specialists in food security and biotechnology. Within the framework of courses and laboratory classes:

- ✓ practical training of students in the field of food quality analysis and safety control is provided;
- ✓ elective courses and master classes on modern technologies for the production of safe and nutritious food products are conducted;
- ✓ students are involved in projects on the development of functional and fortified food products.



need.

During the holy month of Ramadan, on March 15, 2025, students of the School of Physical and Chemical Sciences at Shakarim University organized [a charity event in the city of Semey](#). As part of the initiative, residents were provided with drinking water, dates, boursaks, and hot tea. This initiative was aimed at supporting the local community, promoting a culture of charity, and strengthening social solidarity. Special attention was given to the principles of mutual assistance and care for those in

As part of the celebration of Nauryz 2025, Shakarim University organized large-scale cultural and social events at the Central Square of Semey. Traditional yurts were installed, exhibitions of cultural heritage and traditional household items were presented, and national games and refreshments were organized.

The festive activities included:

- ✓ distribution of traditional dishes and refreshments;
- ✓ presentation of cultural values and elements of national heritage;
- ✓ strengthening community unity and social cohesion.



In 2025, a student food products fair was also organized, during which students showcased their own products. The event contributed to:

- ✓ developing skills in sustainable production and consumption;
- ✓ supporting local student initiatives;
- ✓ promoting a culture of responsible and efficient use of food resources.

2. Scientific and Innovative Activities

In the scientific sphere, the university:

- ✓ conducts research on the development of safe and biologically active products, functional nutrition, and methods for improving crop yields;
- ✓ develops innovative technologies for processing agricultural products and creating high-quality food products;
- ✓ cooperates with enterprises and research centers to implement research results into industrial production.

The round table «Domestic Seed Production», held on October 24, 2025, provided an opportunity to discuss promising directions for developing new plant varieties and advancing the seed production industry. The event facilitated the exchange of experience between specialists and students, expanded knowledge of modern crop production methods, and promoted the introduction of innovative approaches in agriculture. This serves as an example of integrating scientific activities with practical industry challenges and strengthening professional cooperation.





A collection of agricultural products grown at the Agro-Biolaboratory was carried out by employees and students. This is the result of a joint scientific project with scientists from Northwest Agriculture and Forestry University (China).

Scientific Projects in the Field of Sustainable Agriculture

1. [AP26101621](#) (2025–2027) «Multifaceted Investigation of the effects of chitosan on follicle and uterine artery vascularization, pregnancy rates, some important hormones, bacterial populations and biomarkers in “Akbas” cattle inseminated with frozen semen»
2. [AP26100579](#) (2025–2027) «Multifactorial analysis of lameness in broiler chickens: identification of pathogens, risk factors, and prevention strategies at commercial poultry farms in Kazakhstan»
3. [AP27508635](#) (2025–2027) «Analysis of the Competitiveness of Beef Production in Kazakhstan: A Comparison of Carcass Parameters, Meat Quality, and Safety Standards with Practices Used in the United States»
4. [AP23485629](#) (2024–2026) «Quality assurance and safety systems of meat and milk of cattle produced in the territories to Semipalatinsk nuclear test site»
5. [BR24992940](#) (2024–2026) «Creation highly productive sheep population in north-eastern region Kazakhstan based on development effective selection techniques and introduction resource-saving technologies»
6. [AP22686900](#) (2024–2026) «The effective methods of treatment and prevention of strongylatous-trichocephalous-eimeric invasion of sheep»
7. [AP22685400](#) (2024–2026) «Development and testing of an endovideovaginoscope for artificial insemination and diagnosis of diseases of the genitals of cows and sheep»

3. Internationalization and International Cooperation

To achieve SDG 2, the university:

- ✓ participates in international educational and scientific projects in the field of food security and agriculture;
- ✓ organizes exchange programs for students and researchers with foreign universities to enhance competencies in agricultural and food biotechnology;
- ✓ implements international quality and food safety standards into the educational and research process.

Training under a dual degree master’s program in Livestock Production Technology is being implemented jointly with Northwest Agriculture and Forestry University (China).

In 2025, the university participated for the first time in the THE Impact Ranking, where it ranked 601–800 globally for SDG 2, demonstrating its systematic efforts in this area.

4. Social Development and Student Environment

The university creates conditions for involving students in food security projects:

- ✓ organization of volunteer programs to support food initiatives and healthy nutrition campaigns;
- ✓ conducting awareness-raising activities among students and the local community about the importance of balanced nutrition;
- ✓ involving students in research projects aimed at developing affordable and nutritious food products;
- ✓ organizing traditional Auyzashar dinners for students and staff during the holy month of Ramadan.



At the Research School of Food Engineering, Deputy Dean Assel Alibekovna Dautova [conducted a culinary master class](#) for the children of the teaching staff.

As part of the internal university project [«Study of Adaptive Properties and Development of Agricultural Techniques for Early Potato Varieties in the Abai Region»](#) students participated in practical research by applying their knowledge of agronomy and sustainable agriculture. The project develops research skills, strengthens teamwork, and increases student involvement in socially significant regional initiatives. It serves as an example of integrating educational activities with social development and environmental awareness among students.



In February 2025, university students carried out the [annual charity campaign “Мейірімділік жүректен”](#), which included the distribution of hot meals and drinks, as well as visits to a nursing home and an orphanage to hold concerts and games.

The university regularly provides social support to vulnerable categories of students in order to ensure equal access to education and reduce social inequality. Thus, in 2025, one-time financial assistance was provided to five first-year students who are orphans, and 38 students from the 1st to 4th years were assigned a monthly allowance (Order No. 684 dated October 6, 2025).

[Social protection](#) of students is one of the university's priorities. In 2025, 294 students received tuition fee discounts ranging from 20% to 100%, while 55 students received a 100% tuition fee waiver. Orphaned students and students left without parental care, students from among young people who lost their parents (or were left without parental care) before reaching adulthood, as well as students with disabilities of Groups I, II, and III, including those disabled since childhood, receive a 100% discount on accommodation in the university's Student Houses for the entire academic year.

5. Infrastructure and Resources for SDG 2

To achieve the goals of SDG 2, the [university develops](#):

- ✓ laboratories and educational centers for food biotechnology and agricultural research;
- ✓ research equipment for analyzing food quality and safety;
- ✓ resources for practical training and project activities of students in the fields of food security and nutrition.

Five cafeterias operate in the university's academic buildings, providing comfortable and affordable meals for students and staff. Each cafeteria is equipped in accordance with modern requirements, complies with sanitary standards, and offers a diverse and high-quality menu. The assortment includes hot meals, side dishes, salads, beverages, pastries, sweets, as well as daily and popular menu items.

Conclusion

Shakarim University NJSC actively works to ensure food security and improve nutrition by integrating educational programs, scientific research, and social initiatives. The implementation of these activities contributes to the achievement of SDG 2 – Zero Hunger and Improved Nutrition, while fostering qualified specialists and establishing a sustainable scientific and practical foundation in the field of food security.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

REPORT
on the results in achieving
SDG No. 3 Good Health and Well-being
for 2025



Semey, 2026

3 GOOD HEALTH AND WELL-BEING



Introduction

The goal of Shakarim University NJSC within the framework of SDG 3 is to support the health of students, faculty members, and the local community, promote a culture of healthy living, and create conditions for disease prevention.

The university's main objectives include:

- ❖ Development of educational programs in biotechnology, food safety, and healthcare;
- ❖ Conducting scientific research and innovative projects aimed at improving public health;
- ❖ Implementation of international experience and standards in healthcare and healthy lifestyles;
- ❖ Creation of social and educational initiatives that increase health awareness;
- ❖ Provision of infrastructure and resources for sports activities, preventive programs, and applied research.

1. Educational Activities

The university implements [educational programs](#) aimed at developing knowledge about health and disease prevention:

- ✓ [minors](#) and elective courses in gerodietary nutrition, food biotechnology, and healthy lifestyle;
- ✓ practical classes and master classes for students and faculty on balanced nutrition and disease prevention;
- ✓ [educational events](#) for schoolchildren and elderly people on the basics of a healthy lifestyle.



The event held on October 10, 2025, as part of [World Mental Health Day](#) included mental breaks, emotional recovery zones, and interactive exercises. It contributed to supporting the mental health of students and staff, developing self-regulation, and strengthening team interaction. Students of the «Psychology» program participated in the organization of the event, applying theoretical knowledge in practice and developing professional skills.

In January 2025, a training session titled [«Stresten qorghanu. Pedagogtin kush-quaty men tynyshtygy»](#), was organized for the teachers of Shakarim High School. The training was aimed at preventing emotional burnout and strengthening psychological resilience. The event contributed to maintaining the psycho-emotional well-being of teachers, increasing their stress resistance, and creating a positive working



environment. The development of teachers' psychological well-being has a positive impact on the quality of the educational process and the effectiveness of learning.



On December 19, 2025, a training session entitled [«Resursty pedagog: stressti zhengu zholdary»](#), was conducted for young faculty members. The training focused on developing stress resilience, preserving emotional resources, and preventing professional burnout. The event contributed to the development of self-regulation skills and the maintenance of a supportive psychological atmosphere within the academic community.

On November 13, a training session entitled [«Emotsiyalyq turagtylyq pen bolashaqqa kozqaras»](#) was organized for students of Shakarim High School. The training aimed to develop emotional resilience, self-regulation skills, and a positive attitude toward learning and personal development. The event integrated psychological support into the educational program, fostering successful knowledge acquisition and adaptation to the school environment. It serves as an example of how educational initiatives can simultaneously promote health and enhance learning effectiveness.



In November, a training session entitled [«Ortamen qarym-qatynas zhane ozindi tanu»](#), was conducted for students of group LRO-305. The training was aimed at developing communication skills, a culture of interaction, teamwork, and creating a positive atmosphere among students. The event contributed to strengthening social connections, improving students' emotional well-being, and fostering a supportive educational environment. The development of effective communication and constructive interaction skills helps reduce stress levels, strengthen students' mental health, and improve their social adaptation.

2. Scientific and Innovative Activities

In the scientific sphere, the university:

- ✓ conducts research in the fields of gerodietetic and functional nutrition, food biotechnology, and improving the quality of life of the population;
- ✓ develops innovative methods for disease prevention, health preservation, and health promotion;
- ✓ engages students and young researchers in practice-oriented projects focused on human health.

Scientific Projects in the Field of SDG № 3

1. [AP23485656](#) (2024–2026) «Development of an intelligent neural network-based system for the analysis and provision of treatment recommendations for oncological diseases in the Semipalatinsk region»

2. University researchers [developed](#) an innovative [probiotic capsule](#) and created a drinking yogurt based on it.

3. Internationalization and International Cooperation

To implement SDG 3, the university:

- ✓ participates in international projects and conferences on healthcare and healthy lifestyles;
- ✓ implements international best practices in disease prevention and the organization of educational programs;
- ✓ cooperates with foreign universities and research centers in the fields of biotechnology, nutrition, public health, and quality of life improvement.

4. Social Development and Student Environment

The university actively involves students and faculty in socially significant health promotion initiatives:

- ✓ conducting a series of classes on gerodietetic nutrition within the framework of the “silver university” project for older adults;
- ✓ organizing volunteer programs and healthy lifestyle activities for children and students;
- ✓ promoting a culture of health through master classes, olympiads, and educational and awareness-raising projects.



Within the framework of the “Silver University” project, based at the Semey Center for Special Social Services No. 2 of the Abai Region, faculty members of the Department of Food Technology of Shakarim University NJSC, G.T. Zhumanova and B.M. Kulushtayeva, conducted a series of classes on the course “Gerodietetic Nutrition.” The training was carried out in accordance with the approved curriculum and was aimed at expanding and systematizing knowledge in the field of gerodietetic and rational nutrition for older adults.

On January 23, 2025, the faculty members of the Department of Psychology conducted [a psychological marathon](#) for all university employees. During the event, specialists carried out practical exercises aimed at reducing stress levels, preventing emotional burnout, and developing self-regulation skills. Participants learned breathing techniques, anxiety management methods, as well as tools for enhancing personal resilience and psychological well-being. The marathon contributed to



strengthening employees' mental health, increasing their engagement, and fostering a positive working atmosphere within the university community.



Within the framework of the «Salamatty University» project, [preventive activities](#) were organized, including meetings with representatives of narcological services, AIDS prevention and control centers, as well as other specialized organizations. These activities were aimed at promoting a healthy lifestyle, increasing students' awareness of health risks, and preventing harmful habits.

On September 26, 2025, [sports competitions were held](#) in honor of «Health Day», aimed at promoting a healthy lifestyle among 10th and 11th grade students of the university's «Shakarim High School». The event contributed to strengthening physical health, developing team spirit, and fostering habits of regular physical activity.



Guidance on preparing for the [first examination session helps](#) students cope with stress and anxiety associated with the examination period. The activity contributes to the development of self-regulation skills, proper time management between study and rest, and the maintenance of psychological well-being. This is an example of how educational initiatives can simultaneously improve academic preparedness and support student health.

In November, a training session entitled “” [«Nashaqorlyq, ishimdik, ludomaniya – zamanauı indetterdin aldın alu»](#) was conducted for 180 students. The training was aimed at preventing addictions and promoting a healthy lifestyle. The event developed students' self-control skills, conscious behavior, and responsible attitudes toward their health. The training contributed to strengthening the psychological and physical well-being of the student community.



In November, a preventive seminar entitled [«Reproduktivti densaulıq – zhastar bolashagynyn kepili»](#), was conducted for 254 students. The seminar was aimed at developing knowledge about reproductive health, disease prevention, and fostering a responsible attitude toward personal health. The event contributed to increasing student awareness, strengthening health, and creating a safe and supportive educational environment. The seminar combined educational

and social-preventive objectives, supporting the health and well-being of young people.

On October 10, a festive event dedicated to [World Mental Health Day](#) was held at the university, with the participation of 300 students. The event included interactive exercises, emotional recovery zones, and mental pauses aimed at strengthening mental health and self-regulation skills. This event contributes to raising awareness of the importance of psychological well-being and fostering support and care within the student community.

[The seminar «Futbol – student zhastar arasynda buqaralyq sportty damytu quraly»](#) contributed to increasing students' physical activity and promoting football in the region. The event brought together representatives of the university, city sports organizations, and schools, thereby strengthening the student community and promoting the value of a healthy lifestyle.



5. Infrastructure and Resources

To achieve the goals of SDG 3, the [university is developing:](#)

- ✓ modern laboratories and educational centers for research in nutrition, biotechnology, and health;
- ✓ sports facilities and recreational areas for physical education activities, including a swimming pool;
- ✓ digital and methodological resources for educational and awareness-raising programs on health and disease prevention.



The [outdoor team-building](#) event organized on October 4, 2025, was aimed at supporting employees' physical activity, strengthening mental well-being, and enhancing team cohesion. Team games contributed to stress reduction, the development of self-regulation skills, and improved interaction among staff members. The team-building event was held at the university's training base to provide opportunities for active recreation, demonstrating the university's commitment to creating conditions that promote the physical and psychological well-being of employees.

Conclusion

The activities of Shakarim University NJSC in the fields of education, research, and social engagement actively contribute to improving the health and well-being of students, faculty members, and the local community. The implemented educational programs, scientific research, and social initiatives create



conditions for sustainable health development, confirming the university's contribution to achieving SDG 3 – Good Health and Well-Being.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the results in achieving
SDG №4 Quality Education
for 2025**

Semey, 2026



Introduction

The goal of Shakarim University NJSC within the framework of SDG 4 is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. [According to international standards](#), within the framework of SDG 4, educational institutions are committed to providing access to educational programs that meet modern requirements, supporting research and practical training processes, and developing students' critical thinking and creativity skills. within SDG 4, educational institutions are obliged to ensure access to educational programs that meet modern requirements, support processes of scientific research and practical training, and develop students' critical thinking and creativity skills.

The University Development Plan for 2025 places special emphasis on improving the educational process through the modernization of educational programs, the use of modern digital and practice-oriented teaching methods, and the expansion of student participation in research activities. These [measures are aimed at improving the quality of education](#), strengthening internal quality assurance systems, and implementing advanced approaches to teaching and learning.

In 2025, Shakarim University integrated the implementation of SDG 4 – Quality Education as a key direction of its institutional development strategy. The main focus was placed on improving the quality of education, increasing international competitiveness, integrating innovative technologies, strengthening academic freedom and integrity, and promoting a student-centered educational process.

The main strategic objectives included:

- ✓ improving educational programs in accordance with international standards;
- ✓ preserving academic freedom and academic integrity;
- ✓ implementing innovative and digital educational technologies;
- ✓ strengthening the integration of research and education;
- ✓ developing a student-centered learning model that responds to students' needs.

