AL-FARABI
KAZAKH NATIONAL UNIVERSITY

13 CLIMATE ACTION

UNIVERSITY

CLIMATE CHANGE POLICY

UNIVERSITY ACTIONS

CLIMATE PLAN

COMMITMENTS

ALMATY, 2023

GLOBAL CONTEXT

The university community is aware of the growing global concern about climate change. In the 2015 Paris Climate Agreement, 195 countries agreed to keep global temperature increases well below 2°C in this century, while working to limit growth to 1.5°C2.

The Intergovernmental Panel on Climate Change (IPCC) has published a report indicating that limiting global warming to 1.5°C would require zero carbon emissions around 2050 (IPCC, 2018); The university recognizes that any additional warming above 1.5°C will significantly increase the risk of drought, floods, extreme heat and poverty for hundreds of millions of people worldwide.

The Global Development Agenda 2030 contains 17 Sustainable Development Goals (SDGs), and the Paris Climate Agreement provides the framework for sustainable low-carbon development. Clearly, there is a strong link between climate change and sustainable development.

Climate change poses a serious threat to sustainable development. The 2030 development agenda identifies climate change as "one of the greatest challenges of our time" and states, "its adverse effects undermine the ability of all countries to achieve sustainable development".

Managing and adapting to long-term climate risks is critical to sustainable development. Thus, environmental sustainability is the main theme linking the SDGs. Climate change has not only received its section (goal 13) but also integrated into almost all other SDGs.

INTRODUCTION

The university recognizes that we are facing a climate emergency. Climate change is currently one of the most pressing challenges facing humanity. The Republic of Kazakhstan, like the rest of the world community, is actively seeking ways to adapt to global climate change, seeking to ensure sustainable and sustained growth, social integration and environmental protection in the context of partnership and peace.

Kazakhstan, together with more than 170 other countries, officially signed the Paris Agreement in 2016, which sets out a global goal to reduce greenhouse gas emissions and a strong call for action to mitigate dangerous climate change, induced by human.

In the beginning of 2023 the «Strategy of achieving carbon neutrality of the Republic of Kazakhstan until 2060» was adopted, which was preceded by a large and multidisciplinary work on: implementation of «Transition concept of the Republic of Kazakhstan to «green economy»», development and implementation of state programs of industrial and innovative development, implementation of UN Sustainable Development Goals.

We are striving to combat climate change and we are making a significant contribution to reducing greenhouse gas emissions in the city. Universities play a clear role in understanding the complex environmental problems we face and in finding their solutions.

UNIVERSITY ACTION ON CLIMATE CHANGE

We are committed to making the University a world leader in environmental sustainability, both academically and operationally. We have already started this work by developing a methodology to compare our academic contributions to the UN Sustainable Development Goals, and we have extensive experience in climate change research and teaching, as well as involving large number of students in this context. We have also already achieved ambitious operational targets to reduce negative environmental impacts.

OUR APPROACH TO CLIMATE CHANGE WILL BE:

Relinquish	Mitigation	Adaptation	Positive impact
			
Reduce negative environmental impact	Enhancing our positive impact and compensation	Modernizing our campus to a changing world	Learning and innovation for a better world

To identify direct and indirect sources of emissions and increase transparency for greenhouse gas (GHG) accounting, three «scopes» have been defined (scope 1, scope 2 and scope 3).

«Scope 1» indicates direct emissions of greenhouse gases (GHGs) that are emitted from sources owned or controlled by the reporting entity.

«Scope 2» shows indirect GHG emissions associated with the production of electricity, heat or steam purchased by the reporting entity.

«Scope 3» shows all other indirect emissions, i.e. emissions related to the extraction and production of purchased materials, fuel and services, including transport on vehicles not owned or controlled by the reporting entity, outsourcing, waste disposal, etc.

Our university is located in one of the most beautiful locations of the planet - at the foothills of the majestic Ile Alatau Mountains, in the city of Almaty. The favorable climate and world-class campus make KazNU a place of comfortable learning and realization of creative potential. The university does not have direct emissions of scope areas 1, 2 and 3.

Since 2016, Kazakh National University named after Al-Farabi takes part in the annual ranking of the most «ecologically clean» universities of the world - UI GreenMetric Ranking of World Universities and maintains a leading position.

The results achieved due to the active position of the university in promoting the idea of sustainable development and the implementation of a number of activities based on the «Model Plan of Sustainable Development of Universities», which was presented within the III Forum of Asian Universities.

The rating takes into account the performance of universities in six categories:

- campus development
- energy and climate change
- waste recycling
- water intake
- transport and education.

To address climate change comprehensively, organizations should consider the impact of each strategic and operational decision that this Policy seeks to achieve.

№	ENERGY AND CARBON TARGETS	FUTURE TARGETS
1	**Carbon emissions**	Achieve carbon neutrality by 2050.
2	**Waste management**	Currently, sorting of waste in the territory organized by 50%
3	**Trip**	Currently, 70% of employees commute to work by public transport. There are electric machines, bicycle sidewalks and electric scooters inside the campus. By 2050, it is planned to reduce business flights by 25%.
4	**Water management**	Reduce water consumption by 2% per year with resource-saving technologies.
5	**Acquisition**	Use of the Net Positive supplier interface tool

6	**Organic food**	Today, on campus there are a number of coffee shops, cafeterias, where the range of natural products, vegetarian menus that meet health and hygiene requirements.
7	**Biodiversity**	Being located in such a metropolis as Almaty – the KazNU Campus is widely known as one of the most «green» corners of the city, where the greenery consists of 18,000 trees and covers an area of 37,000 square meters. KazNU is actively continuing to improve the campus area. Landscaping works are completed by 97 percent.

This Policy is accompanied by the University Development Program, the Strategy for Achieving Carbon Neutrality and Sustainable Development, which outlines our goals, actions that are necessary to achieve zero emissions, as well as maximizing our positive local and global contributions to adapting to a changing world.

Our ambitious plan addresses all aspects of the University's activities and demonstrates how seriously we take this emergency situation, as we consider the environmental and social consequences of everything we do.

OBLIGATIONS

As part of the global community, we are **addressing climate issues** as part of our contribution to all the Sustainable Development Goals.

Emissions. We will reduce energy consumption, increase the use of renewable energy and achieve zero emissions at the latest by 2050.

Education. All our students study a module related to climate change, sustainable development goals, regardless of the direction of the educational program or level of education. We strive to develop awareness and skills to address these challenges.

It is worth noting that 90% of students have the opportunity to study environmentally friendly energy, green technologies and/or climate as part of their course; there are a number of interdisciplinary modules, which offer

students the opportunity to gain significant experience in sustainable development/climate, including positive interaction with the community.

Research. Scientific research of university scientists is connected with global and regional changes of modern climate; mitigation measures and adaptation to climate change; climatic conditions of Kazakhstan; state of air basin of the Republic of Kazakhstan; influence of observed and expected climate change on river ecosystems; identification of patterns and consideration of the influence of urbanized and adjacent areas on elements of hydrological processes resulting from anthropogenic and natural changes. The research results of the professors and young scientists are published annually in monographs and scientific high-ranking publications indexed in the databases of Scopus and Web of Science.