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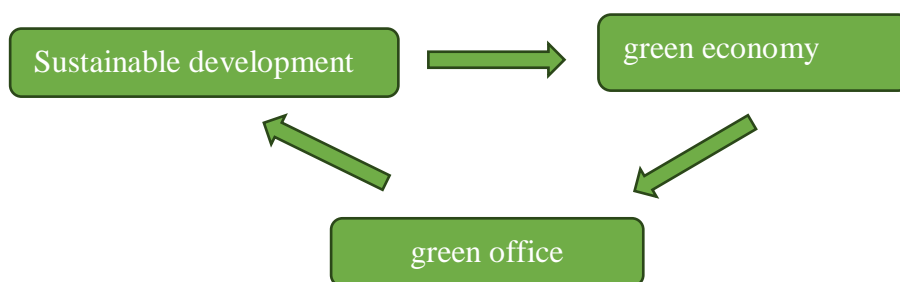
The concept of "Green Office of KazNU"

Almaty, 2023

INTRODUCTION

The growing global threats related to climate change, problems of energy, water and food security, as well as regional conflicts require new solutions and integration of the efforts of the entire world community. Currently, the global world is faced with the need to switch to a sustainable innovative path of development that ensures the preservation of the development of society in interaction with the environment in the long term and protection from crises in conditions of negative internal and external influences, the consequence of which is a decrease in the quality of education and science, inefficiency of development management. Ways to overcome this are reflected in the global idea of the RIO+20 UN Conference on Sustainable Development "The Future we want", which is based on the concept of countries' transition to a "green economy". Kazakhstan takes an active position in ensuring global energy and environmental security, developing strategic mechanisms for the transition to a "green economy".

It is necessary to strive to ensure that the Green Bridge is not only between states, science, business, public institutions, but also between generations. Advanced youth should unite on a scientific and educational platform to successfully solve the tasks set, and universities should become scientific and information and educational centers, "growth points" of student initiatives and youth movement in the 6th field of green economy. Modern universities should take responsibility in promoting ideas for sustainable development. And this is not the work of one university, but the work of universities in the commonwealth and coordination of efforts. It is necessary to carry out institutional and social changes at universities, leading to the creation of fundamentally new structures of "green offices", generating "green development" through curricula, research projects, management of university activities based on energy and resource conservation, waste collection and transformation, development of eco-parks and ecotourism, eco-education and education of ecological culture.



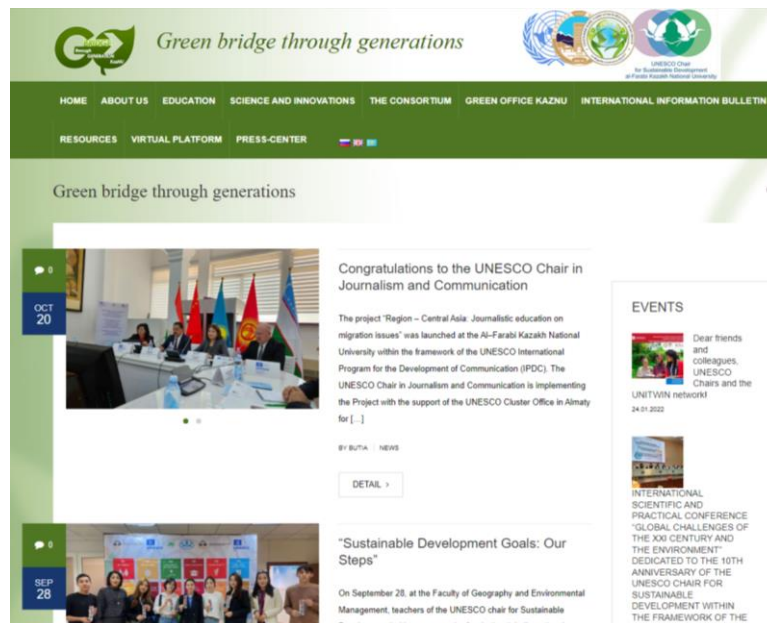
The role of the Green Office for sustainable development and transition to a green economy

Actions of the University on the implementation of the "Green Office"

In this regard, Al-Farabi Kazakh National University (Al-Farabi Kazakh National University) actively develops international relations and occupies leadership positions. Thus, Al-Farabi Kazakh National University became the first university in the country and in the region to be included in the United Nations Academic Impact (UNAI) program. Al-Farabi Kazakh National University actively participated in international consultations on the action program for the UN RIO+20 Global forum, where he was one of the initiators of a separate panel on education for sustainable development with the participation of universities in Asia, Europe and Latin America. KazNU named after Al-Farabi was one of the first to sign the RIO+20 University Declaration on the Promotion of Sustainable Development, a virtual communication platform "Green Bridge through Generation" was created www.greenbridge.kaznu.kz. Al-Farabi Kazakh National University, together with Columbia University, is actively working in the MDP/Global Classroom global network for sustainable development. He regularly participated in international forums of universities in Asia and the Pacific region and successfully held the III Forum of Asian Universities "Eurasian Diversity and the Role of Universities for Sustainable Development" within the framework of the VII Astana Economic Forum, which is the largest international dialogue platform for discussing and solving global problems. Currently, Al-Farabi Kazakh National University is working on the development of the UNESCO Regional 7 Hub on the basis of the university and many other projects. The above gave the Kazakh National Geographical Society the basis to identify Al-Farabi Kazakh National University as the base university for the implementation of the principles of the "green office" in educational institutions of Kazakhstan.