1. Educational Activities

- ✓ Implementation of outcome-based educational programs (Student-Centered Learning), with regular updates to content in accordance with labor market demands.
- ✓ Introduction of digital platforms and online courses to ensure access to education for persons with disabilities and students from remote regions.
- ✓ Development of the “Lifelong Learning” system through the implementation of continuing professional education programs, professional retraining, and advanced training courses for the adult population.

In 2025, the university successfully implemented a range of measures aimed at improving the quality of educational programs, integrating digital technologies, and strengthening international cooperation. Information and news about current

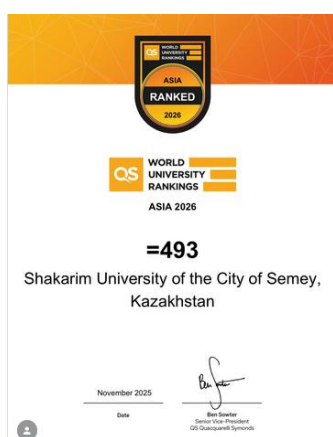
projects, events, and university initiatives are regularly published [on the official university website](#).

In accordance with the Regulation «On the Provision of Benefits and Discounts for Tuition Fees and the Awarding of the Shakarim Educational Grant», students are granted tuition discounts of 20%, 30%, 50%, and 100%. These measures are aimed at ensuring equal access to quality education for all categories of students.

Within the framework of strategic tasks to improve the quality of education in 2025, the following were implemented:

- ✓ adaptation of educational programs in line with the requirements of the modern labor market;
- ✓ revision of learning outcomes based on the competency-based approach;
- ✓ increase in the share of practical components in academic courses;
- ✓ expansion of bases for industrial internship placements;
- ✓ introduction of digital technologies and elements of artificial intelligence into course content.

These changes reflect the university's commitment to meeting the modern challenges of the digital economy and the requirements of employers.



Shkarim University entered the top 500 universities in Asia according to the QS World University Rankings: Asia 2026, [ranking 493rd](#) and improving its position by 26 places compared to the previous year. This achievement reflects the growth of academic quality, international recognition, and research performance of the university. This success contributes to strengthening the educational potential, enhancing the university's prestige, and motivating students toward academic achievements.

In September, the [training session «Hello student! We are here for you!»](#) was conducted for 354 students, aimed at familiarizing them with the university environment, educational programs, and support resources. The event helps first-year students adapt to the learning process, establish interaction with lecturers and peers, and forms a comfortable and supportive student environment. The training contributes to the successful integration of students into the educational process and increases their engagement in university life.





Within the framework of the 180th anniversary of Abai Kunanbayev, [a delegation from the South Kazakhstan Pedagogical University](#) visited Shakarim University, consisting of faculty members and students. The guests were introduced to the Shakarim Museum, studied the life and work of the great poet, and had the opportunity to gain a deeper understanding of Abai's teaching of the «Tolyk Adam» concept. The purpose of the visit was to promote Abai's spiritual and moral values among young people and to foster love for the homeland.

In 2025, in the [Republican competition «Best University Teacher – 2025»](#), [two lecturers of the university received the award «Best Teacher 2025.»](#) This award reflects recognition of the teaching quality and scientific potential of the staff.

Based on the results of the 2024–2025 competitive selection, four scholars of Shakarim University were awarded the State Scientific Scholarship. The evaluation considered the effectiveness of the applicants' research activities, leadership of scientific projects, quality and quantity of scientific publications, as well as their contribution to the development of national science.



State Scientific Scholarship:

- ✓ Bekbaev Kairat Serikzhanovich – Candidate of Technical Sciences, Associate Professor, Head of the Department of Bioengineering Systems.
- ✓ State Scientific Scholarship for talented young scientists:
- ✓ Idyrishev Berik Arystanbekuly – PhD, postdoctoral researcher at the Department of Food Technology;
- ✓ Sygyrbay Adilet Mukhituly – PhD, postdoctoral researcher at the Department of Agriculture, Head of the Design Bureau;
- ✓ Toktarbay Eldos Nussipuly – Research staff member on grant projects at the Department of Kazakh Philology.

2. Scientific and Innovative Activities

- ✓ Conducting research in the fields of pedagogy, psychology, and teaching methodologies to improve the effectiveness of the educational process.
- ✓ Developing innovative educational technologies, including the use of artificial intelligence and immersive environments (VR/AR) in education.
- ✓ Creating a scientific and methodological foundation to support school education in the region (work with specialized classes and teacher training).



The Shakarim University team [SemeyLand](#) took 1st place in the regional stage of the International Collegiate Programming Contest (ICPC). The students demonstrated a high level of algorithmic training and teamwork, earning a place in the semifinals. This success strengthens the university's and the region's innovative and scientific-technical potential.

[The Shakarim AI Check project](#) became the winner of the national AI SANA Leaders competition in the nomination «Best AI Project in Education – Academic Integrity». The system uses artificial intelligence to check the originality of student and scientific works, ensuring transparency and objectivity in the educational process, and is also being implemented in regional universities to strengthen academic integrity.



Shakarim University hosted a [regional chemistry Olympiad](#) organized by the Research School of Physical and Chemical Sciences and the Department of Chemistry and Ecology, with the participation of 51 schools from the Abai Region. The winners received educational grants and prize awards, including a one-year educational grant for a graduate of the Jas Abay School. The event stimulates interest in the natural sciences, supports talented young people, and strengthens scientific and educational cooperation within the region.

3. Internationalization and International Cooperation

- ✓ Participation in international education rankings (THE Impact Rankings for SDG 4).
- ✓ Implementation of academic mobility programs and double degree programs with foreign universities.
- ✓ Promotion of literacy and professional skills among refugees and migrants through adaptive educational courses.

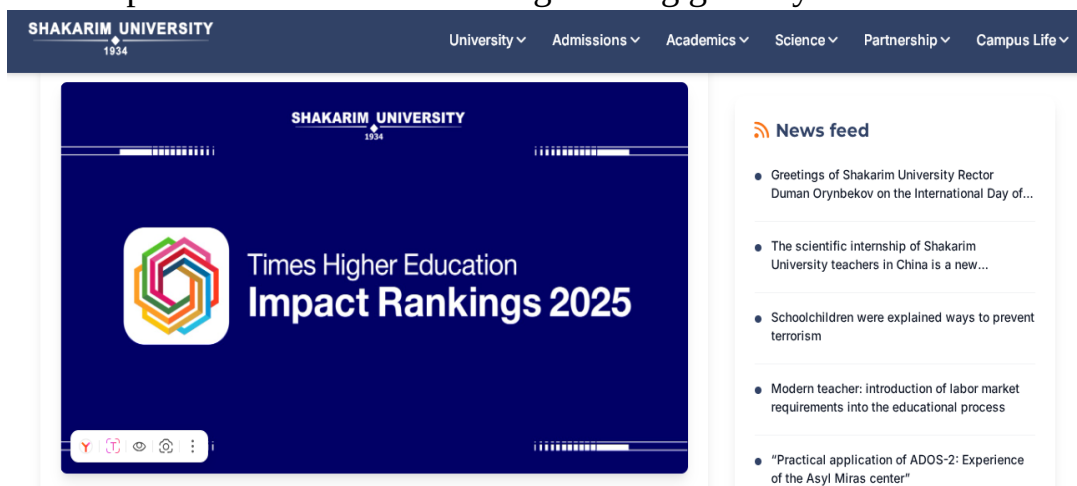


Shakarim University and TUIT signed [a memorandum of cooperation in the field of artificial intelligence and digital technologies](#), which strengthens international academic ties. The memorandum opens opportunities for joint strategic projects and the exchange of experience between the universities.

Shakarim University hosted an [open lecture by an international expert, Professor Paul Torgerson \(University of Zurich, Switzerland\)](#) on epidemiology and zoonotic infections. The event facilitated the exchange of scientific experience, introduced students and faculty members to global research methodologies, and strengthened international cooperation in the fields of veterinary and medical sciences.



Confirming its role in achieving the Sustainable Development Goals, [Shakarim University was included for the first time in the Times Higher Education Impact Rankings 2025](#), which assesses universities' contributions to the achievement of the United Nations Sustainable Development Goals. The university received rankings in 13 out of 17 SDGs, including SDG 4 (Quality Education), where it was placed in the 801–1000 range among globally ranked universities.



[Shakarim University became an associate member of the International Association of Universities of the Third Age \(AIUTA\)](#), opening new opportunities for the implementation of educational, creative, and social projects for older citizens. The university is strengthening international cooperation and expanding its «Silver University» programs, ensuring access to education and social engagement for older adults. This step reflects the university's internationalization strategy and strengthens its position at both regional and international levels.

Active international cooperation is an important element of ensuring the quality of education. The university maintains partnerships with universities from the USA, Germany, China, Japan, Türkiye, Poland, and other countries, which contributes to expanding educational and scientific opportunities for students.

In 2024–2025, the university received a delegation from Tashkent State Pedagogical University named after Nizami within the framework of the academic mobility program.



The delegation included:

Gulnara Abdullayevna Shakhmurova — Head of the Department of Zoology and Anatomy, Doctor of Biological Sciences, Professor, with more than 38 years of experience in science and education.

Students of the delegation:

- ✓ 1 student from the «Geography-History» program (6B01512);
- ✓ 2 students from the «Chemistry-Biology» program (6B01509);
- ✓ 3 students from the «Biology» program (6B01510).

During their two-week stay, the guests actively participated in university life through:

- ✓ Exchange of experience with students and faculty;
- ✓ Conducting lectures and scientific discussions;
- ✓ Attendance of lectures and seminars conducted by university faculty.

The program also included familiarization with the history of the university, visits to museums, and sightseeing tours in Semey, which allowed the guests to explore the cultural and historical heritage of the region.

4. Social Development and Student Environment

- ✓ Creating an inclusive environment by ensuring barrier-free access to academic buildings and dormitories, and supporting the operation of resource learning centers.
- ✓ Implementing mentoring and tutoring programs to support first-year students and students from socially vulnerable backgrounds.
- ✓ Conducting educational events, olympiads, and competitions for school students aimed at improving the overall level of education in the region.



Students of Shakarim University [won the Republican Debate Tournament for the «AMANAT» Cup](#). The participants demonstrated a high level of critical thinking, public speaking, and teamwork, enhancing the university's prestige. This success contributes to the formation of an active student environment and the development of civic engagement among youth.

At Shakarim University, an [informational and educational seminar on cybersecurity](#) was conducted for students in cooperation with the Economic Department of Abai Region. Students were introduced to modern types of internet fraud, methods of protecting personal data, and legal aspects, which contributes to the development of digital literacy and safe online behavior.



Employees of Shakarim University [visited the enterprise «Zhylukommunenergo»](#) to organize dual education within the «Thermal Power Engineering» program. Students combine theoretical knowledge with practical training at the enterprise, studying boiler units, steam generators, and water treatment methods. This approach improves the quality of specialist training and accelerates graduates' adaptation to the workplace.

With the aim of improving the quality of education and international integration, the university strengthened its ties with foreign partners. Particular emphasis is placed on cooperation with Nizami Tashkent State Pedagogical University (Uzbekistan) within the framework of academic mobility programs, including:

- ✓ exchange of experience and internships for lecturers of the “Chemistry” educational program (D.R. Ontagarova, A.K. Sapakova, A.N. Nygmetullova);
- ✓ organization of visits by lecturers and students under bilateral agreements, contributing to the internationalization of education and the enrichment of academic program content.

Students of group B1-101 of Shakarim University — Balzhan Orazgazy, Akmaral Sakhi, and Aknur Kenzhebekova — participated in the international scientific and practical conference «Digitalization and Artificial Intelligence: New Perspectives for Central Asia».

- ✓ Research work: Scientific Supervisor: Raigul Alimgaziyevna Sadykova;

- ✓ Article title: «The Role of Experiments in Learning Biology and the Importance of Student Scientific Clubs for the University»;
- ✓ Results: The students' article was recognized among the best and was published in a special Abstract Book. The participants received official certificates.

The scientific event was organized with the participation of several international and national universities:

- ✓ S. Seifullin Kazakh Agrotechnical Research University (Kazakhstan);
- ✓ E.A. Buketov Karaganda University (Kazakhstan);
- ✓ University of Illinois Urbana-Champaign (USA);
- ✓ InnovaScience Scientific and Consulting Center (Uzbekistan);
- ✓ Berlin School of Economics and Law (HWR Berlin, Germany);
- ✓ Nanyang Technological University (Singapore).

Students' participation in international-level events demonstrates the high scientific potential of Shakarim University and contributes to the professional development of young researchers, strengthening international cooperation and enhancing the university's scientific reputation.

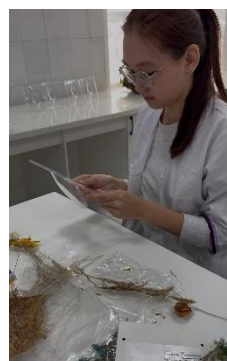


The Department of Chemistry and Biology also implemented a project activity [within the framework of HerbaVase](#). The HerbaVase project is aimed at developing students' creative skills and enhancing the university's image through the creation of decorative vases using the herbarium method. The project activities contribute to practical learning, the development of students' aesthetic appreciation, and environmental literacy. Within the framework of the project, students collected plants growing in the Abai Region and, after drying them, created decorative

vases with an environmentally friendly and aesthetically appealing design. Each product reflects the beauty of nature and the development of artistic thinking among students.

Project supervisors: Medetova A.M., Turysbekova A.A. Project participants: Botakhanova A.S., B1-301; Akhmadiyeva D.D., B1-301.

- ✓ Unique decorative products using herbarium materials were created.
- ✓ Students gained practical experience in combining science and art.
- ✓ The project contributes to environmental education and the development of students' creative competencies, strengthening their professional and personal skills.



The university continues to actively develop its research activities. Recently, our researchers received [grants for the implementation of important scientific projects](#), demonstrating the university's high potential in the fields of science and innovation.

List of ongoing projects and principal investigators:

✓ Assel Beksultanovna Zheksenayeva

Project: «Multifactorial Analysis of the Cloaca in Broiler Chickens: Identification of Pathogens, Risk Factors, and Prevention Strategies on Poultry Farms in Kazakhstan».

✓ Erlan Sauykovich Zharykbasov

Project: «Scientific and Practical Aspects of Developing Technologies for Functional Dairy Products Based on Biologically Active Additives».

✓ Almagul Nurgazezovna Nurgazezova

Project: «Study of the Quality and Nutritional Properties of New Food Products from Non-Traditional Animal and Plant Raw Materials».

✓ Zhanat Mekeshovna Nurzhumanova

Project: «Comprehensive Study of the Effect of Chitosan on Follicular and Uterine Artery Vascularization, Ovulation, Hormones, Bacterial Population, and Biomarkers in "Ақбас" Breed Cattle Using Frozen Embryos».

✓ Yerbol Amangazovich Ospanov

Project: «Development of an Automated Bioreactor Line for the Continuous Production of Biogas and Fertilizers».

✓ Samat Kairatovich Kassymov

Project: «Rational Utilization of Secondary Meat Raw Materials Based on Waste-Free Technologies in Food Production, Ensuring Food Security, and Development of a Business Plan».

✓ Olga Alexandrovna Stepanova

Project: «Development of Technology for Environmentally Friendly Nanomodified Lubricating and Cooling Fluids Based on Vegetable Oils».

✓ Yermek Tolegenovich Abilmazhinov

Project: «Development and Study of an Automated Wind-Solar Installation for Continuous Power Supply and Water Supply of Agricultural Facilities».



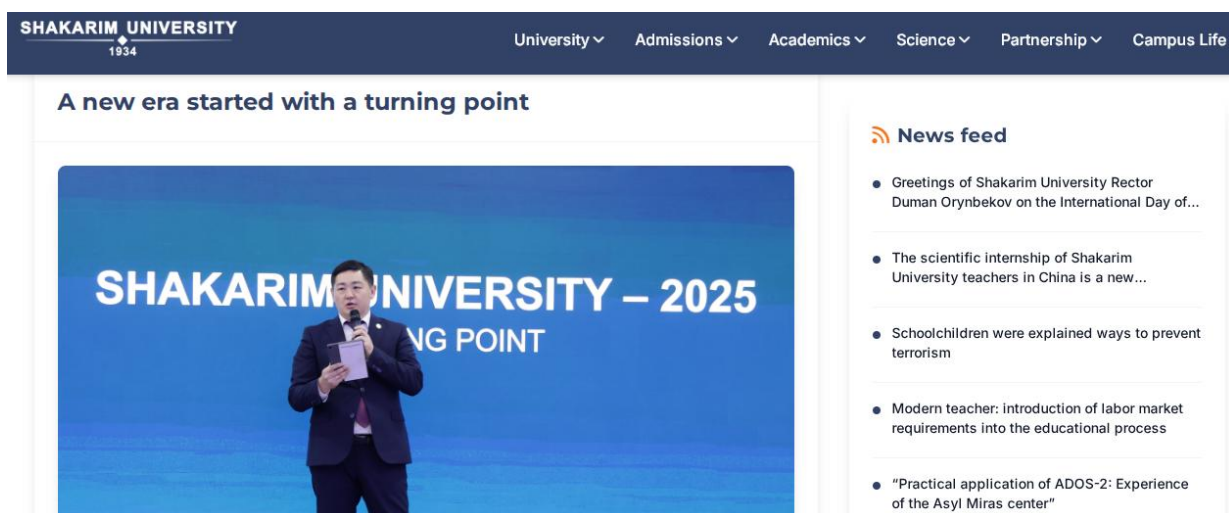


A delegation from Shakarim University visited the [«Asyl Miras» Center](#) in Abai Region, dedicated to supporting children with autism, to strengthen partnership ties and exchange experience in the field of inclusive education. The event was attended by the Rector, deans, faculty members, and students, and included a tour, a psychological training session, and professional consultations with the center's staff. As a result of the meeting, agreements were reached on organizing students' educational and industrial internships at the center, developing a new educational program in special pedagogy, and creating joint educational modules that contribute to the development of inclusive education and the reduction of educational inequality.

