

# NP JSC "South Kazakhstan University named after M. Auezov"



## THE CONCEPT FOR THE IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS At the SKU named after M. AUEZOV



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## **INTRODUCTION**

**Kazakhstan has taken significant steps towards sustainable development, focusing on economic growth, social justice and environmental protection.**

The United Nations General Assembly has developed a blueprint for achieving a better and more sustainable future for all 17 interrelated Sustainable Development Goals.

By adopting the 2030 Agenda for Sustainable Development and its 17 Goals in 2015, the international community has once again reaffirmed its commitment to this extremely important topic. In the document, 193 UN member states, including Kazakhstan, committed themselves to ensuring sustainable, inclusive and progressive growth, social integration and environmental protection, intending to achieve them in partnership and in peace.

The 2030 Agenda is based on five main components – the so-called 5 "pi" - people, prosperity, planet, partnership and peace, traditionally viewed through the prism of three main dimensions – social, economic and environmental.

The SDGs are designed to ensure a decent quality and standard of living for current and future generations, while maintaining a balance between economic prosperity, social security, and conservation of natural resources and the environment.

The Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2023-2029, approved by Decree of the Government of the Republic of Kazakhstan dated March 28, 2023 No. 248, identifies the main trends in higher education in the world: massification, interaction of universities and business with the state (triple helix), digitalization, internationalization, initiatives of academic excellence, increasing requirements for the quality of educational services and scientific research at universities, the focus on public service, the development of corporate governance and academic freedom at universities.

Auezov University is the largest and multidisciplinary university of the Republic of Kazakhstan, the scientific, educational, intellectual, and cultural center of the region. The university trains specialists for all sectors of the economy, science and culture of the region, the republic and the global space. M. Auyezov South Kazakhstan University is one of the most prominent brands of higher education in the republic.

Based on the best traditions of the University's 80-year history, as well as using innovations, it is in search of ways that will benefit society, both in Kazakhstan and around the world.

This concept outlines the new stages of the University's development for the period 2025-

2029. We will monitor the progress of our priorities, directions and goals, using appropriate indicators and benchmarks for comparative analysis. With these tools, we will be able to effectively use resources, respond to environmental challenges, and update our Strategy while maintaining our commitment to the University's mission.

### **Sustainable development and the "Third Mission" of universities**

For the transition to sustainable development, integrated solutions are required, implemented in parallel in territories of different scales, which would combine innovative technological solutions and expert support. The leading role in the search for such solutions is assigned to leading universities, not only as scientific and educational structures, but also as points of integration of theory and practice, as carriers of the socio-cultural environment, as centers of accumulation of the intellectual potential of creative youth.

Universities have enormously expanded their traditional functions today, taking on a new, relevant role in society, a "civic" or "social" role. This new role is usually associated with what is called the "third mission" of the university, and represents, along with the traditional first teaching mission and second research mission, a mission to transfer knowledge to the external local environment and contribute to the social, cultural, economic and environmental development of society.

The third mission is a natural and necessary way of university development in the modern world, which is determined by the quality of educational and scientific programs, that is, the first and second missions. Each university chooses its own set of areas in which it interacts with the outside world.

The university's commitment to sustainable development is of absolute importance for many reasons. First of all, because of their institutional role, universities should strive to be a reference model for the entire community, guiding the behavior of other actors in the institutional, social and economic world, and significantly influencing the formation of a value system in society. In addition, because universities, like any other organization, have an operational structure whose activities affect the economy, society and the environment. Thus, the institutional role of universities involves a double obligation: to develop themselves according to the principles of sustainable development and confidently promote these principles in the community.

Realizing its Third Mission, as a socially responsible university, NP JSC "South Kazakhstan University named after M. Auezov" takes an active part in the socio-political, socio-cultural life of the region and the country as a whole, forming a personality with leadership and communicative competencies in the context of "Tolyk Adam". Within the framework of this concept, 83% of students are involved in the activities of youth organizations, student government and collegiate university management, 40% in the volunteer movement, more than 20% participate in sports clubs for the formation of a healthy lifestyle. As part of the implementation of the principle of lifelong learning,

the Silver University project is being implemented for people of retirement age 60 plus in Shymkent.

The Development Program of the Non-profit Joint-Stock Company "M. Auezov South Kazakhstan University" for 2025-2029 defines the University's goals and objectives, which support the idea of achieving the SDGs through the provision of inclusive and equitable quality education, taking into account current trends in higher education and encouraging lifelong learning opportunities for all.