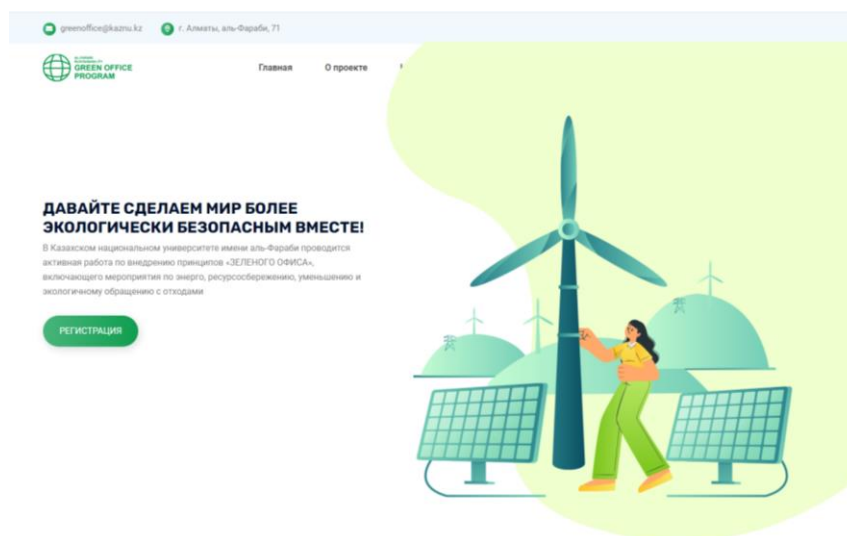
INFORMATION AND ANALYTICAL KNOWLEDGE BASE ON THE IMPLEMENTATION OF GREEN OFFICE PRINCIPLES

The information and analytical knowledge base on the implementation of the principles of the green office is located on the virtual communication platform "Green Bridge across Generations" greenbridge.kaznu.kz , where there are also materials on the development of the green economy and the concept of sustainable development in the country.



The project is based on the creation of an interactive Green Office platform. The platform will allow real-time analysis of the state of all university offices (departments) in various multifactorial positions.

The general concept of the platform, the interface, the necessary tabs have been created. The 1st questionnaire has been created and is working: office registration, office elements. The 2nd questionnaire is extensive, covers the entire range of activities of departments, laboratories, centers and other structural divisions of the university. There are six sections in it: "Education and Science", "Energy", "Water", "Waste", "Paper and documents", "Awareness". Each topic is supposed to answer 10-12 questions. This questionnaire allows you to conduct an analysis in each direction, to have a general picture, in general, of the university and each structural unit. This will help to identify the problem areas of each Office, set tasks to eliminate them and achieve sustainable compliance with the concept of the Green Office of the Treasury.



The expected result of the "green office" is the creation of an eco-hub of KazNU on the basis of the Green Office. Holding working meetings, inviting experts from different fields, as well as conducting training for various groups. As part of it, the creation of a Unified solid waste sorting system throughout the KazNU Campus (including all dormitories and catering facilities). Creation of a laboratory for processing plastic waste on the territory of the KazNU technopark.

TASKS OF THE "GREEN OFFICE"

The main tasks of the "green office" are:

1. Conducting institutional and social changes in educational institutions, leading to the creation of fundamentally new structures of "green offices" – centers aimed at implementing corporate environmental policy in educational institutions. Administration of an educational institution based on energy and resource conservation, waste collection and transformation, projects generating "green" development - ecoparks.

2. The inclusion of sustainable development issues in the educational process through curricula, the development and publication of educational and methodological literature. Improvement of environmental education, organization of training seminars, trainings, special courses, contests, debates, round tables, etc.

3. Development of scientific activities in the field of sustainable development through the development of breakthrough scientific projects aimed at improving energy efficiency, the creation and use of energy-saving equipment and technologies, alternative sources and types of energy. Research in the field of sustainable development is not only necessary to support the disciplines taught, they create new knowledge, which is then transformed into specific programs and activities.

4. Worldwide development of ecological education and ecological culture of youth. Creation of opportunities for 29 students and employees of the educational institution to acquire skills of socially responsible behavior aimed at sustainable development in conditions of national and cultural diversity through the development of ecotourism, volunteer movement, youth actions, flash mobs, etc.

5. Development of cooperation and partnership programs with other organizations for the purposes of sustainable development. It is difficult for an educational institution to implement environmental measures and programs alone, therefore, the concept of a "green office" provides for partnership programs and cooperation of the university with commercial and public organizations, government agencies at the regional and international levels.