5. Infrastructure and Resources

- ✓ Modernization of the library collection and transition to electronic library systems with open access.
- ✓ Equipping classrooms with modern multimedia equipment and laboratories for practice-oriented learning.
- ✓ Development of campus policy: creation of comfortable spaces for self-study and collaboration (coworking spaces, quiet zones).

In 2025, Shakarim University demonstrated sustainable results in the modernization of educational activities, strengthening of pedagogical capacity, and expanding international cooperation.



The main development vectors include:

- ✓ Strengthening practice-oriented learning;
- ✓ Integration of digital and AI technologies;
- ✓ Increasing the competitiveness of graduates in the global labor market;
- ✓ Expanding international academic partnerships.



These achievements are aligned with the sustainable development goals in education and the strategic objectives of strengthening the scientific and educational potential of the region.

Conclusion

The university considers quality education as the foundation of the sustainable development of society. By implementing a comprehensive set of measures in educational, scientific, and social policy, the university creates an ecosystem that ensures equal access to knowledge and the development of human potential. The achievement of SDG 4 indicators is carried out through the integration of advanced educational technologies, support for talented youth, and the continuous professional development of faculty members. Further development in this direction will enable the university to maintain its leading position in the national educational landscape and make a significant contribution to the formation of a knowledge-based society.





**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the results in achieving
SDG № 5 Gender Equality
for 2025**

Semey, 2026



Introduction

The goal of Shakarim University NJSC within the framework of achieving Sustainable Development Goal 5 (Gender Equality) is to ensure equal opportunities for men and women in the educational, scientific, sports, and social spheres of the university.

The university's main objectives include:

- ❖ creating conditions for the equal participation of women and men in educational programs, scientific and innovative activities;
- ❖ supporting initiatives aimed at expanding the participation of female and male students in the sports, cultural, and social life of the university;
- ❖ developing infrastructure and resources that contribute to the observance of the principles of gender equality.

1. Educational Activities

The university actively implements educational programs that promote the equal participation of students of both genders. Within the framework of courses and elective subjects, the following are ensured:

- ✓ a transparent system for student admission and allocation;
- ✓ opportunities for female and male students to participate in research projects and student initiatives;
- ✓ support for leadership programs aimed at developing the skills of both female and male students.



On February 6, 2025, Senior Lecturer of the Higher School of Business, PhD M.S. Iskakova, participated in the program «Dialogue» on the regional television channel of the city of Semey. During the interview on the topic [«Economic Potential and Modern Geopolitics»](#) issues related to the country's current economic situation, improving the financial literacy of the population, as well as the training of future economists and financiers were discussed. The participation of a female expert in a socially significant media platform contributes to expanding the role of women in the fields of economics and education, shaping a positive image of female leadership, and promoting the principles of gender equality.

2. Scientific and Innovative Activities

In the field of scientific and innovative activities, the university:

- ✓ ensures equal access to laboratories, research grants, and support programs for young researchers;
- ✓ supports the participation of female students in research projects, conferences, and competitions;

3. Internationalization and International Cooperation

To strengthen gender equality, the university:

- ✓ encourages the participation of female and male students in international exchange programs;
- ✓ implements joint projects with foreign universities with mandatory observance of equal opportunities;
- ✓ develops partnerships that support international standards of equality.

4. Social Development and Student Environment

The university creates an inclusive student environment by ensuring equal opportunities through:

- ✓ organizing sports events for female and male students;
- ✓ club and social activities with equal participation of all students;
- ✓ activities aimed at raising awareness of gender equality.



[The Autumn City Volleyball Championship among girls](#) was held on October 25, 2025. Team squads representing the university's schools took part in the competition. The event was aimed at developing teamwork, sportsmanship, and promoting a healthy lifestyle among female students. All participants had equal conditions for participation, which contributed to the promotion of gender equality principles in the sports environment.

[The table tennis tournament](#) for university and college students of Semey was held on November 21, 2025, in an individual competition format. Female students from various educational institutions participated in the tournament, ensuring equal opportunities to demonstrate their athletic abilities. A student of Shakarim University NJSC won first place, and the event contributed to the development of table tennis and the strengthening of friendly relations among participants.



level of preparation.

[The City Basketball League among female students](#) of Abai Region was held on November 30, 2025, in a team competition format. Teams of female students from various schools and sports clubs of the city took part in the competition, ensuring equal conditions for all participants. The university team won second place, demonstrating strong teamwork and a high

Students of Shakarim University became prize winners of the [XIII Summer Universiade in Kazakh wrestling](#), held in Turkestan. The athletes won one gold, one silver, and two bronze medals, bringing recognition to the university at the national level. Their success is the result of persistent training and skill, as well as the professional work of coach Aibek Zhumanbaev. These events demonstrate the active involvement of female students, adherence to the principles of equal participation, and the promotion of a healthy lifestyle.



The university's Psychological Service conducted an anonymous survey titled «Harassment in Higher Education Through the Eyes of Students», aimed at identifying and preventing cases of discrimination and inappropriate behavior in the educational environment. A total of 3,200 students participated in the survey, which made it possible to obtain an objective picture of the situation and determine directions for further preventive work. The activity contributes to the formation of a safe, equal, and supportive university environment, the strengthening of gender equality principles, and the psychological well-being of students.

5. Infrastructure and Resources for SDG 5 – Gender Equality

The university continues to develop infrastructure aimed at creating equal conditions:

- ✓ sports facilities with equal access for female and male students;
- ✓ classrooms and laboratories equipped to be convenient for all students;
- ✓ resources to support student initiatives and clubs with equal participation opportunities.

Conclusion

Shakarim University NJSC actively works toward achieving SDG 5 – Gender Equality by creating conditions for the equal participation of women and men in educational, scientific, sports, and social activities. The implementation of these initiatives and the continuous development of infrastructure demonstrate the university's commitment to the principles of gender equality and sustainable development.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the results in achieving
SDG № 6 Clean Water and Sanitation
for 2025**

Semey, 2026

6 CLEAN WATER AND SANITATION



Introduction

Sustainable Development Goal 6 «Clean Water and Sanitation», adopted as part of the United Nations 2030 Agenda for Sustainable Development, aims to ensure the availability and sustainable management of water resources and sanitation for all. The implementation of this goal is a priority area of the state policy of the Republic of Kazakhstan in the fields of environmental safety, rational use of natural resources, and sustainable development, as reflected in the Environmental Code of the Republic of Kazakhstan, the Water Code of the Republic of Kazakhstan, the Concept for the Transition of the Republic of Kazakhstan to a «Green Economy», as well as in national strategic documents and programs for the development of education and science.

Shakarim University NJSC, as a regional multidisciplinary university, recognizes its responsibility in achieving the Sustainable Development Goals, including SDG 6. The university's activities in this area are carried out in accordance with the University Strategic Development Plan, the Action Plan for the Implementation of Sustainable Development Principles, and internal regulatory documents on environmental safety, occupational health and safety, sanitary and hygiene requirements, and the rational use of resources.

The university's objective within the framework of achieving SDG No. 6 is to establish a sustainable system of rational water use, ensure safe sanitary and hygienic conditions in the educational and research environment, and develop educational, research, and awareness-raising activities in the field of water resource management and environmental safety.

To achieve this objective, the university identified the following tasks for 2025:

- ❖ ensuring uninterrupted access for students and staff to safe drinking water in academic buildings, dormitories, and administrative facilities;
- ❖ compliance with sanitary standards and requirements for water supply and wastewater disposal in accordance with the current legislation of the Republic of Kazakhstan;
- ❖ implementation of measures for the rational use of water resources and reduction of their inefficient consumption;
- ❖ development of research activities and educational programs related to water resource protection, hydroecology, and sustainable water management systems;
- ❖ conducting informational and awareness-raising activities aimed at fostering environmental culture and responsible attitudes toward water resources among students and staff.
- ❖ modernization of water supply infrastructure and sanitation systems within the framework of the university's sustainable development program.

Thus, the activities of Shakarim University in 2025 within the framework of SDG 6 are comprehensive in nature and aimed at integrating the principles of

sustainable water use into the university's educational, scientific, administrative, economic, and social activities.

1. Educational Activities

- ✓ Training specialists in the fields of «Hydraulic Engineering Construction», «Water Supply and Sanitation», and «Ecology and Environmental Management» using modern laboratory facilities.
- ✓ Introduction of modules on sustainable water resource management, rational water consumption, and circular economy principles (Circular Economy) into educational programs.
- ✓ Conducting open lectures and advanced training courses for employees of housing and communal services enterprises and water utilities.

The educational activities of Shakarim University are aimed at integrating the principles of sustainable development and preparing future specialists capable of addressing global and regional environmental challenges. In 2025, the university continued its systematic efforts to implement the UN Sustainable Development Goals, including SDG 6 «Clean Water and Sanitation», through its educational, research, and project activities.

An important aspect of the implementation of SDG 6 at Shakarim University is improving access to safe drinking water and creating conditions for compliance with sanitary and hygienic requirements in the daily lives of students and staff.

Within these measures, modern drinking water dispensers have been installed in university buildings and dormitories, ensuring free access to safe drinking water throughout the academic day. The operation of these devices is carried out in strict accordance with applicable sanitary standards and water quality requirements, which is confirmed by internal inspections and documents from the occupational safety and sanitation services.

The university also emphasizes the development of sustainable habits of rational water use among students and staff. Recognizing that compliance with the principles of «clean water and sanitation» begins with the daily behavior of each individual, the university regularly conducts awareness-raising activities aimed at:

- ✓ raising awareness of the importance of saving drinking water;
- ✓ forming a culture of personal hygiene and sanitary-environmental thinking;
- ✓ strengthening practical skills of rational water use in everyday life and the educational environment.

Such measures contribute not only to improving learning and working conditions, but also to the development of students' practical skills of responsible attitude toward natural resources, which is an integral part of training qualified specialists of the 21st century.

2. Scientific and Innovative Activities

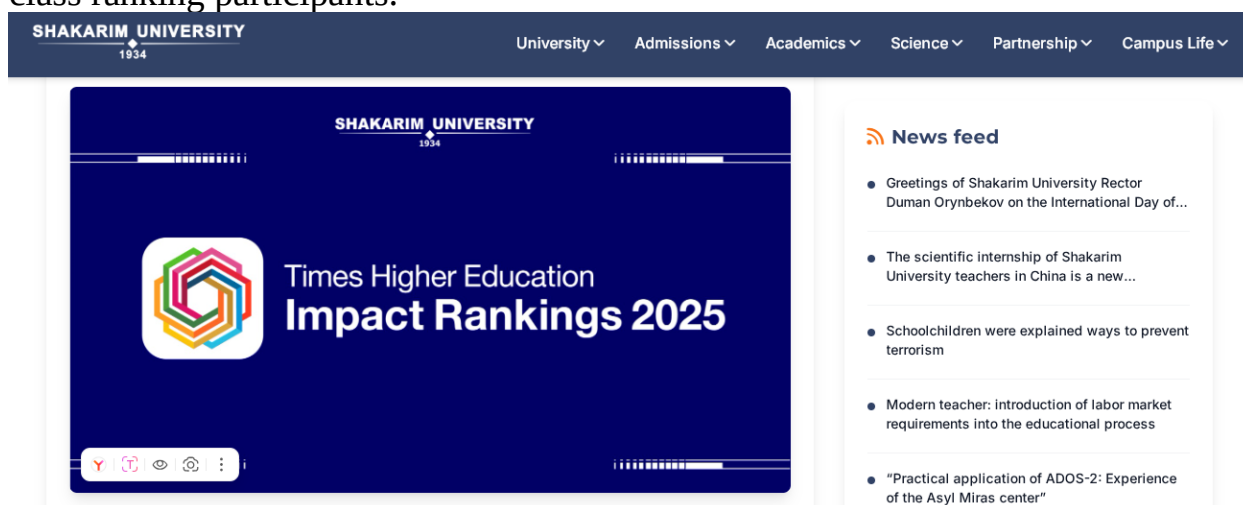
- ✓ Research in the development of energy-efficient technologies for wastewater treatment and desalination.

- ✓ Monitoring the quality of surface and groundwater resources in the region and creating environmental status maps of water bodies.
- ✓ Development of innovative filtration and water disposal systems for industrial enterprises and agricultural clusters.

3. Internationalization and International Cooperation

- ✓ Participation in international grant programs on transboundary water resource management (jointly with universities of neighboring countries).
- ✓ Exchange of experience and research internships for scientists at leading global centers of water technologies.
- ✓ Participation in global initiatives (for example, UN-Water) and the THE Impact Rankings related to SDG 6.

As evidence of the university's role in achieving the Sustainable Development Goals, Shakarim University was included for the first time in the [Times Higher Education Impact Rankings 2025](#), which evaluates universities' contributions to achieving the United Nations Sustainable Development Goals. The university received rankings in 13 out of 17 SDGs, including SDG No. 6 (Clean Water and Sanitation), where it was placed in the 801–1000 range among world-class ranking participants.



4. Social Development and Student Environment

- ✓ Organizing volunteer campaigns and eco-marathons for cleaning riverbanks, lakeshores, and springs with the participation of students and staff.
- ✓ Conducting awareness-raising activities among the local population on the importance of hygiene, sanitation, and water conservation.
- ✓ Establishing student scientific societies and clubs engaged in environmental monitoring and project-based solutions in the field of water supply for small communities.



In 2025, [a scientific project was implemented at the Agrobiological Station](#) of Shakarim University aimed at studying the agrochemical composition of soils and analyzing vegetation cover. The main objective of the project was a comprehensive assessment of soil fertility, determination of plant species diversity, and development of recommendations for the effective development of the region's agro-ecosystem. Within the framework of the study, the following were carried out:

- ✓ collection and laboratory analysis of soil samples;
- ✓ determination of the content of major macro- and microelements;
- ✓ assessment of soil acidity levels and humus

content;

- ✓ analysis of the species composition and condition of vegetation cover;
- ✓ evaluation of the impact of anthropogenic factors on the agro-ecological sustainability of the territory.

As a result of the study, a statistical database was created reflecting the current state of soil fertility and vegetation cover at the Agrobiological Station.

The statistical analysis showed that:

- ✓ the average humus content in the studied soils was 3.4%, which corresponds to a moderate level of soil fertility;



- ✓ the soil acidity (pH) ranged from 6.5 to 7.2, characterizing the soils as close to neutral and favorable for most agricultural crops;



- ✓ nitrogen content was at an average level of supply, while in some samples its deficiency was detected;

- ✓ phosphorus and potassium content generally corresponded to standard values;

- ✓ the vegetation cover was represented by more than 25 plant species, predominantly grasses and legumes;

- ✓ a moderate impact of anthropogenic factors was recorded, including soil compaction and localized reduction of the humus layer.

The obtained data indicate a stable state of the agroecosystem; however, they require measures to increase nitrogen content and prevent soil degradation.

The results of the study confirm the satisfactory condition of the soil-vegetation complex of the Agrobiological Station of Shakarim University. The conducted analysis allows the use of the obtained data for:

- ✓ developing recommendations to improve soil fertility;

- ✓ optimizing fertilization systems;
- ✓ preserving biodiversity;
- ✓ enhancing the sustainability of the region's agroecosystem.

The implementation of the project contributed to the development of students' practical skills in agrochemistry, ecology, and sustainable land use. The obtained results are used to develop recommendations for the rational use of natural resources, which is directly aligned with the objectives of sustainable ecosystem management and the protection of water and land resources.

This initiative demonstrates the university's contribution to ensuring environmental sustainability in the region and forming a scientific basis for rational natural resource management in the context of the implementation of the Sustainable Development Goals.