The transformation of the NP JSC "South Kazakhstan University named after M. Auezov" into a research university and the creation of a new innovative research ecosystem at the university requires the intensification and development of research activities, staffing of priority areas of development and fundamental changes in the infrastructural support of scientific and educational activities of the university.

To implement the Strategy and achieve its goals, the university will promote values such as sustainability, responsibility and ethics in teaching, a high level of scientific research, and project work that is globally recognized for Auezov University's membership in the world's leading universities.

### **Auezov University as a university of sustainable development**

The goal is to become one of the best world-class universities actively promoting the principles of sustainable development in the external environment.

The university's mission is to generate new competencies, train a leader who translates the research mindset, culture and personal growth of competitive specialists for the sustainable development of the region.

## Goals

Creating an effective corporate governance model to ensure the sustainable development of the University and encouraging research and dissemination of knowledge about sustainable development.

Cooperation and information exchange within national and international university networks, as well as increasing the contribution of university science to the socio-economic development of the country;

Formation of a promising model of university education and provision of academic leadership;

Integration of scientific activity and educational process at all levels of higher and postgraduate education and promotion of principles of sustainable development;

The University recognizes the importance for present and future society of reassessing, rethinking and revising education so that it eventually encompasses as many principles, knowledge, skills, beliefs and values as possible related to achieving the SDGs and ensuring sustainability in all three areas: ecology, society and economics.

The University is making its contribution to sustainable development, and the Rae Kwon Chung Center for a New Climate Economy for Sustainable Development has been opened here. It is the first institute in Central Asia and the CIS to introduce a new model of economic development based on the principles of sustainable growth, green technologies and reducing the impact of climate change on the environment.

In order to achieve sustainable development, it is necessary to involve all structural departments of the university to solve short- and long-term tasks.

M. Auezov South Kazakhstan University plays an important role in promoting sustainable development in Kazakhstan and beyond. The University implements an integrated approach to sustainable development, encompassing education, research, and community engagement.

In order to achieve the SDG goals in support of new growth models and a conscious lifestyle, by 2029 the university identifies 7 areas in which the main work on the implementation of the principles of sustainable development will be concentrated:

**1) Steady growth**

**2) Green technologies**

**3) Reducing the carbon footprint**

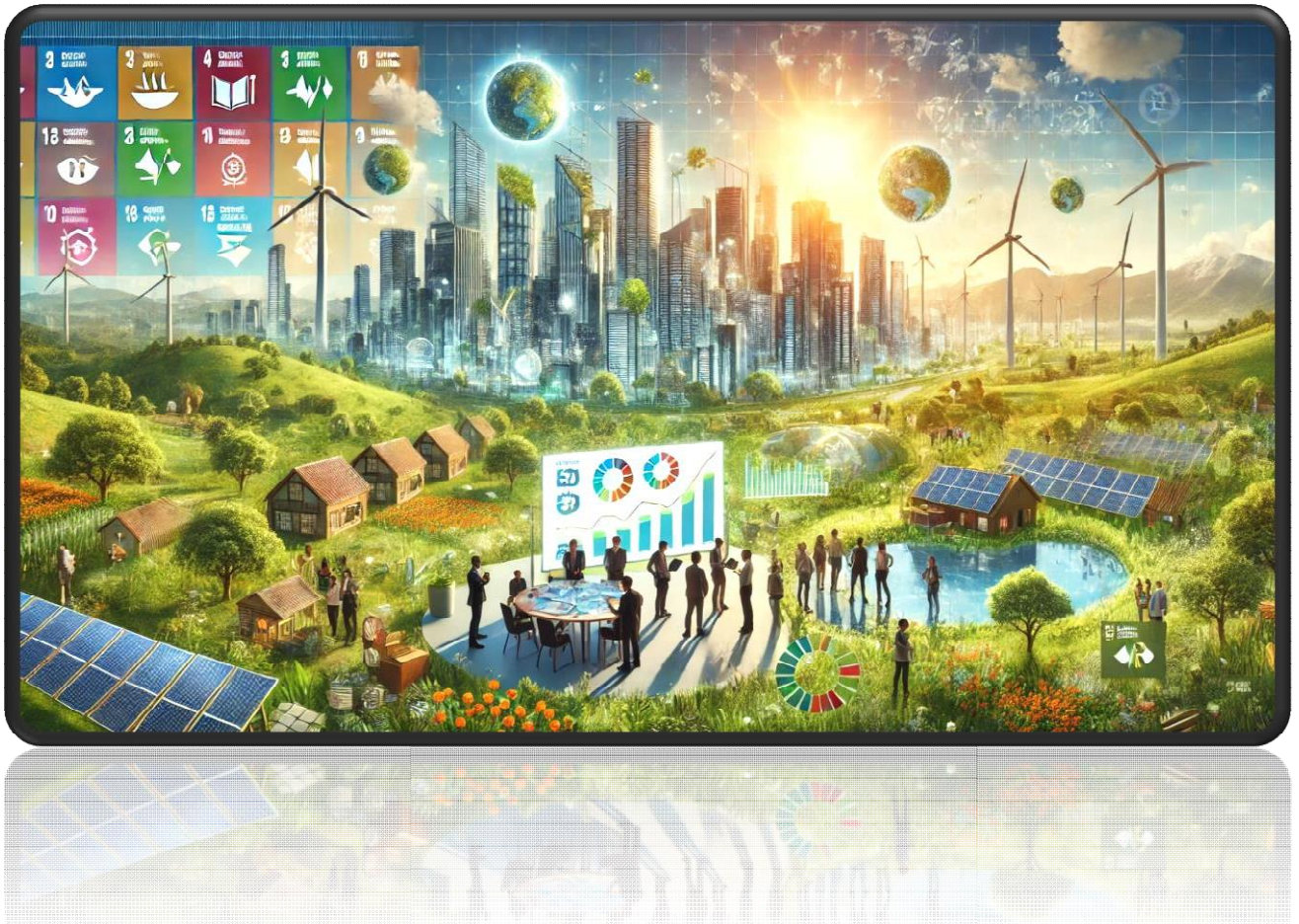
**4) Ensuring food security;**

**5) Involvement of students and staff in the sustainable development of the university**

**6) Interaction and promotion of sustainable development ideas in the region;**

**7) Cooperation on sustainable development issues between universities.**

# 1. Steady growth



Fulfilling the above-mentioned mission and realizing the strategic goal, the University strives to apply the principle of sustainability in all processes, functions and activities of the university. At UCU, the principles of sustainable development are integrated into all training programs, which contributes to the training of specialists who are ready to solve the problems of sustainable development in their future careers.

The University offers specialized courses and programs on sustainable development, such as "Sustainable Development" and "Green Economy". UCU provides practical opportunities for students to participate in sustainable development projects such as environmental initiatives and energy conservation programs.

**Goal:** To inform and inform the faculty, staff and students of the University about the adoption of the Sustainable Development Goals formulated by the United Nations, to declare the university's commitment to the principles of sustainable development, and their implementation in all activities of the university. Offer training programs dedicated to the issues of sustainable development of an enterprise, industry, region, and country.

## Actions:

- 1) to include the principles of sustainable development in the strategic objectives of the university development;
- 2) take into account the objectives of sustainable development when adjusting the content of strategic and long-term program documents of the university;
- 3) дальнейшее формулирование стратегических целей университета достижению которой, в той или иной мере, призвана способствовать каждая стратегическая цель университета;
- 4) posting information on the university's website about the university's commitment to the UN Sustainable Development Goals, its mission in this area and areas of work to implement the principles of sustainable development;
- 5) development of new disciplines on sustainable development as an elective component of educational programs;
- 6) organization of round tables, discussions, scientific, theoretical and practical conferences on topical issues of sustainable development;
- 7) inclusion of examples, cases, situational tasks on the topic of sustainable development in university academic disciplines;
- 8) in order to stimulate student research on the topic of sustainable development, the organization of educational student excursions and short courses in institutes, centers on ecology, nutrition, and health;
- 9) exploring the possibility of conditions for research by teaching staff and students on green energy and resource conservation, for further use of acquired skills in the development of innovative business projects within the framework of technoparks, business incubators and the creation of start-up companies;
- 10) updating the topics of students' final papers (theses, master's and doctoral theses) at all levels to include sections on environmental protection and sustainable development.

## THE SUSTAINABLE DEVELOPMENT GOALS



## 2. "Green" technologies



The University strives to create modern and energy efficient buildings using environmentally friendly materials and design. Use efficient energy consumption, lighting, heating, and cooling management systems. Find alternative energy sources such as solar panels and geothermal energy to meet energy needs. An effective water resource management system that includes rainwater harvesting and recycled water for irrigation and other non-drinking purposes.