The creation of a "green office" of educational institutions is based on the concept of 3R – three important basic principles: □ reduction – the principle of economy (reduction of consumption of electricity, water and other resources); □ refinement – the principle of reuse of materials (rational use of paper, etc.); □ replacement – the replacement of some products with others, more environmentally friendly (minimization of the negative impact on the environment due to a more responsible approach to the selection of goods, services, etc.). The principles of the

"green office" should permeate all the functions of the educational institution, including staff selection, financing, and student recruitment. This also applies to administrative and economic activities, construction and equipment of premises.



The philosophy of the "green office"

WAYS TO IMPLEMENT THE "GREEN OFFICE" CONCEPT

For the first task

- "green" administration of an educational institution.
- creation of a "green office" – a separate department or council, committee or working group consisting of the heads of individual departments to systematize and coordinate the activities of an educational institution in the field of sustainable development; planning and decision-making, creation of appropriate infrastructure and regulation (including legal) activities at all levels;
- development of a strategy, objectives and a plan for the implementation of the activities of the "green office" of the educational institution in the following areas: economic, educational and methodical, scientific and innovative, social and educational;
- conducting administrative and economic activities: energy efficiency (energy saving) – energy audit and monitoring of energy consumption – replacing traditional lamps with energy-saving ones, installing motion sensors, improving energy efficiency of buildings and taking into account "green" standards in the design and construction of new buildings, the use of environmentally friendly building materials in the production of repair and construction works, the introduction of "smart" networks; the use of renewable energy sources – the use of solar panels, the installation of solar panels, heat pumps, heat recovery systems, etc.
- * water conservation – installation of water meters, the use of plumbing that reduces water loss and provides 50% water savings, automation of irrigation of the territory of the educational institution, the formation of an active position of young people aimed at water conservation. To regulate the temperature in the office, install manual or automatic heat supply systems.
- * waste management and procurement – organization of separate collection, recycling of waste – paper, glass, plastic, metal; separate collection and safe disposal of hazardous waste – batteries, cartridges, mercury lamps, etc. Responsible consumption (effective procurement) – encouraging the active position of employees and students in the purchase of "eco" goods, priority for similar goods in tenders for university purchases, etc.

For the second task

- educational and instructional activities for the promotion of "green" initiatives.
- increasing the content of the environmental module on environmental protection and sustainable development in the educational process of an educational institution;
- introduction of new and development of existing educational and methodological complexes of specialty and disciplines, methods and forms of education in the field of "green economy" and sustainable development;
- expanding the coverage of structural units of the educational institution with education in the field of environmental protection and sustainable development;
- improving the quality of human resources training and meeting the needs of society for professional personnel in the field of green economy, environmental protection and sustainable development;
- eco-education is the organization of training seminars, trainings, lectures, master classes, tutoring on various environmental aspects, special courses, contests, debates, round tables for various categories of listeners interested in a careful and rational attitude to their surrounding nature.

For the third task

- scientific and innovative activities in the field of "green economy" and sustainable development.
- an increase in the number of projects and research works on the issues of green economy, environmental protection and sustainable development carried out at the educational institution, city, regional, state and international levels.
- development of breakthrough scientific and innovative projects aimed at improving energy efficiency, reducing greenhouse gas emissions, using alternative sources and types of energy;
- creation and implementation of energy-saving equipment and technologies;
- development of infrastructure for research and implementation of innovative technologies on environmental protection and sustainable development.

For the fourth task

- social work, development of ecological education and ecological culture of youth.
- raising awareness of all groups of the population through environmental education and upbringing, contributing to the assimilation of a number of environmental and ethical norms, values, professional skills that are required to ensure sustainable development; □ popularization of knowledge, activities on the green economy, environmental protection and sustainable development among all groups of the population through the media, social networks, etc.
- organization and implementation of social projects: transport programs – management of traffic flows on campus, development of cycling, provision of bicycle parking, car-sharing
- encouraging the sharing of a car by all family members, optimizing the use of vehicles for the purposes of an educational institution, the widespread use of

public transport and hiking; youth environmental programs – socially responsible and business-oriented environmental initiatives that are offered to students or initiated by themselves - actions, flash mobs, volunteer movements, ecotourism, etc.

– food safety is the purchase of high-quality products from Kazakhstani manufacturers, organic waste is transferred to local farms, take-away packaging is made of biodegradable materials, the rejection of plastic bags and disposable, plastic tableware, the rejection of genetically modified products.

For the fifth task

– cooperation and partnership for sustainable development.

– integration of knowledge and international experience on sustainable development, Green Metrics principles and UNAI principles on sustainable development into the practice of decision-making on the planning, design and development of the educational institution's campus and its infrastructure; integration of the campus and the educational institution itself into the environment at the city and country level as smartcampus, smart university, smart college, smart school through cooperation with city and national authorities in the role of experts and consultants when making certain management decisions on the development of urban infrastructure and the formation of national strategies. development of partnership programs with commercial and public organizations, government agencies at the regional and international levels for the purposes of sustainable development;

– cooperation with educational institutions and international organizations in the study and dissemination of accumulated experience, mutual support and popularization of ideas and new technologies for sustainable development through the organization of joint international conferences and seminars, joint projects, trainings and programs on sustainable development using the capabilities of the virtual communication platform "Green Bridge through Generation" www.greenbridge.kaznu.kz.