

Утверждаю
Член Правления-проректор
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деятельности
НАО «Казахский национальный
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PLAN
for the modernization of existing buildings to enhance energy efficiency
within the framework of
SDG 7 AFFORDABLE AND CLEAN ENERGY

Almaty 2024

Introduction

The policy of KazNU regarding the achievement of the Sustainable Development Goals (SDGs) declared by the UN is an important aspect of the university's educational process and internal operations. The SDGs, adopted by the United Nations, consist of 17 goals and 169 targets aimed at promoting sustainable development in the economy, society, and environment. Universities play a key role in achieving these goals through education, research, and actions within their own organizations.

Key aspects of the university's policy on achieving the SDGs include:

Integration of SDGs into curricula: Faculties develop programs that include SDG-focused education. This may involve offering courses on sustainable development, incorporating the SDG perspective into various disciplines, and encouraging students to reflect and act towards achieving these goals.

Research and innovation on SDGs: The university should conduct research aimed at developing new solutions, technologies, and methods that promote sustainable development. These research areas can include clean energy, medicine, new food and industrial production technologies, ecology, and more.

Promotion of SDG-related practices on campus: The university can enhance the energy efficiency of buildings, manage waste, and improve consumption through digitalization and the implementation of smart management systems (utilizing AI in public utilities, security, and energy efficiency), promote cycling, electric, and public transport, as well as develop eco-friendly, economical, and healthy food options in cafeterias, and monitor the health of students and staff.

Training and engagement of staff and students: The university should educate and engage its staff and students in sustainable practices and goals to create a broad cultural imperative for sustainability within the university community.

Supporting the community in achieving SDGs: The university should collaborate with local and international communities to promote the achievement of the SDGs. This can include partnerships with organizations, participation in development projects, and sharing knowledge and experience.

Accountability and monitoring of SDG achievement measures: The university may establish monitoring and reporting mechanisms to assess its progress in achieving the SDGs. This includes defining key performance indicators related to the SDGs and regularly reporting results to the community and stakeholders about its sustainability activities and achievements.

Encouragement and recognition of activities aimed at achieving the SDGs: The university can develop systems for rewarding and recognizing those who actively participate in achieving the SDGs. This may include scholarships, awards, and other forms of recognition.

Overall, the university's policy on achieving sustainable development goals should be a targeted, multifaceted, and long-term effort that encompasses educational, research, and practical measures aimed at supporting sustainable development at all levels. The university's research and innovation policy should

focus on creating an environment that encourages and supports research activities aimed at achieving the SDGs, providing resources and support for researchers and students working in this area. KazNU, with its focus on research and innovation, has the potential to make a significant contribution to achieving the SDGs through its research and innovative activities, and a sustainability-oriented policy plays a key role in this process.

Plan for modernisation of existing buildings to improve energy efficiency

1) A research project on 'Development of heat-reflective coatings based on metal and semiconductor nanostructures to improve energy efficiency in buildings' is being prepared

2) The International Conference 'Green Higher Education Institutions: International Cooperation' will be held on 28 November 2024.

The aim of the Green Universities programme is to form an environmental culture in the university community and to introduce specific environmental practices.

The objectives of the conference are to share experience, knowledge and information on the results of participation in the UI GreenMetric World University Ranking (<https://greenmetric.ui.ac.id/rankings/ranking-by-country-2023/Kazakhstan>) for the formation of environmental culture in universities; contribution to building a green economy; achievement of the UN Sustainable Development Goals and establishment of the International Association of Green Universities.

It is planned to join efforts and resources to further develop environmental thinking among students and introduce nature-saving practices in Kazakhstan's universities.

Partners of the event: Association of Green Universities of Russia; ECA Movement (Russia); KARAGACH Foundation (Kazakhstan).