In 2025, N. Imankulova, a student of group GI-201, won 1st place in the Republican Research Competition organized by Makhambet Utemisov West Kazakhstan University.

The research project was carried out under the supervision of Senior Lecturer A.M. Nurpeisova and was entitled «The Use of Water Bodies of the Abai Region for

Recreational Purposes».

The study was aimed at:

- ✓ assessing the recreational potential of the region's water bodies;
- ✓ analyzing the ecological condition of water resources;
- ✓ determining the permissible anthropogenic load;
- ✓ developing recommendations for the rational and environmentally safe use of water bodies for tourism and recreational purposes.

The research has practical significance for the region, as it contributes to the development of a scientifically grounded approach to water resource management, the preservation of their ecological condition, and the promotion of sustainable tourism.

In 2025, fourth-year students at Shakarim University implemented an environmentally significant project focused on the production of natural soap based on natural ingredients. The aim of the project was to develop a safe and environmentally friendly cleansing product that contains no synthetic toxic substances, is readily biodegradable, and does not negatively affect aquatic ecosystems when released into wastewater. Modern studies confirm that many conventional detergents contain



synthetic surfactants and chemical additives that may deteriorate water quality and disrupt the ecological balance of water bodies (for example, by altering surface tension, which can adversely affect microorganisms). Therefore, the development of natural and biodegradable alternatives is particularly important within the framework of SDG 6 – Clean Water and Sanitation.

The project included:

- ✓ selection and experimental testing of natural ingredients;
- ✓ laboratory testing of pH and product properties;
- ✓ assessment of the ecological safety of the soap during use;
- ✓ evaluation of the impact of its residues on water quality.

The analysis results showed that the developed soap:

- ✓ contains no harmful synthetic additives;
- ✓ demonstrates a high degree of biodegradability;
- ✓ does not negatively affect the pH level of natural waters at low concentrations;
- ✓ is safe for both human skin and the environment.



Main characteristics of the developed eco-friendly soap

<i>Characteristics</i>	<i>Result</i>	<i>Impact assessment</i>
Composition	Natural oils and plant extracts	Safe
Product pH	~8–9 (alkaline, safe for skin when rinsed off)	Eco-friendly
Presence of synthetic surfactants	Absent	Positive
Biodegradation	Rapid	Reduces pressure on aquatic ecosystems
Impact on water quality	Low under standard conditions	Non-polluting

The university actively implements scientific and practical activities aimed at water quality control and the rational use of water resources. An example of such initiatives is the work of chemistry student K. Dulatov, which was recognized as the best research project dedicated to water quality assessment. This project took 1st



place in the university's internal competition and highlights the importance of involving students in applied research related to SDG 6.

Within natural science educational programs (for example, in the fields of Chemistry and Biology), students actively study issues related to water quality, water resources, and sanitation, applying modern analytical methods and practical skills.

Students of the Department of Chemistry and Biology conducted a comparative analysis of the water quality of the Irtysh River and the city water supply system as part of their laboratory classes, followed by the preparation of reports and recommendations for improving sanitary and environmental indicators.

The chart below presents the key water quality indicators measured by students in 2025.

Comparative water quality indicators

Indicator	Irtysh River	Tap water	Regulatory standard (MAC / MPC)	Assessment
pH	7,6	7,2	6,0–9,0	Within norm
Turbidity, mg/L	4,8	0,9	$\leq 1,5$	Exceedance in river
Total hardness, meq/L	5,9	4,2	$\leq 7,0$	Within norm
Nitrates (NO_3^-), mg/L	32	18	≤ 45	Within norm
Total iron, mg/L	0,42	0,18	$\leq 0,3$	Exceedance in river
Mineralization, mg/L	780	540	≤ 1000	Within norm

5. Infrastructure and resources

Implementation of water-saving technologies on campus: installation of sensor faucets, rainwater harvesting systems for irrigating green spaces, and modernization of internal university water supply networks to reduce losses.

✓ Establishment and equipping of specialized laboratories (chemical-analytical and microbiological) for water quality research.

✓ Ensuring uninterrupted access to high-quality drinking water for all students and staff on campus (installation of water dispensers and drinking fountains).

As part of the implementation of SDG 6 - Clean Water and Sanitation», Shakarim University possesses the necessary infrastructure and resources to ensure water quality control and the rational use of water resources.

5.1. Laboratory base

✓ Educational and research laboratories of the Department of Chemistry and Natural Sciences.

✓ Equipment for water quality analysis (spectrophotometers, pH meters, titrators, analytical balances, etc.).

✓ Conducting chemical and physicochemical analysis of water samples.

✓ Opportunities for student and scientific research on water resource monitoring.

5.2. Research infrastructure

✓ Participation of students and faculty in projects studying water composition and quality.

✓ Support for student research initiatives (for example, the study by K. Dulatov).

✓ Organization of scientific and practical conferences and environmental competitions.

5.3. Water-Saving Technologies

✓ Rational use of water resources in academic buildings and dormitories;

✓ Monitoring and control of water consumption.

✓ Compliance with sanitary standards and drinking water quality requirements.

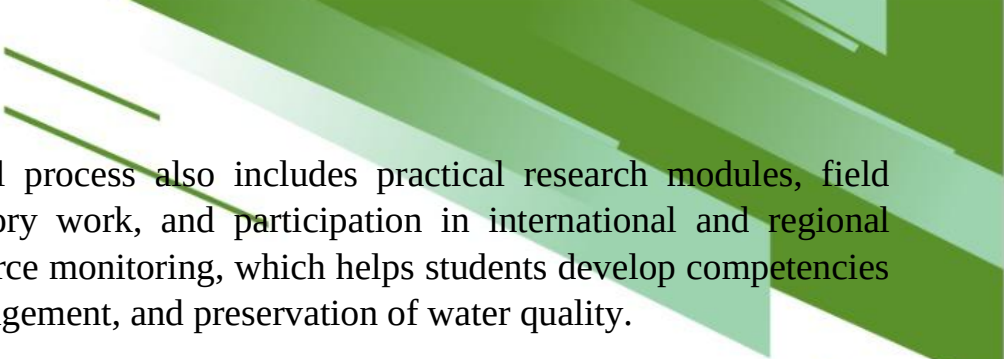
5.4. Information and Educational Resources

✓ Inclusion of sustainable development and water resource topics in educational programs.

✓ Conducting lectures, seminars, and practical classes on environmental and water security issues;

✓ Coverage of university activities in mass media and social networks.

[The systematic integration of the SDGs into educational activities](#) is reflected in the university's corporate documents, including the Sustainable Development section in the catalog of corporate regulatory documents, which outlines the university's commitments to incorporating principles of social and environmental responsibility into academic programs and project activities.



The educational process also includes practical research modules, field measurements, laboratory work, and participation in international and regional projects on water resource monitoring, which helps students develop competencies in the assessment, management, and preservation of water quality.

Conclusion

The university's activities within the framework of SDG 6 are aimed at fostering a culture of responsible water use and implementing sustainable solutions in water resource management. By combining advanced scientific developments with practical campus initiatives and awareness-raising activities among students and the wider community, the university makes a significant contribution to the preservation of the region's aquatic ecosystems.

The integration of rational water consumption principles into the educational process and the university's infrastructure development serves as an example for social partners and local communities. Further development of competencies in water technologies will enable the university to become a regional center of expertise in the fields of clean water provision and sustainable sanitation.





**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the results of achieving
SDG 7: Affordable and Clean Energy
for 2025**

Semey, 2026

7 AFFORDABLE AND CLEAN ENERGY



Introduction

NJSC «Shakarim University» consistently implements a sustainable development strategy aimed at ensuring access to reliable, sustainable, and modern energy (SDG 7). The university's goal is to improve energy efficiency, introduce renewable energy sources, reduce its carbon footprint, and develop scientific research in the field of energy.

University objectives within the framework of achieving SDG 7:

- ❖ ensuring sustainable energy consumption and reducing the carbon footprint of the university infrastructure;
- ❖ introducing renewable energy sources (RES) into educational, research, and operational processes;
- ❖ developing scientific research and innovative energy technologies;
- ❖ training qualified personnel for the region's «green» economy;
- ❖ raising awareness among students and staff about the importance of rational energy use and environmental sustainability.

1. Educational Activities

[The university implements educational programs](#) aimed at training specialists in the field of energy and sustainable development:

- ✓ 6B07103 – Thermal Power Engineering;
- ✓ 7M07101 – Thermal Power Engineering;
- ✓ 7M07105 – Thermal Power Engineering;
- ✓ 6B05303 – Technical Physics;
- ✓ 7M05302 – Technical Physics;
- ✓ 7M05304 – Technical Physics;
- ✓ 7M05306 – Technical Physics (double-degree program with Tomsk Polytechnic University);
- ✓ 8D07109 – Technical Physics;
- ✓ 7M07109 – Nuclear Reactors and Power Plants.

Main areas:

Educational programs include courses and graduation projects devoted to energy efficiency and renewable energy sources (RES). Students study topics such as alternative energy sources, energy conservation in industrial enterprises, thermonuclear fusion, plasma physics, and modern energy conversion methods. In 2025, the educational program 7M07109 “Nuclear Reactors and Power Plants” was launched in response to plans for the construction of a nuclear power plant in the Republic of Kazakhstan and the recognition of nuclear energy as “green” energy by the European Commission. Topics of diploma projects and master's theses include plasma research, hydrogen storage systems, solar panels, and nanofluid heat-transfer media. Practical classes and laboratory work are conducted on modern energy technologies. Examples of topics include:

Practical classes and laboratory work focus on modern energy technologies. Examples include the lecture and practical class topic “Modern and Advanced

Schemes for Solid Fuel Combustion” (course: “Special Issues of Fuel Combustion”); “Modern Advanced Methods of Production and Conversion of Thermal and Electrical Energy,” “Energy-Saving Measures in Industrial and Municipal Energy Systems,” and “Use of Secondary Energy Resources and Industrial Waste as Energy Fuel” (course: “Scientific and Technical Problems of Thermal Power Engineering and Heat Technologies”).

Modular courses cover energy resource management, environmental safety, and decarbonization. [The Minor «Energy and Resource Saving»](#) includes the following disciplines: «Energy and its Conversion», «Energy and Environment», and «Energy Efficiency of Buildings and Industrial Enterprises». As a result, students acquire competencies in developing and applying technical solutions for equipment modernization, improving environmental safety, conducting environmental and economic assessments, and enhancing energy production technologies.

[The Minor «Radiation Safety and Human Ecology»](#) includes the disciplines «Regulation and Sources of Exposure for Personnel and the Population», «Energy-Saving «Green» Technologies», and «Physics in Medicine». As a result of studying these courses, students gain key competencies: fundamental knowledge of radiation regulation and safety, application of energy-saving «green» technologies, and understanding of physical laws in biological systems.

Integration of international standards and rankings such as QS SDGs and THE Impact Rankings into the educational process. Educational programs include courses and modules aimed at achieving SDG 7 «Affordable and Clean Energy». The development of sustainable development competencies is supported by planned learning outcomes, including the evaluation of conventional and unconventional energy conversion methods, the design of modern thermal and nanotechnology systems, the application of knowledge in thermal power engineering and thermonuclear energy, as well as the analysis of challenges in the nuclear industry and metrological support. These competencies are reinforced through master’s theses, diploma projects, student research activities, and participation in [scientific clubs](#).

The successful achievement of student research outcomes is confirmed by prize-winning places in competitions. [Dual education](#) is being developed in cooperation with partner enterprises.



Engagement of students in project-based and research activities through startup competitions (Shakarim Science) and student laboratories.



Result: training competent specialists in the field of sustainable energy who are capable of implementing innovative and environmentally safe solutions.



2. Scientific and Innovation Activities

The University actively develops research in the following areas:

- ✓ energy-efficient technologies and resource saving;
- ✓ alternative and renewable energy;
- ✓ reduction of carbon footprint and sustainability of energy systems.

Activities:

Research projects (R&D). The university is implementing projects funded through grant financing:

AP26100207 “Development of a Technology for Producing Environmentally Friendly Nanomodified Lubricating and Cooling Fluids Based on Vegetable Oils”;

AP26195367 “Development of an Automated Bioreactor Line for Continuous Production of Biogas and Fertilizers”;

AP26197931 “Development and Research of a Wind-Solar Installation with Automated Control for Uninterrupted Electricity and Water Supply to Agricultural Facilities”;

AP25794135 “Development of a Mathematical Model and Analytical System for Predicting the Efficiency of Clean Biogas Production”;

BR24993178 “Development of an Innovative Technology for Recycling Secondary Resources – Metallurgical Waste, By-products of Oil Refining and Oil Extraction”;

AP19678220 “TiO₂-Based Nanofluid Heat Transfer Medium for Use in a Hybrid Solar Collector”.



Students of the Technical Physics program, Ayalyam Mukasheva and Aknur Rakhmetollayeva, participated in the [21st Youth Seminar «Nuclear Potential of Kazakhstan»](#) (08.12.2025). They presented the results of their research, answered questions, and received high

evaluations. The presented material is aligned with the United Nations Sustainable Development Goals, in particular SDG 7 «Affordable and Clean Energy» and SDG 4 «Quality Education».



[II International Congress of Women in Industry and Technology](#) (Astana, December 8–9, 2025) – discussion of women’s integration into industry, mentoring, and sustainable development. Participants included I.O. Stepanova, Head of the Department of Technical Physics and Thermal Power Engineering, Shakarim University.

Student startups and research projects aimed at campus decarbonization contribute to reducing energy consumption and transitioning to renewable energy sources. Students and faculty members of Shakarim University actively support the [«Taza Kazakhstan»](#) initiative, promote environmental culture, and develop a green campus. Such activities increase the sustainability of the university’s energy infrastructure and contribute to reducing its carbon footprint.



Contribution: Development of scientifically grounded solutions that promote the sustainable development of the region and comply with international standards (THE Impact Rankings: Research; QS SDGs: Research Impact).

3. Internationalization and International Cooperation

To improve the quality of educational and research activities, the university:

- ✓ participates in international projects and grants on sustainable energy;
- ✓ supports student and faculty exchanges with foreign universities;
- ✓ implements global best practices in energy efficiency and decarbonization;
- ✓ uses international rankings and indicators (qs sdgs, the impact rankings) to monitor progress and evaluate results.



On December 18, 2025, representatives of NJSC «Shakarim University» participated in the [IV International Conference Achievements in Applied Physics and Mathematics – 2025 \(AAPM-2025\)](#) in Bukhara, Uzbekistan. Fourth-year student of the “Thermal Power Engineering” educational program, Kadyrbolat Nurlat Yerboluly, presented a report on the effect of electrolytic-plasma hardening on the properties of Steel 45. The work demonstrates the potential of energy-saving and resource-efficient technologies and has been accepted for publication in the Springer Proceedings in Physics series (Scopus, Q4), confirming international recognition.

Result: Development of a global cooperation network, attraction of international experience, and strengthening the university’s reputation as a center of sustainable development.

4. Social Development and Student Environment

The university fosters a culture of environmental responsibility among students and staff by implementing programs for the rational use of energy and water.



To promote environmental culture and contribute to a green future, Shakarim University organized the one-day campaign [«Green Transportation Initiatives»](#) on September 19, 2025.

Infrastructure for charging electric vehicles has been installed in the parking area of the main building.



Educational initiatives for student engagement in projects. At Shakarim University, the activities of the [Scientific and Practical Center for the Valorization of Agricultural Products](#) are being intensified. The purpose of

the center is to increase the value of agricultural products and create environmentally friendly, high-quality products. The research center conducts studies on obtaining various bioproducts from organic waste and their application in food production processes.

Impact: Formation of an environmentally conscious community and stimulation of student participation in achieving SDG 7.

5. Infrastructure and Resources

The university is actively modernizing its infrastructure with a focus on energy efficiency and renewable energy sources:

Energy Efficiency Measures:

- ✓ LED lighting and motion sensors;
- ✓ optimization of heating, ventilation, and air-conditioning systems;
- ✓ sealing and replacement of window units, installation of heat-exchange units;
- ✓ automation of engineering networks.

Renewable Energy:

- ✓ a 50 kw solar power plant project on the campus rooftop;
- ✓ research and implementation of heat pump technologies;
- ✓ long-term goal – increasing the share of renewable energy sources in the university's energy balance.

Economic Effect:

- ✓ reduction of energy consumption and operating costs;
- ✓ payback period of measures — from 0.6 to 5 years;
- ✓ funds saved on energy resources are redirected to environmental and innovation projects.

Contribution to SDG 7: Reduction of the carbon footprint, rational use of resources, creation of a green campus, and compliance with international sustainable development standards.