At the University, the priority area of development is "Modern construction technologies. Construction materials" it is planned to develop energy-saving technologies for the production of modern building materials and import-substituting products of fine, technical, building ceramics and refractories, glass, glass-crystal materials, special cements, composite materials and concretes, as well as technologies for the production of heat-storing materials of international importance.

**Goal:** To build the university's current activities on the principles of sustainable management of infrastructure and the environment, i.e. the use of energy-saving equipment, technologies, alternative sources and types of energy, resource conservation, ensuring the safety and health of teaching staff and students, effective waste management.



## **Actions:**

- 1) The University implements environmental protection policies and procedures covering all aspects of the university's activities;
- 2) implementation of a waste reduction, reuse, recycling and composting program to reduce waste sent to landfills;
- 3) ensuring economical use of water, installing limiters and encouraging the use of water flow management systems;
- 4) the use of recycled materials;
- 5) saving paper, development of electronic means of communication, transition to paperless office work;
- 6) organization of waste paper and plastic bottles collection in university buildings;
- 7) organization and effective cooperation with nearby plastic waste collection points and/or small business recycling enterprises;
- 8) inclusion of relevant topics in the research and educational process;
- 9) to inform and educate the university community about the importance of environmental protection and sustainable behavior.

### **3. Reducing the carbon footprint**



The University is firmly committed to achieving carbon neutrality and recognizes the need for urgent action to address the climate crisis. This strategy provides a comprehensive plan of action to achieve this goal and ensure a sustainable future for the campus and society at large.

**Goal:** The main objective of the carbon management plan is to outline the university's comprehensive approach to reducing greenhouse gas emissions and achieving carbon neutrality by 2035. The University makes decisions based on scientific research and data on greenhouse gas emissions.

**Actions:**

- 1) improving the energy efficiency of buildings and buildings, lighting systems and equipment;
- 2) implementation of energy management systems to optimize energy use;
- 3) encouraging the use of energy-efficient household appliances and electronics;
- 4) Switching to renewable energy sources such as solar and wind energy to meet the energy needs of buildings;
- 5) exploring the possibilities of using geothermal energy and biomass energy;
- 6) cooperation with local utilities for the purchase of renewable energy.

**4. Ensuring food security**



Given the expected changes in temperatures, rainfall, and pest behavior associated with climate change, the global community should increase investments in research, development, and technology demonstration projects to enhance the sustainability of food systems worldwide. Strengthening the capacity of local food systems to withstand shocks will be crucial to prevent large-scale food shortages in the future and ensure food security and nutrition for all.

In addition to consuming enough calories, proper nutrition includes other aspects that deserve attention, including obtaining micronutrients and a healthy diet. Unhealthy diets and unhealthy lifestyles are closely linked to an increase in the number of cases of non-communicable diseases. Improving the quality and sustainability of food consumed at the university. It is necessary to understand the food chain (production, sale and consumption) within the framework of sustainable development policy. In-depth attention is paid, in particular, to nutrition management in university buildings.

**Goal:** Access and provision of students and university staff with environmentally friendly food from socially acceptable sources, sufficient for an active and healthy life.

**Actions:**

1. development of an action plan to improve the quality of service and food consumed at the university;
2. Close collaboration and collaboration with external suppliers to identify weaknesses and areas (in environmental, social and territorial terms) that require improvement;
3. Purchase of local food products for the canteen and cafeteria;
4. the use of environmentally friendly cleaning products;
5. Maintenance (if necessary) a special sanitary and epidemiological regime in a pandemic.

## 5. Involvement of students and staff in the sustainable development of the university



### **Goal:**

Involving teaching staff and students in special events, charity events, and social programs aimed at fostering a culture of sustainable development, gaining social experience in the context of national and cultural diversity, developing skills in socially responsible behavior, and nurturing a university team of eco-leaders. There are environmental clubs at the university.

## **Actions:**

1) Expansion of existing environmental clubs and creation of a service for systematization and coordination of the university's activities in the field of sustainable development.

The objectives of the service are:

- Organization of sustainable development events at the university;
- preparation of information materials, announcements of events on the university's website, materials for applicants on the university's mission and its achievements in the field of sustainable development;
- preparation for participation in the ratings of universities of sustainable development;
- study of successful international and domestic practices of sustainable development of universities;
- participation in the development of strategic plans for the sustainable development of the university;
- stable functioning of the student eco-club, constant interaction and work with the club's assets on the organization and holding of the above-mentioned events;
- development of instructions for students on how to organize environmental events and flash mobs at the university, video announcements of events.

## **6. Interaction and promotion of sustainable development ideas in the region**



Universities represent a fundamental resource of the territory in which they are located, both in terms of opportunities for technological innovation and for raising capital. (human, financial, tangible, and intangible), both in terms of job creation and, more generally, a driving force for change and development, a platform through which actors at various levels share knowledge and innovation.

**Goal:** to develop a system of interaction with city and regional governments, the local community to promote the ideas of sustainable development developed by the university

### **Actions:**

- 1) development of cooperation with local or regional authorities in the implementation of specific programs for the sustainable development of the industry, region or territory;
- 2) participation in urban beautification and landscaping events and other initiatives;
- 3) development of mutually beneficial cooperation with local enterprises and support for entrepreneurial initiatives aimed at sustainable development, organization of university students' practice in organizations guided by the principles of sustainable development;
- 4) holding joint conferences, round tables, preparation of scientific publications;
- 5) promoting a culture of sustainable development beyond the university through:
  - open access placement of specialized MOOCs;
  - involvement in university events and initiatives of residents and organizations of the region and especially the territory adjacent to the university;
  - posting information about the university's activities in the field of sustainable development, announcements of ongoing events on the university's website.

## 7. Cooperation on sustainable development issues between universities



The challenge of sustainability requires and at the same time represents an exceptional opportunity to enhance university-to-university relations in a national and international context for knowledge transfer and the exchange of scientific and technological innovations.

By joining together, Universities can more effectively:

- to promote a new national policy of sustainable development, a policy of sustainable growth to promote projects and processes focused on the closed-loop economy;
- to encourage the development of cooperation between universities and cities, spreading social innovations throughout the territory and providing cultural incentives for the entire national system;
- share common actions and best practices, simplifying the path for all universities and research and educational institutions;
- promotion of dialogue initiatives with economic entities through technology transfer offices, incubator services and by-products.

### Goals:

Participation in existing national and international organizations,

promoting and developing the principles of sustainable development in order to effectively share experiences in the field of sustainable development

### **Actions:**

1) to explore the possibilities and conditions for joining national and international associations and networks of interuniversity cooperation on sustainable development, for example:

- ISCN – International Sustainable Campus Network
- Global Compact Network
- PRME – Principles for Responsible Management Education
- SDSN – Sustainable Development Solutions Network
- IAU – International Association of Universities и др.

2) prepare an application for membership in the above-mentioned Associations;

3) in the medium term, initiate the creation of a regional Association of universities for sustainable development to spread the culture and best practices of sustainable development among universities in the region.

Some of the objectives of the Association may be:

- harmonization of institutional activities and improvement of the management of environmental and social aspects, as well as continuous monitoring of the status of sustainable development of member universities and the definition of a common structure and relevant indicators for monitoring and comparative analysis of environmental, social and economic indicators of universities and related activities;

- Creating a community capable of developing/disseminating/transmitting/adapting best practices and adequately representing participants and the network itself at the national and international levels, paying special attention to sustainability aspects

- in international rankings and achieving the Sustainable Development Goals;

- promotion of projects within the Network that have already been successfully tested by one or more members, and joint development of initiatives related to new projects in the field of knowledge and skills transfer, university teaching and management, etc.

3) to study the successful work experience of domestic and foreign universities in order to use the best practices in the sustainable development policy of the university;

4) promptly inform the community and partner universities about achievements in the field of sustainable development by updating the website and through other communication channels.



## Strategic documents and related links:

- 1) The transformation of our world: The 2030 Agenda for Sustainable Development. Resolution adopted by the UN General Assembly on September 25, 2015  
[//https://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=R](https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=R)
- 2) On the Concept of transition of the Republic of Kazakhstan to a "green economy". Decree of the President of the Republic of Kazakhstan dated May 30, 2013 No. 577.
- 3) Resolution of the Government of the Republic of Kazakhstan dated October 12, 2021 No. 731 "On approval of the national project "Green Kazakhstan".
- 4) Programs and Declarations "Education for Sustainable development" developed at the global environmental forum UNRIO+20;
- 5) UNESCO programs – Education for Sustainable Development, etc.;