Conclusion

Within the framework of implementing SDG 7 «Affordable and Clean Energy», «Shakarim University» NJSC consistently develops energy efficiency initiatives, the introduction of renewable energy sources, infrastructure modernization, and the expansion of research and educational activities in the field of sustainable energy. The measures being implemented make it possible to reduce the carbon footprint, optimize energy consumption, and create an environmentally responsible university environment. The integration of international standards, the development of innovative projects, and the active involvement of students in research and project activities ensure the training of qualified specialists for the green economy. Thus, the university makes a significant contribution to the achievement of SDG 7 and strengthens its role as a center of sustainable development and environmental innovation.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the results of achieving
SDG № 8 Decent Work and Economic Growth
for 2025**

Semey, 2026

8 DECENT WORK AND ECONOMIC GROWTH



Introduction

The objective of NJSC «Shakarim University» within the framework of SDG 8 is to create conditions for the development of students' professional competencies, enhance labor mobility, and contribute to the economic growth of the region.

The university's main tasks include:

- ❖ providing high-quality professional education that meets the requirements of the modern labor market;
- ❖ developing scientific and innovation activities that contribute to economic growth and the creation of new jobs;
- ❖ fostering international cooperation for the exchange of experience and best employment practices;
- ❖ developing infrastructure and resources that support professional training and students' career development.

1. Educational Activities

The University implements educational programs aimed at training highly competitive specialists for the labor market:

- ✓ practical courses and laboratory work develop professional skills demanded by employers;
- ✓ training sessions, seminars, and master classes on entrepreneurship and career development are organized;
- ✓ students are provided with opportunities to participate in internships and practical training, enhancing their professional potential.



Representatives of Shakarim University participated in the [republican seminar-forum of career centers under the «Serpín» program](#), held at Sarsen Amanzholov East Kazakhstan University. The forum discussed effective mechanisms for fulfilling graduates' grant obligations, the exchange of experience among universities, and support for young specialists. The forum was aimed at preparing graduates for employment, sharing best practices in career development and job placement, as well as creating conditions for the effective integration of young specialists into the labor market.

A foresight session on the development of a regional workforce demand map for the Abai Region was held at Shakarim University. The event made it possible to identify in-demand professions, assess emerging competencies, and adapt the specialist training system to the current economic needs of the region. As a result of the session, a scientific and analytical document will be prepared to support strategic planning and labor market development.



2. Scientific and Innovation Activities

In the field of research, the university:

- ✓ develops innovative projects that contribute to economic growth and the introduction of modern technologies into production processes;
- ✓ supports the research activities of students and faculty aimed at creating new jobs and improving the competitiveness of the economy;
- ✓ cooperates with enterprises and industrial partners in the implementation of applied projects.



An international consultation seminar was held at Shakarim University with the aim of modernizing sheep farming, improving the effective use of state support measures, increasing the export potential of the sheep-breeding sector, developing agribusiness, and attracting investment, thereby contributing to job creation and regional economic development. Scientists from Pakistan and Kazakhstan exchanged experience and discussed opportunities for the development of the domestic agricultural sector.

3. Internationalization and International Cooperation

To achieve SDG 8, the university:

- ✓ participates in international educational and research projects aimed at developing labor skills and entrepreneurship;
- ✓ organizes student and faculty exchange programs with foreign universities to enhance competencies and labor mobility;
- ✓ introduces international best practices in employment and career development into the educational process.

Shakarim University [held a meeting with students enrolled in the dual-degree program](#) at the branch campus of WSG University in Bydgoszcz, Poland. During the meeting, students shared their study experiences, provided recommendations to future program participants, and discussed opportunities for implementing startup projects. The dual-degree program provides students with the opportunity to gain international experience, expand their professional knowledge, and prepare for successful careers. The university supports student initiatives and promotes the development of academic mobility. Participation in international educational programs enhances students' competitiveness in the labor market and contributes to the development of professional skills and entrepreneurial thinking.



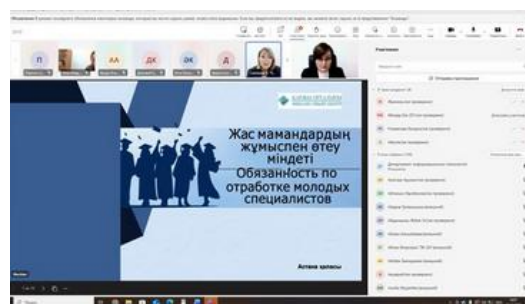
Shakarim University was visited by our 1994 graduate, Zhandos Tursungaliuly, Director of [«UNIVERSAL SM»](#) LLP, visited the university together with a group of Chinese colleagues. The delegation discussed prospects for joint projects aimed at combining production and technological capabilities to implement new initiatives, as well as organizing internships for students and young professionals. This visit became a concrete step toward long-term cooperation between the university, domestic businesses, and international partners.

4. Social Development and Student Environment

The university creates conditions for the professional and social development of students:

- ✓ organization of job fairs, career days, and master classes with the participation of employers;
- ✓ support for student initiatives and startups aimed at creating new jobs;
- ✓ engagement of students in projects that promote entrepreneurship and the development of work-related skills.

An online session was held at Shakarim University for final-year students on the mandatory employment requirements associated with state educational grants. Participants received guidance on employment opportunities, in-demand professions in the regions, as well as the conditions for deferment or exemption from the obligation. The event contributed to preparing young professionals for entry into the labor market and enhancing their professional mobility.





On May 12, 2005, [a representative of the Department of the Agency of the Republic of Kazakhstan for Civil Service Affairs in the Abai Region, T. Zulkharov](#), met with graduating students of the Business School of Shakarim University. During the meeting, future graduates received information on the procedures for entering the civil service, career advancement opportunities, and prospects available to young

civil servants.

On November 12, 2025, a meeting was held between Kairat Nurgazyuly Sapargaliyev, Deputy Head of the Department of the Agency of the Republic of Kazakhstan for Civil Service Affairs in the Abai Region, and 3rd–4th year students.



As part of the project [«Talent Search and Attraction to the Public Sector»](#), a meeting was organized with students to provide career guidance and discuss employment opportunities in the public sector. The event contributed to the development of students' professional skills and their preparation for future employment.

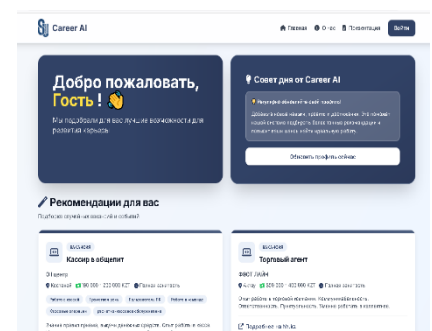


5. Infrastructure and Resources for SDG 8

To achieve the goals of SDG 8, the university develops:

- ✓ career development centers and advisory services for students;
- ✓ laboratories and innovation coworking spaces for practical training and startup projects;
- ✓ resources for internships, practical placements, and entrepreneurial initiatives that support economic growth.

Shakarim University [operates CareerAI, an intelligent career development recommendation system designed for students and graduates](#). The platform provides personalized recommendations on relevant job vacancies, professional events, and career opportunities based on users' individual competencies. This initiative contributes to improving graduate employability and creating conditions for decent work.



Conclusion

«Shakarim University» NJSC actively works on training qualified specialists, supporting entrepreneurship, and creating opportunities for decent work. The implementation of these measures contributes to the achievement of SDG 8 – Decent Work and Economic Growth, while fostering a sustainable economic and educational environment in the region.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the Results of Achieving
SDG № 9 Industry, Innovation and Infrastructure
for 2025**

Semey, 2026

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Introduction

The objective of the university's activities within the framework of SDG 9: Industry, Innovation and Infrastructure is to develop sustainable scientific and educational infrastructure, support innovation, and implement modern technologies in educational and research processes. The main objectives include the development of engineering and technical education, the promotion of applied scientific research, and the strengthening of the university's material and technical base in accordance with modern requirements.

1. Educational Activities

The university implements educational programs aimed at training specialists for the industrial and innovative development of the economy. The educational process actively incorporates:

- ❖ modern engineering and technical disciplines;
- ❖ practice-oriented classes using laboratory and digital equipment;
- ❖ project-based learning focused on solving applied technological challenges.



The Scientific and Analytical Group of Shakarim University [conducted geodetic surveys and soil analysis in the Beskaragai District](#) of the Abai Region to enhance agricultural productivity. The research findings will enable local farmers to make informed decisions and contribute to the efficient management of land resources. The project also provided students and young researchers with practical experience in applied scientific research.

2. Scientific and Innovation Activities

Within the framework of its scientific and innovation activities, the university:

- ✓ conducts research in the fields of engineering, natural, and applied sciences;
- ✓ develops innovative projects aimed at introducing new technologies and improving the efficiency of production processes;
- ✓ supports the participation of students and young researchers in scientific research and startup projects.

The research outcomes are focused on practical application and the development of the regional innovation ecosystem.

[The round table «Domestic Seed Production»](#)

facilitated the exchange of knowledge and experience in the field of introducing innovative plant varieties and modern seed production technologies. The event supports the development of the university's scientific and research capacity by integrating practical innovations into specialist training and industry development. It serves as an example of how academic and research activities contribute to strengthening scientific infrastructure and promoting innovation.



Shakarim University hosted [AI-Sana Shakarim Solveathon: AI & Agriculture 2025](#), the first event of its kind in Kazakhstan—a three-day innovation marathon for students, young researchers, and startup teams focused on developing prototypes to address real-world agricultural

challenges. Teams from eight universities across the country participated, and the winners received awards for the best solutions. The solveathon promotes innovative thinking, supports the integration of artificial intelligence technologies into the agricultural sector, and strengthens the practical application of knowledge among future professionals. The university submitted five applications for grant funding under the commercialization of research and scientific-technical activity results (R&D) program for 2026–2028, aimed at enhancing climate resilience. The projects are being implemented in cooperation with business partners and involve leading researchers in the development of innovative environmental solutions. This initiative contributes to the integration of science, innovation, and practical measures for sustainable development and climate change mitigation.

At the Engineering Center of Shakarim University, research is being conducted on the technology of restoring worn mining equipment components using the plasma cladding method. The studies are carried out by the [«Materials Science and Surface Modification of Materials. Electrolytic-Plasma Technologies»](#) Laboratory under the supervision of Aibek Bakytzhanuly Shynarbek. The application of this technology makes it possible to extend the service life of equipment components, reduce replacement costs, and decrease dependence on imports, thereby contributing to the development of innovative industrial solutions.





A [scientific seminar](#) on the application of artificial intelligence and remote sensing for the predictive exploration of mineral resource sites was held at Shakarim University. Researchers and students discussed new technologies for the digitalization

of geological exploration and AI-based modeling, strengthening the integration of science and education.

An open discussion platform at Shakarim University dedicated to the President of Kazakhstan's Address, [«Kazakhstan in the Era of Artificial Intelligence»](#), brought together students, faculty members, and experts to discuss the development of AI, the implementation of digital technologies, and support for innovative solutions. The event contributed to enhancing participants' competencies, facilitating the exchange of ideas, and stimulating initiatives in the educational and research sectors.



A [student idea](#) competition titled «AI Project». Innovative Ideas Transforming Industries» was held at Shakarim University, with the participation of six teams. The competition provided students with an opportunity to develop their creative potential and present projects focused on the digitalization and automation of various sectors through artificial intelligence technologies. The projects covered a wide range of areas, from university AI platforms to logistics and urban traffic analysis, demonstrating the participants' readiness to contribute to the country's digital transformation.

PhD, Professor of Science at Shakarim University and Head of the Design Bureau, [Adilet Sugirbay](#), was a guest on the television program [«Елге сәлем»](#) broadcast by the Semei TV. During the interview, he shared his views on the development of Kazakhstan's agro-industrial sector and the role of innovative technologies. Under his leadership, the Design Bureau is engaged in improving agricultural machinery, including the development of potato planting equipment, as well as intelligent devices for optimizing crop and livestock operations and ensuring the efficient use of water resources.





The Summer School «EDUSUMMER: Advanced Experience – Shared Development» at Shakarim University was successfully completed, providing participants with opportunities to exchange experience, master modern educational methods, and develop innovative thinking. The program covered digital transformation, artificial intelligence, MOOCs, research activities, and international integration, while practical workshops enabled participants to develop and present their own project proposals. The event contributed to the development of educators' professional competencies, the generation of new ideas, and the promotion of a startup culture within the university ecosystem.

3. Internationalization and International Cooperation

To achieve SDG 9, the university:

- ❖ participates in international scientific and educational projects;
- ❖ develops cooperation with foreign universities and research centers in the field of technology and engineering;
- ❖ introduces international experience and standards into educational and research activities.

This contributes to technology transfer and improves the quality of specialist training.

A delegation from Shakarim University visited the National Nuclear Center of the Republic of Kazakhstan to discuss the training of qualified personnel in nuclear energy, radiation safety, and nuclear materials handling technologies. The meeting covered the development of joint educational programs, the introduction of a dual education system, and student participation in the center's research projects. The cooperation strengthens students' professional competencies, integrates academic training with industrial practice, and contributes to the development of the country's strategically important scientific and technical potential.



Doctoral students of Shakarim University completed an international internship at Igdır University, where they studied technologies for processing lignocellulosic by-products in the food industry with the integration of molecular hydrogen. This joint project strengthens scientific cooperation between Kazakhstan and Turkey and contributes to the development of a «green» economy and environmentally efficient solutions.

Shakarim University is a leading higher education institution in the Abai Region, where academic traditions are harmoniously combined with modern scientific approaches. The [«Agrotechnopark»](#) conducts full-cycle research on the production of preparations containing lactobacilli, bifidobacteria, and biologically active supplements, while a modern PCR laboratory enables real-time microbiological, chemical, and radiological analyses. These laboratories provide students with opportunities to develop research skills, participate in fundamental scientific studies, and prepare for international competitiveness.



5. Infrastructure and Resources for SDG 9

To achieve SDG 9 objectives, the university develops:

- ❖ modern laboratory and research infrastructure;
- ❖ digital educational platforms and information resources;
- ❖ material and technical facilities for scientific research and innovation activities.



The [international forum «INNOVATE SHAKARIM UNIVERSITY»](#), held on May 4, 2025, showcased scientific and startup projects by students and staff, including innovations in food resources and solar energy. Within the framework of the forum, a three-year project on greening the university campus was launched, improving infrastructure and creating a sustainable environment for learning and research. The event integrates education, science, and infrastructure development, promoting the implementation of innovative solutions and fostering an environmental culture.

Faculty members and students [of Shakarim University visited the Semey Center for Nuclear Medicine and Oncology](#), where dual education programs and master's training are implemented. The cooperation enables the integration of physics, medicine, and engineering technologies, preparing specialists in medical physics. Such initiatives bridge science and practice, contribute to the development of innovative professionals, and strengthen the university's partnerships with specialized centers.





After the renovation of Shakarim University's academic buildings, a modern coworking center was opened for students, faculty members, and university guests. The upgraded infrastructure includes academic buildings, a sports complex, and modern laboratories, creating comfortable conditions for educational, research, and extracurricular activities. The implementation of this project is part of the university's strategic course aimed at digital transformation, infrastructure modernization, and improving the quality of education. In addition, Shakarim University has launched a new workshop for assembling glass-profile structures, equipped with modern machinery for producing plastic windows of various sizes. The workshop not only supports the replacement of outdated windows in university buildings but also serves as a practical training site for mastering assembly and installation technologies. This strengthens the university's infrastructure and promotes the introduction of innovative solutions into the educational environment.

Conclusion

The activities of Shakarim University in education, science, and infrastructure development contribute to the formation of a sustainable innovation ecosystem. The implemented measures confirm the university's contribution to the achievement of SDG 9 – Industry, Innovation and Infrastructure, as well as to the development of the region's scientific and technological potential.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the Results of Achieving
SDG № 10 Reduced Inequalities
year 2025**

Semey, 2026



Introduction

The university's goal within the framework of implementing SDG 10 is to ensure equal opportunities for obtaining quality education, social support, and professional development for all categories of students regardless of social status, financial situation, and other factors.

The university's objectives include:

- ❖ expanding access to education for socially vulnerable groups;
- ❖ providing financial support and benefits;
- ❖ creating an inclusive educational environment;
- ❖ developing social responsibility and equal opportunities for students' self-realization.

1. Educational Activities – Implementation of Academic Programs

The university implements a policy of providing benefits and discounts on the payment of educational services, as well as awarding the Shakarim educational grants. Discounts of 20%, 30%, 50%, and 100% are provided, ensuring the accessibility of higher education for students from various social categories. Educational programs are implemented taking into account the principles of inclusiveness and equal access to education.

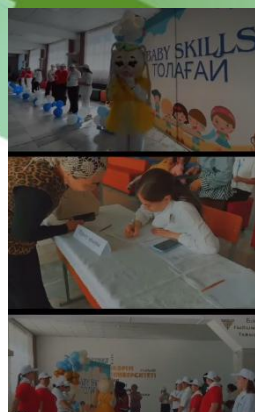


Shakarim University, in collaboration with the Education Department of the Abai Region, organized the international forum [«Inclusion: Inclusion: Ten mumkindikter kenistigi»](#), which brought together educators, researchers, and experts from Kazakhstan, Russia, and Kyrgyzstan. The event addressed key issues of inclusive education, equal access to quality learning, and social support for children with special educational needs. The forum contributed to the exchange of experience, strengthening of the inclusive educational environment, and promotion of social justice principles within the education system.

In 2025, the Higher College of Shakarim University organized the annual daytime camp for children, «Tolagai». The «Tolagai» camp is aimed at organizing meaningful and engaging



summer recreation for children, developing their creative abilities, communication skills, and social activity. As part of the camp's program, children



participated in educational, creative, and sports activities, spent their time productively, and gained bright impressions from their summer vacation.

2. Scientific and Innovation Activities

The university's research addresses the socio-economic aspects of societal development, issues of social support, sustainable development, and improving the quality of life. The research results are used in the development of recommendations for reducing social inequality and improving social policy.

Research projects in the field of sustainable development:

1. [AP25796077](#) (2025-2027) «The Role of the Kazakh Emigration Press in Shaping Intellectual Discourse»;
2. [R28712491](#) (2025-2027) «A Comprehensive Literary and Cultural, Historical and Ethnographic, Geographical, and Linguistic Study of the Spiritual Heritage of Shakarim Kudaiberdiuly: Digital Integration and Ethno-Tourism».

3. Internationalization and International Cooperation

The university promotes academic mobility and international partnerships, ensuring equal access for students to exchange programs and international educational initiatives. This contributes to expanding opportunities for the professional and personal development of students regardless of their social status.

4. Social Development and Student Environment

The university provides financial support to students from socially vulnerable categories. Five first-year students who are orphans were provided with one-time financial assistance, and 38 students from the first to the fourth year were awarded a monthly allowance.

Social and preventive activities are carried out to support students' well-being, create equal conditions for learning and development, and encourage students' participation in community activities.

As part of the International Day of Older Persons, a volunteer project [«Qarttaryn qadirlegen el ardaqty»](#), was organized, in which university students supported elderly people through meetings, games, and cultural activities. The initiative contributed to strengthening intergenerational ties, social cohesion, and developing students' empathy and sense of responsibility. It serves as an example of student engagement in social initiatives aimed at supporting elderly and vulnerable population groups.



In December, the [«Qorgynyshsyz Sessiya»](#) training was conducted for first-year students, with the participation of 160 students. The training was aimed at reducing psychological barriers and anxiety during the examination period, thereby creating equal conditions for successful learning regardless of students' level of preparation and personal characteristics. The event promotes the inclusiveness of the educational environment, strengthens students' confidence, and supports their academic well-being.

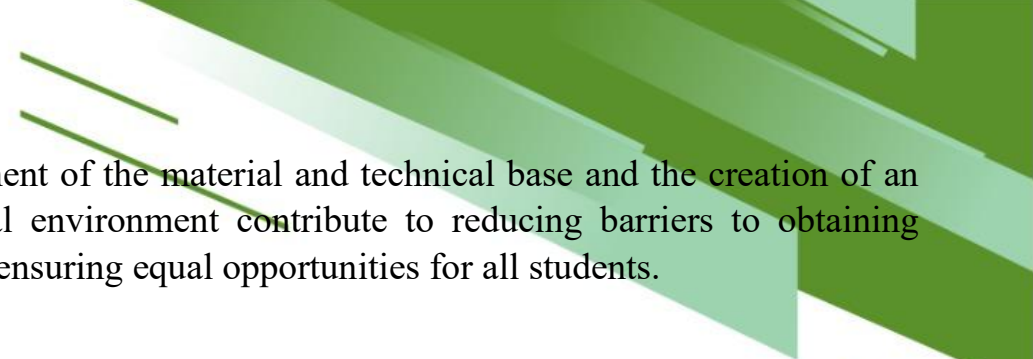
In December 2025, a [seminar for first-year advisors entitled](#) «Birinshi kurs studentterinin beimdeui: qyandyqtary zhane qoldau zholdary» was held. The seminar was aimed at studying the difficulties of first-year students' adaptation and identifying ways to support them. The event contributes to the development of advisors' competencies in working with students, strengthens the student support system, and creates conditions for the successful integration of students into the educational process and student community.



[Holding the National Dictation at Shakarim University](#) contributes to strengthening language culture, promoting the state language, and creating equal opportunities for all participants in the educational process. The event is aimed at improving literacy, fostering cultural identity, and promoting the Kazakh language within the academic environment.

5. Infrastructure and Resources

The university creates conditions for comfortable and safe learning for all categories of students, including ensuring access to educational resources, digital platforms, and social infrastructure.



The development of the material and technical base and the creation of an accessible educational environment contribute to reducing barriers to obtaining higher education and ensuring equal opportunities for all students.

Conclusion

Within the framework of implementing SDG 10 - Reduced Inequalities, «Shakarim University» NJSC ensures equal access to quality education, social support, and development opportunities for all categories of students and university staff. The measures implemented to provide benefits, financial support, develop an inclusive environment, promote students' social engagement, and provide social support for faculty members and staff contribute to reducing inequalities and creating conditions for successful learning and self-realization. The university continues its efforts to create a fair, accessible, and inclusive educational environment in accordance with the principles of sustainable development.





**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the Results of Achieving
SDG 11: Sustainable Cities and Communities
for 2025**

Semey, 2026



Introduction

The objective of the university within the framework of SDG 11 - Sustainable Cities and Communities is to contribute to the development of an environmentally sustainable, safe, and comfortable urban environment through educational, scientific, and community engagement activities.

Key objectives:

- ❖ promoting environmental awareness and civic responsibility among students;
 - ❖ participating in urban landscaping, greening, and community improvement initiatives;
 - ❖ integrating sustainable development principles into campus infrastructure and operations;
- strengthening partnerships with local authorities, public organizations, and other stakeholders.

1. Educational Activities – Implementation of Academic Programs

The University's academic programs incorporate courses and modules on sustainable development, environmental protection, energy efficiency, and the sustainable use of natural resources. As part of the educational process, the following activities are carried out:

- ✓ delivering lectures, seminars, and practical classes on sustainable urban development;
- ✓ organizing student projects aimed at developing the concept of a «Green Campus»;
- ✓ engaging students in initiatives to improve urban environments and promote environmental sustainability.



Shakarim University hosted the [presentation of the scientific and educational book «Zhylyk Tūligi»](#), dedicated to the role of the horse in the history, culture, and economic life of the Kazakh people. The event brought together distinguished scholars, poets, and public figures who discussed the scientific and cultural significance of the publication, as well as the prospects for the development of horse breeding and related research. The book integrates perspectives from animal science, history, and cultural studies, while proposing research initiatives to support the further development of the horse breeding sector.

2. Scientific and Innovation Activities

The university's scientific research is aimed at developing solutions to reduce environmental impact, improve energy efficiency, and implement environmentally safe technologies.

- ✓ Implementation of research projects on campus decarbonization;
- ✓ Development of proposals for urban greening and rational resource management;
- ✓ Participation in grant-funded projects focused on the sustainable development of the region.

As part of the cooperation between Shakarim University and the A. Kh. Margulan Institute of Archaeology, a joint research project entitled «[Comprehensive Historical and Archaeological Study of the Abai Region](#)» is being carried out. Archaeological excavations, particularly at the Muzdybai-3 burial ground, are aimed at studying the cultural and historical characteristics of the ancient communities of the region. In the future, a comprehensive laboratory examination of the discovered artifacts is planned in order to determine their dating more accurately and to conduct a more comprehensive historical and cultural analysis.



Research Projects in the Field of Sustainable Development:

1. [R28712491](#) (2025-2027) «Comprehensive Literary, Cultural, Historical, Ethnographic, Geographical, and Linguistic Study of the Spiritual Heritage of Shakarim Kudaiberdiuly: Digital Integration and Ethno-Tourism»;
2. [AP26197931](#) «Development and Investigation of an Automated Wind-Solar Hybrid System for Uninterrupted Electricity and Water Supply to Agricultural Facilities».

Q1–Q2 Publications in 2025 Addressing the Sustainable Development Goals (SDGs):

№	Наименование статьи	Квартиль	ЦУП (SDG)
1.	Implementation of the Alash Idea in Literary Translations (On the Example of Contemporary Kazakh Literature)	Q2	SDG 4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; SDG 11 – Make cities and human settlements inclusive, safe, resilient, and sustainable.
2.	Performance Evaluation of Fixed-Point DFOS Cables for Structural Monitoring of Reinforced Concrete Elements	Q2	SDG 9 – Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation; SDG 11 – Make cities and human settlements inclusive, safe, resilient, and sustainable.

3. Internationalization and International Cooperation

The university develops cooperation with foreign universities and organizations in the field of sustainable development and environmental initiatives.

- ✓ Participation in international sustainability rankings (e.g., UI GreenMetric);
- ✓ Academic mobility of students and faculty in environmental fields;
- ✓ Joint projects with international partners on sustainable urban development.

4. Social Development and Student Environment

The university actively engages students and staff in environmental and social initiatives aimed at improving the urban environment.

- ✓ Organization of community clean-up events as part of the national environmental campaign "Clean Kazakhstan";
- ✓ Implementation of environmental campaigns and flash mobs for the improvement of campus and surrounding areas;
- ✓ Team-building activities and field events aimed at fostering environmental awareness and collective responsibility.

[The «EcoQadam»](#) event was organized to improve the sanitary condition of the city and engage students in maintaining cleanliness and order in the urban environment. The campaign contributed to the development of environmental responsibility, active citizenship, and the formation of habits of the rational use of urban resources. It serves as an example of the practical participation of the student community in the sustainable development of the city.



Shakarim University hosted [a festive event for participants of the «Silver University»](#), dedicated to honoring the older generation. Students prepared concerts, games, and gifts, creating a joyful and warm atmosphere. The event contributed to strengthening intergenerational ties and fostering social responsibility among young people.

5. Infrastructure and Resources

The University implements the principles of sustainable infrastructure and resource management. The campus's green infrastructure is being developed, and

measures are being introduced to improve energy efficiency and promote the rational use of water and electricity.

- ✓ Modernization of lighting systems using energy-efficient technologies;
- ✓ Expansion of green areas and tree planting on campus;
- ✓ Organization of separate waste collection and environmental awareness activities.

Conclusion

The implementation of activities within the framework of SDG 11 contributes to the development of a sustainable university and urban environment, the promotion of environmental awareness, and the enhancement of social responsibility among students and staff. A comprehensive approach that integrates educational, research, social, and infrastructure activities enables the University to make a significant contribution to the sustainable development of the region and strengthen its status as a socially responsible and environmentally oriented higher education institution.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the Results and Achievements of
SDG № 12 Responsible consumption and production
for 2025**

Semey, 2026

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Introduction

The university's objective in implementing SDG 12 – Responsible Consumption and Production is to foster a culture of responsible resource use, reduce environmental impact, and integrate the principles of sustainable development into its educational, research, and operational activities.

Main objectives:

- ❖ integration of the principles of sustainable consumption into educational programs;
- ❖ development of scientific research in the field of resource conservation and environmentally friendly technologies;
- ❖ promotion of environmental responsibility among students and staff;
- ❖ implementation of practices for the efficient use of energy, water, and materials within the university's infrastructure.

1. Educational Activities

Educational programs include courses and modules focused on rational use of natural resources, environmental safety, sustainable technologies, and resource conservation.

- ✓ Conducting seminars on sustainable production and waste management;
- ✓ Implementation of student projects aimed at reducing resource consumption on campus;
- ✓ Organization of master classes on environmentally responsible consumption.



On April 15, 2025, [as part of the national environmental initiative «Taza Kazakhstan», an open lecture](#) was held on the responsible use of natural resources and energy conservation. The event contributed to fostering students' environmental awareness, increasing their understanding of the environmental significance of the country and the region, and promoting responsible resource use. The interactive format of the lecture and intellectual games enhanced student engagement and reinforced the knowledge gained.

2. Scientific and Innovative Activities

The university's research activities are focused on developing technologies that contribute to waste reduction, recycling of secondary raw materials, and improving the efficiency of resource use.

- ✓ Research in the field of food waste and secondary raw material recycling;

- ✓ Development of innovative environmentally friendly products and technologies;
- ✓ Implementation of start-up projects aimed at promoting the principles of the green economy.

Q1–Q2 Publications in 2025 Addressing the Sustainable Development Goals (SDGs):

№	Article Title	Journal	DOI	Quartile	SDG
1.	Comparable Analysis of Natural and Modified Starches from Kazakhstan: Physicochemical Properties, Applications, and Insights on Biodegradable Films	Applied Sciences	http://dx.doi.org/10.3390/app15073938	Q2	SDG 12 – Ensure Sustainable Consumption and Production Patterns; SDG 9 – Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization, and Foster Innovation.
2.	Innovative Resource-Saving Equipment for Safflower Processing to Improve Oil Quality	FOODS	http://dx.doi.org/10.3390/foods14091596	Q1	SDG 12 – Ensure Sustainable Consumption and Production Patterns; SDG 9 – Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization, and Foster Innovation.
3.	Use of hydrogen-rich solvent and principal component analysis improves the recovery of phytochemicals from grape wastes	JOURNAL OF AGRICULTURE AND FOOD RESEARCH	http://dx.doi.org/10.1016/j.jafr.2025.102033	Q1	SDG 12 – Обеспечение рациональных моделей потребления и производства; SDG 2 – Ликвидация голода, обеспечение продовольственной безопасности, улучшение питания и содействие устойчивому развитию сельского хозяйства
4.	Development and Optimization of Edible Antimicrobial Films Based on Dry Heat-Modified Starches from Kazakhstan	FOOD SCIENCE & TECHNOLOGY	http://dx.doi.org/10.3390/foods14112001	Q1	SDG 12 – Ensure Sustainable Consumption and Production Patterns
5.	Design and Characterization of	BUILDINGS	http://dx.doi.org/10.3390/buildings16010020	Q2	SDG 12 – Ensure Sustainable

	Ceramic Bricks with Industrial Waste and Silica-Carbon-Based Additives				Consumption and Production Patterns; SDG 9 – Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization, and Foster Innovation.
6.	Effect of Pressure Regulating Mechanism on Screw Pressing Efficiency and Production Capacity in Sea Buckthorn (Hippophae rhamnoides) Juice Extraction	Applied Sciences	http://dx.doi.org/10.3390/app15031130	Q2	SDG 12 – Ensure Sustainable Consumption and Production Patterns; SDG 2 – End Hunger, Achieve Food Security and Improved Nutrition, and Promote Sustainable Agriculture.
7.	Use of Meat-Bone Paste to Develop Calcium-Enriched Liver Pate	FOODS	http://dx.doi.org/10.3390/foods10092042	Q1	SDG 12 – Ensure Sustainable Consumption and Production Patterns; SDG 2 – End Hunger, Achieve Food Security and Improved Nutrition, and Promote Sustainable Agriculture.
8.	Use of Meat-Bone Paste to Develop Calcium-Enriched Liver Pate	FOODS	http://dx.doi.org/10.3390/foods10092042	Q1	SDG 12 – Ensure Sustainable Consumption and Production Patterns; SDG 2 – End Hunger, Achieve Food Security and Improved Nutrition, and Promote Sustainable Agriculture.
9.	Analysis of microstructure, starch properties, and volatilomicse reveals the effect of nitrogen fertilizer on cooking quality of proso millet	FOOD CHEMISTRY-X	http://dx.doi.org/10.1016/j.fochx.2025.103381	Q1	SDG 12 – Ensure Sustainable Consumption and Production Patterns; SDG 2 – End Hunger, Achieve Food Security and Improved Nutrition, and Promote Sustainable Agriculture.
10.	Investigation of the Effects of Electron Beam Irradiation on the Functional Properties and Stability of Various Feed Products During Storage	APPLIED SCIENCES-BASEL	http://dx.doi.org/10.3390/app15189855	Q2	SDG 12 – Ensure Sustainable Consumption and Production Patterns; SDG 2 – End Hunger, Achieve Food Security and Improved Nutrition, and Promote

					Sustainable Agriculture.
11.	Conversion of spent coffee grounds into bioenergy and biomass using Clostridium species: A sustainable pathway for renewable energy	INDUSTRIAL CROPS AND PRODUCTS	http://dx.doi.org/10.1016/j.indcrop.2025.122068	Q1	SDG 7 – Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for All; SDG 12 – Ensure Sustainable Consumption and Production Patterns.
12.	Biomass and bioethanol production from pretreated mixed fruit peel hydrolysate using Saccharomyces cerevisiae strains at different pH and oxygen conditions	BMC BIOTECHNOLOGY	http://dx.doi.org/10.1186/s12896-025-01074-1	Q2	SDG 7 – Ensure Access to Affordable, Reliable, Sustainable and Modern Energy for All; SDG 12 – Ensure Sustainable Consumption and Production Patterns.

3. Internationalization and International Cooperation

The university participates in international initiatives and partnership projects related to sustainable development and environmental responsibility.

- ✓ Participation in international conferences on sustainable production;
- ✓ Academic mobility in environmental and technological fields;
- ✓ Cooperation with foreign universities in the areas of green technologies and the circular economy.

4. Social Development and Student Environment

Promoting environmental awareness is an important part of student life. The university supports initiatives aimed at responsible consumption and waste reduction.

- ✓ Organization of environmental campaigns and community clean-up events;
- ✓ Implementation of waste separation practices;
- ✓ Organization of awareness campaigns on reducing plastic use and promoting the responsible consumption of resources.



The [ECOHOUSE competition](#), held among students on April 4, 2025, in celebration of Environmental Education Day, contributed to improving environmental literacy and enhancing knowledge of environmental issues. The event develops students' ability to analyze environmental challenges, encourages a creative approach to sustainable consumption, and increases their involvement in practical environmental initiatives. Participation in the competition also fosters teamwork, social engagement, and students' active involvement in environmental initiatives.

5. Infrastructure and Resources

The university implements measures aimed at the efficient use of material and energy resources.

- ✓ Implementation of energy-efficient lighting and equipment;
- ✓ Optimization of water and electricity consumption;
- ✓ Transition to electronic document management to reduce paper consumption.

Conclusion

The university's comprehensive activities within the framework of SDG 12 – Responsible Consumption and Production contribute to fostering responsible resource use, promoting environmental awareness, and implementing the principles of sustainable consumption and production. The integration of educational, research, social, and infrastructural initiatives helps reduce environmental impact, improve resource efficiency, and strengthen the university's position as a socially responsible and environmentally conscious higher education institution.



**НЕКОММЕРЧЕСКОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО
«ШӘКӘРІМ УНИВЕРСИТЕТ»**

**REPORT
on the Results and Achievements of
SDG № 13 Climate Action
for 2025**

Semey, 2026



Introduction

The university's objective in implementing SDG 13 – Climate Action is to reduce its carbon footprint, foster environmental responsibility among students and staff, and integrate sustainable practices into its educational, research, and operational activities.

Main objectives:

- ❖ integration of climate-related issues into educational programs;
- ❖ development of scientific research in the fields of decarbonization and climate change adaptation;
- ❖ participation in regional and national environmental initiatives;
- ❖ implementation of energy-efficient and resource-saving technologies within the university's infrastructure.

1. Educational Activities

Educational programs include courses focused on environmental safety, climate change, sustainable energy, and the rational use of natural resources.

- ✓ Conducting lectures and seminars on climate change and sustainable development;
- ✓ Implementation of student projects to assess the campus carbon footprint;
- ✓ Development of educational case studies on the decarbonization of industrial processes.



Students of the Forest Resources and Game Management educational program participated in the [campaign «Let's Restore the Forest After the Fire»](#), independently growing 500 Scots pine seedlings at the university's Agrotechnopark. The initiative enabled students to apply theoretical knowledge in practice, study forest seedling cultivation technologies, and gain experience in environmentally significant projects. This activity contributes to the development of students' practical competencies and strengthens their environmental responsibility.

2. Scientific and Innovative Activities

The university's research activities focus on developing solutions to reduce greenhouse gas emissions and improve energy efficiency.

- ✓ Implementation of research projects on campus decarbonization;
- ✓ Development of energy-efficient technologies and the introduction of renewable energy sources;
- ✓ Participation in grant-funded projects aimed at climate change adaptation.

As part of the BR24992914 program, doctoral student Ayaulym Daniyarova presented research on the use of agricultural waste for hydrogen and methane production [at the international conference "Biological Sciences and Environmental Solutions for the Achievement of SDGs" in Yerevan](#). Her poster presentation and Flash Talk promoted the exchange of scientific ideas and strengthened academic links with the international research community.



Q1–Q2 Publications in 2025 Addressing the Sustainable Development Goals (SDGs):

№	Article Title	Journal	DOI	Quartile	SDG
1.	Impact of forest fire on the heavy metal content in the soil cover of the Amankaragay pine forest, Kostanay Region	JOURNAL OF ECOLOGICAL ENGINEERING	http://dx.doi.org/10.12911/22998993/199472	Q2	SDG 13 – Take Urgent Action to Combat Climate Change and Its Impacts; SDG 15 – Protect, Restore and Promote the Sustainable Use of Terrestrial Ecosystems, Sustainably Manage Forests, Combat Desertification, and Halt and Reverse Land Degradation and Halt Biodiversity Loss.
2.	Influence of TiO ₂ Nanoparticle Concentration on Micro-Arc	COATINGS	http://dx.doi.org/10.3390/coatings15101142	Q2	SDG 15 – Protect, Restore and Promote the Sustainable Use of Terrestrial

	Oxidized Calcium-Phosphate Coatings: Corrosion Resistance and Biological Response				Ecosystems, Sustainably Manage Forests, Combat Desertification, and Halt and Reverse Land Degradation and Halt Biodiversity Loss; SDG 13 – Take Urgent Action to Combat Climate Change and Its Impacts.
--	---	--	--	--	---

3. Internationalization and International Cooperation

The university actively develops international cooperation in the field of sustainable development and climate policy.

- ✓ Participation in international environmental sustainability rankings (e.g., UI GreenMetric);
- ✓ Academic mobility in the fields of green energy and environmental technologies;
- ✓ Joint research with international partners on climate resilience.

4. Social Development and Student Environment

Promoting environmental awareness is an important component of the university's educational and extracurricular activities.

- ✓ Organization of community clean-up events as part of the national environmental campaign "Clean Kazakhstan";
- ✓ Implementation of environmental campaigns, flash mobs, and awareness initiatives aimed at reducing the carbon footprint;
- ✓ Involvement of students in volunteer environmental initiatives.



As part of the [national environmental campaign «Clean Kazakhstan»](#), community clean-up events were organized in September and October with the participation of students and university staff. These activities contributed to campus improvement, promoted environmental awareness, and strengthened responsibility for maintaining a clean environment.

5. Infrastructure and Resources

The university implements sustainable resource management practices and reduces its environmental impact.

- ✓ Modernization of lighting systems using energy-efficient technologies;
- ✓ Development of green spaces and campus landscaping;
- ✓ Implementation of waste separation practices and reduction of paper consumption through digitalization.

Conclusion

The implementation of activities within the framework of SDG 13 – Climate Action contributes to reducing environmental impact, strengthening climate responsibility, and promoting sustainable behavior among students and staff. The university's comprehensive approach, integrating educational, research, social, and infrastructural activities, enables it to contribute to climate action at both the regional and national levels while strengthening its position as an environmentally responsible higher education institution.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the Results and Achievements of
SDG № 14 Life below water
for 2025**

Semey, 2026



Introduction

The university's objective in implementing SDG 14 – Life Below Water is to foster environmental responsibility, develop scientific research in the field of water resource protection, and reduce negative impacts on aquatic ecosystems through educational and practical activities.

Main objectives:

- ❖ integration of water resource and ecosystem protection issues into educational programs;
- ❖ development of scientific research on the protection of the aquatic environment;
- ❖ participation in environmental initiatives aimed at preserving the rivers and water bodies of the region;
- ❖ implementation of sustainable water use practices within the university's infrastructure.

1. Educational Activities

Educational programs include courses focused on the ecology of water resources, hydrobiology, environmental safety, and sustainable natural resource management.

- ✓ Conducting lectures and seminars on water ecosystem pollution issues;
- ✓ Implementation of student projects on water quality assessment;
- ✓ Organization of field training related to monitoring the condition of water bodies.

2. Scientific and Innovative Activities

The university's research activities are aimed at studying the condition of water resources and developing technologies for their protection.

- ✓ Conducting research on wastewater treatment;
- ✓ Development of biotechnological methods for pollution reduction;
- ✓ Participation in grant-funded projects on the restoration of regional aquatic ecosystems.

3. Internationalization and International Cooperation

The university cooperates with international partners on environmental protection and the sustainable use of natural resources.

- ✓ Participation in international conferences on the ecology of aquatic systems;
- ✓ Academic mobility of students and faculty in environmental fields;
- ✓ Joint scientific publications and research in the field of water resource protection.

4. Social Development and Student Environment

Promoting environmental awareness among students is an important component of the university's educational activities.

- ✓ Organization of environmental campaigns to clean riverbanks and water bodies;
- ✓ Awareness campaigns on reducing water pollution and promoting the responsible use of resources;
- ✓ Involvement of students in volunteer environmental projects.

5. Infrastructure and Resources

The university implements measures aimed at the sustainable use of water resources and pollution reduction.

- ✓ Implementation of water-saving systems;
- ✓ Modernization of sanitary and technical equipment;
- ✓ Monitoring and reducing wastewater volumes and transitioning to environmentally friendly cleaning agents.

Conclusion

The university's comprehensive activities within the framework of SDG 14 – Life Below Water contribute to the protection of aquatic ecosystems, the promotion of environmental awareness, and the development of scientific solutions for water resource protection. The integration of educational, research, and infrastructural initiatives enables the university to contribute to the sustainable management of water resources at the regional level and to foster responsible attitudes toward the environment.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the Results and Achievements of
SDG № 15 Life on land
for 2025**

Semey, 2026



Introduction

The university's goal in implementing SDG 15 – Life on Land is to foster environmental responsibility among students and staff, conserve biodiversity, restore forest and land resources, and implement sustainable land use practices.

Main objectives:

- ❖ integrate issues related to the protection of forests, soils, and biodiversity into educational programs;
- ❖ promote scientific research on the protection of terrestrial ecosystems;
- ❖ engage students in environmental protection and sustainability initiatives;
- ❖ ensure the rational use of land resources and support the campus's green infrastructure.

1. Educational Activities

The educational programs include courses aimed at studying terrestrial ecology, biodiversity conservation, forestry, and sustainable natural resource management:

- ✓ lectures and seminars on the protection of forests, soils, and biodiversity;
- ✓ practical classes on assessing the condition of terrestrial ecosystems;
- ✓ student projects on developing plans for the conservation of green areas on the campus and in the city.



Students of group LRO-303 of the educational program "Forest Resources and Game Management" took part in a practical environmental project on the production and installation of bird feeders. The activity enabled students to apply the knowledge they had acquired in practice, study the protection of birds and their habitats, and develop environmental awareness skills. This project integrates the educational process with real conservation activities, fostering students' practical competencies and environmental responsibility.

2. Scientific and Innovative Activities

The university's scientific research is focused on studying the condition of terrestrial ecosystems, developing methods for land restoration, and promoting the sustainable use of natural resources.

- ✓ projects on the restoration of degraded lands and forest plantations;
- ✓ development of innovative technologies for protecting soils from erosion;
- ✓ research on biodiversity conservation and the implementation of sustainable land use practices.

Students of the educational program "Forest Resources and Game Management" took part in the "Restore the Forest After the Fire" campaign by independently growing 500 Scots pine seedlings at the university's Agrotechnopark. During the campaign, a Jacobsen table was used to test seedling germination, demonstrating the application of scientific equipment in educational and research activities. The event integrates research with practical contributions to increasing the country's forest cover and developing genetically valuable planting material. It is an example of combining innovative technologies, scientific research, and practical environmental impact.



Students of the Department of Agriculture at Shakarim University implemented a unique startup project to grow 1,000 Scots pine (*Pinus sylvestris*) seedlings with a closed root system at the university's Agrotechnopark. The young trees were prepared for adaptation to the natural environment and transferred to the Kanonerka Nursery and Seed Station Complex of the Semey Ormany State Forest Nature Reserve. Within four months, the seedlings reached a height of 6 cm, and further growth is expected by autumn.

Q1–Q2 Publications in 2025 Addressing the Sustainable Development Goals (SDGs):

№	Article Title	Journal	DOI	Quartile	SDG
1.	Impact of forest fire on the heavy metal content in the soil cover of the Amankaragay pine forest, Kostanay Region	JOURNAL OF ECOLOGICAL ENGINEERING	http://dx.doi.org/10.12911/22998993/199472	Q2	SDG 13 – Take urgent action to combat climate change and its impacts; SDG 15 – Protect, restore, and promote the sustainable use of terrestrial ecosystems, ensure sustainable forest management, combat desertification, halt and reverse land degradation, and halt biodiversity loss.
2.	Influence of TiO ₂ Nanoparticle Concentration on Micro-Arc Oxidized Calcium-Phosphate Coatings: Corrosion Resistance and Biological Response	COATINGS	http://dx.doi.org/10.3390/coatings15101142	Q2	SDG 15 – Protect, restore, and promote the sustainable use of terrestrial ecosystems, ensure sustainable forest management, combat desertification, halt and reverse land

					degradation, and halt biodiversity loss. SDG 13 – Take urgent action to combat climate change and its impacts;
3.	Identification and Pathogenicity of Causal Agents of Apple Canker Disease in Kazakhstan	HORTICULTURAE	http://dx.doi.org/10.3390/horticulturae11010045	Q2	SDG 2 – End hunger, achieve food security and improved nutrition, and promote sustainable agriculture. SDG 15 – Protect, restore, and promote the sustainable use of terrestrial ecosystems, ensure sustainable forest management, combat desertification, halt and reverse land degradation, and halt biodiversity loss.
4.	Phylogenetic and Pathogenic Characterization of Cytospora Species Causing Apple Canker in Kazakhstan	AGRICULTURE-BASEL	http://dx.doi.org/10.3390/agriculture15232490	Q1	SDG 2 – End hunger, achieve food security and improved nutrition, and promote sustainable agriculture. SDG 15 – Protect, restore, and promote the sustainable use of terrestrial ecosystems, ensure sustainable forest management, combat desertification, halt and reverse land degradation, and halt biodiversity loss.
5.	Assessment of contamination of natural waters with radionuclides and heavy metals the case of Karabulak creek at the Semipalatinsk Test Site	PLOS ONE	http://dx.doi.org/10.1371/journal.pone.0310833	Q2	SDG 6 – Ensure availability and sustainable management of water and sanitation for all; SDG 3 – Ensure healthy lives and promote well-being for all at all ages. SDG 15 – Protect, restore, and promote the sustainable use of terrestrial ecosystems, ensure sustainable forest management, combat

				desertification, halt and reverse land degradation, and halt biodiversity loss.
--	--	--	--	---

3. Internationalization and International Cooperation

The university develops cooperation with foreign universities and organizations in the field of terrestrial ecosystem conservation and sustainable land use.

- ✓ Participation in international conferences on biodiversity and terrestrial ecology;
- ✓ Joint research projects on the conservation of forest and land resources;
- ✓ Academic mobility of students and faculty in environmental protection fields.

4. Social Development and Student Environment

Fostering environmental responsibility among students is an important part of the university's educational and extracurricular activities.

- ✓ Organizing student volunteer clean-up and campus greening events, as well as landscaping activities in urban areas;
- ✓ Tree-planting campaigns and initiatives to restore green spaces;
- ✓ Conducting awareness campaigns on biodiversity conservation and the sustainable use of natural resources.

Students and staff of the university took part in a tree-planting campaign under the slogan [«Clean Kazakhstan – Clean Future!»](#). The event contributed to the development of environmental awareness, strengthened teamwork, and increased understanding of the importance of conserving natural resources. It is an example of the active involvement of the university community in practical sustainable development initiatives.



5. Infrastructure and Resources

The university implements measures for the sustainable use of land and natural resources while supporting green infrastructure:

- ✓ establishment and maintenance of green spaces and parks across the campus;
- ✓ sustainable use of land resources and proper maintenance of vegetation;
- ✓ implementation of environmentally friendly technologies for the landscaping and greening of the university campus.

[The "Taza Like" campaign](#) contributed to the improvement and conservation of forest areas surrounding the campus and the city, enhancing the condition of the natural infrastructure. The clean-up and maintenance activities carried out in the



forest areas demonstrate the university's commitment to the sustainable use of natural resources and to creating a safe and comfortable environment for students and staff. This is an example of integrating environmental initiatives into the management of the university's infrastructure.

Conclusion

The university's activities within the framework of SDG 15 contribute to the conservation of terrestrial ecosystems, the restoration of natural resources, and the development of environmental awareness among students and staff. The integration of educational, research, social, and infrastructure initiatives enables the university to make a significant contribution to the sustainable development of the region and strengthens its position as a socially responsible and environmentally oriented educational institution.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the Results and Achievements of
SDG № 16 Peace and justice
for 2025**

Semey, 2026

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Introduction

The University's Goal within the Framework of SDG 16 – Peace, Justice and Strong Institutions is to foster among students and staff the values of lawfulness, legal literacy, ethical behavior, and to create a transparent and effective university environment.

Main objectives:

- ✓ development of legal and civic literacy among students;
- ✓ ensuring transparent and fair governance of educational processes;
- ✓ developing skills in peaceful conflict resolution and ethical behavior;
- ✓ supporting student initiatives aimed at social justice and strengthening the institutional culture.

1. Educational Activities

Educational programs include courses and modules on law, human rights, ethics, and conflict management.

- ✓ Conducting lectures and seminars on human rights, the rule of law, and civic responsibility;
- ✓ Organizing training sessions on ethical standards and corporate culture;
- ✓ Preparing student projects aimed at improving the institutional environment of the university.



An awareness-raising meeting with experts on the topic [«A Safe Future — Shared Responsibility in Combating Stalking»](#) was organized. The event contributed to the development of students' legal literacy, safe behavior skills, and responsibility for their own safety and the safety of others. The campaign also strengthens the university's social environment by increasing awareness and ethical culture among students.

The University implements the [Concept of State Policy in the Religious Sphere through open dialogues](#) with representatives of various religious associations. The event promotes tolerance, mutual understanding, and peaceful coexistence, fostering respect among students for different cultural and spiritual values, as open dialogue with religious leaders includes an educational component: developing knowledge of religious culture, interfaith interaction, and ethical standards. Thus, the



project simultaneously promotes students' social development and enhances their educational level in religious literacy and tolerance.

2. Scientific and Innovative Activities

Scientific research is aimed at studying issues related to the legal system, public safety, ethics, and mechanisms of effective governance.

- ✓ Research projects on the rule of law and public order;
- ✓ Development of innovative solutions for conflict management and ensuring transparency in organizations;
- ✓ Publications and student participation in scientific conferences on legal issues.



An [open lecture by Academician Darkhan Kydyrali entitled «Abai and the Turkic World»](#) was held at Shakarim University to mark the 180th anniversary of Abai Kunanbayev. The lecture contributed to deepening the knowledge of students and faculty about Abai's spiritual heritage, the historical and cultural ties among Turkic peoples, and the role of Kazakh scholars in Abai studies. The event included discussions, a question-and-answer session, and a tour of the university museum, enhancing the educational, cultural, and scientific impact of the lecture on the university environment.

3. Internationalization and International Cooperation

The University actively cooperates with international partners in the fields of law, ethics, and governance.

- ✓ Participation in international conferences on human rights and institutional development;
- ✓ Exchange of experience and organization of joint educational programs with foreign universities;
- ✓ Involvement of international experts to deliver lectures and master classes on effective governance and legal issues.

Students of the "Foreign Language: Two Foreign Languages" program organized an educational event on the traditions of celebrating the Chinese New Year, conducted by lecturers Fan Li Jun and Pu Li Juan. Participants learned about Chinese culture, national customs, festive symbols, and traditional costumes, while developing language and intercultural competencies. The event promotes interest in



learning foreign languages, fosters respect for other cultures, and develops intercultural communication skills.

4. Social Development and Student Environment

Creating a fair and ethical student environment is an important part of the University's social policy.

- ✓ Organizing round tables and discussions on human rights, the rule of law, and social interaction;
- ✓ Training sessions on conflict resolution and mediation for students and staff;
- ✓ Student initiatives aimed at promoting ethical and democratic values within the University.



A meeting was held at Shakarim University between fourth-year students and Ruslan Sharipov, Head of the Department of Civil Service of the Abai Region. Students were informed about the importance of public service and given the opportunity for direct employment in municipal positions based on high academic performance, encouraging young people to actively contribute to the country's development.

The open forum «Abai's Doctrine of the Complete Human Being: A Guide for Youth, A Foundation for the Nation» supports the development of the University's social and cultural environment by engaging students in discussions on morality, responsibility, and civic values. The event develops self-regulation skills, respect for traditions, and strengthens collective interaction. It is an example of integrating cultural and educational activities into the student environment to develop sustainable social and ethical competencies.



Students and staff of the University participated in a Peace Campaign dedicated to the anniversary of the closure of the Semipalatinsk Nuclear Test Site, demonstrating their commitment to the ideals of non-violence and peacebuilding. The event contributed to the development of civic responsibility, patriotism, and an informed position on historical memory and public security. It is an example of involving the student community in socially significant initiatives and strengthening the values of peaceful coexistence.

A group of students are sitting on a wooden bench in a classroom, participating in a group activity. They are holding large, inflated balloons in various colors (green, red, blue). The students are looking towards the right side of the frame, where a teacher or another student is likely leading the activity. The background shows a typical classroom setting with a whiteboard and a window.





«АДАМЗАТТЫҢ АБАЙЫ: РУХАНИЯТ, ПАРАСАТ, ТАНЫМ»
халықаралық ғылыми-танымалық конференция

9 тамыз 2025 жыл



SHAKHMATOV UNIVERSITY

9 Шахматов университеті «Үй аңыз» конференция-залы
(Глинка көшесі, 20 А)

10:00



БЕРКЕ БАЯН
Доктор
Дисциплинарный Руководитель



**ОРЫНБЕКОВ
Дильярбек**
Доктор
Дисциплинарный Руководитель



MIRBEK SARCAT
Доктор
Дисциплинарный Руководитель



**ЕГОРОВ
Егор**
Технический Руководитель



**ЕСЕНБЕКОВА
Татьяна**
Доктор
Дисциплинарный Руководитель



**БЕКТУР
Бектур**
Доктор
Дисциплинарный Руководитель



**ЕГОРОВ
Егор**
Технический Руководитель

9 Абайдың «Жидарды Берке» мемориеті Тарихи-мәдени
ортасы қоры мемориетінің музей орнында, 10 залы
(Х.Мұхамедиянов көшесі, 29)

14:30



**ФАЗЛЫХАЙНОВА
Анна**
Модератор



**САФАДИНОВ
Ирем**
Модератор



**ZEYNEP
ZEYNEP**
Модератор



**КОЗЛОВ
Геннадий**
Модератор



**ТОСУНБАЙ
Карим**
Модератор



**KHASAN
Ruzana Tashmuro**
Модератор



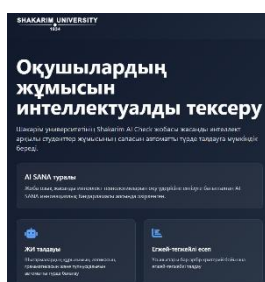
**ГЕННАДИЙ
ГЕННАДИЙ**
Модератор

On August 9, an [international scientific and practical conference titled «Abai Humanity: Spirituality, Wisdom, Knowledge»](#) was held at Shakarim University, dedicated to the 180th anniversary of the great humanist and thinker Abai Kunanbayev. Scientists and philosophers from more than 10 countries, including Kazakhstan, Turkey, Netherlands, France, Russia, and Uzbekistan, took part in the conference. The main focus was placed on the integration of Abai's ideas into educational programs, international communication, and the digital environment, including AR formats, multilingual translations, and interactive platforms.

5. Infrastructure and Resources

The university ensures the establishment of transparent and efficient administrative processes, accessibility of information, and adherence to the principles of good governance.

- ✓ implementation of digital platforms for transparent management of educational processes;
- ✓ development of an internal control system and ethical codes;
- ✓ ensuring accessibility of information for students and staff through official websites and platforms.



The Shakarim AI Check mobile application provides students with an innovative tool for developing academic writing skills and critical thinking, increasing the digital accessibility of education.

Conclusion

The university's activities within the framework of SDG 16 contribute to the formation of legal culture, the strengthening of ethical standards, and the development of a transparent institutional environment. A comprehensive approach that combines educational, scientific, social, and infrastructural initiatives makes it possible to develop students' skills of law-abiding, ethical, and responsible behavior, thereby strengthening the university's position as an institution with high standards of governance and social responsibility.



**NON-PROFIT JOINT-STOCK COMPANY
«SHAKARIM UNIVERSITY»**

**REPORT
on the Results and Achievements of
SDG № 17 Partnerships for the goals
for 2025**

Semey, 2026

17 PARTNERSHIPS FOR THE GOALS



Introduction

The university's objective in implementing SDG 17 – Partnerships for the Goals is to strengthen cooperation with national and international organizations, universities, and government institutions to implement sustainable development programs.

Main objectives:

- ❖ development of strategic partnerships and networking;
- ❖ exchange of knowledge and best practices at the regional and international levels;
- ❖ attraction of external resources and participation in joint projects;
- ❖ creation of conditions for international academic mobility of students and faculty.

1. Educational Activities

Educational programs incorporate collaborative learning practices and experience exchange with partner universities and organizations.

- ✓ Participation of students in joint educational modules with international universities;
- ✓ Organization of master classes and lectures delivered by partner experts;
- ✓ Development of joint case studies and projects with partner companies and institutions.



As part of strengthening international cooperation, Shakarim University [invited Professor Agnieszka Dąbska from the Warsaw University of Technology \(Poland\)](#) to deliver a lecture for students and faculty of the Department of Civil Engineering and Geodesy. The lecture covered hydraulic engineering, geotechnical engineering, building foundations and substructures, as well as structural engineering research. The event contributed to the expansion of students' academic and professional competencies, the integration of global experience into the educational process, and the development of international academic exchange.

[A forum dedicated to the 10th anniversary of the "One Belt, One Road" University Alliance](#), organized by Lanzhou University, was held in China. Shakarim University was represented at the event by Vice-Rector for Internationalization and Innovation Yerassyl Dulatbay. During the forum, the "Silk Road (Dunhuang) Consensus"



was adopted, defining the strategic direction of international cooperation in higher education for the new era.

2. Scientific and Innovative Activities

The university's research activities are carried out jointly with international and national organizations and are aimed at knowledge exchange and the implementation of innovations.

- ✓ Joint scientific publications with foreign universities and research centers;
- ✓ Participation in international grants and sustainable development research programs;
- ✓ Organization of scientific conferences and forums involving partner organizations.



[An international expert conducted a comprehensive review of the veterinary educational programs](#) at Shakarim University, assessing their compliance with WOAH Day-1 Competencies and FAO recommendations. The discussions focused on updating curricula, implementing the One Health approach, and participating in international twinning projects. This initiative contributes to improving the quality of veterinary education at the international level and strengthening academic cooperation. The participation of the international expert, collaboration with FAO and WOAH, the implementation of twinning projects, and the exchange of experience strengthen the university's international partnerships.

Shakarim University hosted a [meeting between students and the President of the Academy of Pedagogical Sciences of Kazakhstan, Academician and State Prize laureate of the Republic of Kazakhstan Askarbek Kusainov](#). During the lecture entitled "Quality Education – The Future of the Country," the scholar discussed the current state and future development of the education system, emphasizing the importance of training qualified teachers and the requirements for future educators in the context of global changes. The event was attended by students of pedagogical programs and university faculty. The lecture delivered by the distinguished scholar and academician promotes knowledge exchange, strengthens academic cooperation, and fosters scientific and educational collaboration.



3. Internationalization and International Cooperation

The university actively develops international cooperation and academic mobility for students and faculty.

- ❖ Student and faculty exchange programs with leading foreign universities;
- ❖ Participation in international educational and research projects;
- ❖ Organization of international congresses and seminars within partnership networks.

In 2025, the university signed 21 memoranda of cooperation with foreign universities and became a participant in the Erasmus+ international project as part of a consortium led by the Tajik branch of Lomonosov Moscow State University. In addition, the university received four international academic mobility grants with universities in Greece, Türkiye, Romania, and Poland. These achievements strengthen the university's position in the international educational arena, expand opportunities for academic and scientific exchange, and promote the integration of global experience into educational and research programs.

Currently, the university hosts international students from Pakistan and Türkiye. To promote an international educational environment and strengthen intercultural dialogue, the university plans to organize a Cultural Day with the participation of students from these countries. During the event, students will present the national traditions, cuisine, music, and traditional costumes of their countries, contributing to cultural exchange, broadening students' perspectives, and strengthening international cooperation.



In 2025, 181 students of Shakarim University studied abroad, while 21 faculty members participated in international academic mobility programs. These programs facilitated experience exchange, enhanced the quality of education, and fostered the development of global competencies. Such activities strengthen the university's international cooperation and integration into the global educational community.

Shakarim University [participated in the international exhibition and conference "Belt and Road – 2025" at Xi'an Jiaotong University \(China\)](#), which brought together universities, research institutes, and investors from 18 countries. During the event, international cooperation agreements were signed, and the first batches of equipment were delivered for the Kazakhstan–China Joint Laboratory of Electrical Automation. Participation in the forum promotes the integration of science and industry, the development of innovation, and the strengthening of international scientific cooperation.





Lectures delivered by international scholars for students of the Agronomy and Green Fields Technologies

programs contributed to the development of international academic cooperation and knowledge exchange. The event strengthened the university's partnerships with foreign scientific and educational institutions by integrating global experience into education and research. It is an example of successful cooperation in education and science aimed at achieving sustainable development.

On November 14, Shakarim University and Bright Futures School [signed a memorandum of cooperation](#) aimed at the long-term development of joint educational initiatives. The main areas of cooperation include the development of multilingual education, advanced Chinese and English language studies, the involvement of international specialists, and the implementation of joint projects to improve the quality of education. This step contributes to the development of students' academic and cultural competencies, the integration of international experience, and the strengthening of partnership relations between the school and the university.



The [HSK program](#) at Shakarim University provides students with opportunities to study in China, participate in international educational programs, and pursue professional development. Learning Chinese and obtaining internationally recognized language certification opens new opportunities for academic mobility and career advancement. The program contributes to integrating international experience into the educational process and developing students' global competencies.

Shakarim University hosted a [delegation from Indonesia](#) to develop educational, scientific, and cultural cooperation. The discussions focused on faculty and student exchanges, joint projects in nuclear physics and environmental research, as well as strengthening academic and cultural partnerships between the universities of the two countries.





Shakarim University and Ankang University (PRC) signed a memorandum of cooperation aimed at developing joint educational programs, scientific research, and academic exchange. Particular attention was given to agricultural technologies, food processing standards, human resource development, and strengthening research and innovation infrastructure.

During the visit, international expert SES Heiko Schröder became acquainted with the educational programs and laboratory facilities of the university's Schools of Food Engineering and Physicochemical Research. The discussions focused on improving the quality of education, expanding international cooperation, and increasing practical learning opportunities for students. The expert highly appreciated the university's material and technical facilities as well as its opportunities for practical training.



4. Social Development and Student Environment

Students are actively involved in social and volunteer projects implemented jointly with partner organizations.

- ✓ Participation of students in joint social and environmental initiatives;
- ✓ Organization of meetings with representatives of international and national partner organizations;
- ✓ Student start-ups and projects supported by external partners.



International fieldwork for young researchers on the theme "Interdisciplinary Research in Archaeology" was held at the Kokentau Complex in the Abai Region. Participants from Azerbaijan, Belarus, the United States, Uzbekistan, Russia, and Kazakhstan exchanged experience and applied modern research methods. Shakarim University, jointly with the A.Kh. Margulan Institute of Archaeology, provided young researchers with a unique opportunity for scientific development and the implementation of their research ideas.

5. Infrastructure and Resources

The university develops infrastructure to ensure effective cooperation with partners and the exchange of resources.

- ❖ Digital platforms for collaboration and information exchange;
- ❖ Establishment of cooperation centers and innovative laboratories with partner participation;

❖ Implementation of joint educational and research programs with international organizations.

The Turkish Cooperation and Coordination Agency (TİKA) donated a modern Turkish language classroom to Shakarim University, equipped with interactive whiteboards and all the necessary teaching materials. This project supports high-quality education within the "Two Foreign Languages" program, creates comfortable conditions for learning the Turkish language, and strengthens cultural and educational ties between Kazakhstan and Türkiye. The partnership with TİKA opens new opportunities for expanding international cooperation and developing students' language competencies.



The company Adal As inaugurated its own production laboratory equipped with modern facilities for high-precision analyses and a complete food quality control cycle. Representatives of the Department of Food Technology at Shakarim University attended the opening ceremony, highlighting the high level of technical equipment and the prospects for implementing innovative solutions. Cooperation between the company and the university contributes to the development of scientific and industrial integration and creates a foundation for the practical training of undergraduate and master's students.

Conclusion

The implementation of activities within the framework of SDG 17 – Partnerships for the Goals contributes to strengthening strategic partnerships, expanding international cooperation, and promoting knowledge exchange. The integration of educational, scientific, social, and infrastructural activities enables the university to participate effectively in the global academic network, improve the quality of education and research, and contribute to achieving the Sustainable Development Goals at both the regional and international levels.