MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE POLTAVA STATE AGRARIAN UNIVERSITY

PLAN ENSURING THE POLICY OF STRIVING FOR A CARBON-NEUTRAL POLTAVA STATE AGRARIAN UNIVERSITY (2025 –2030)

1. Introduction

Poltava State Agrarian University (PSAU), realizing the urgency of the problem of global climate change and the need to reduce greenhouse gas emissions, undertakes to implement a policy of striving to achieve carbon -neutral status.

This policy is developed in accordance with the provisions of the Paris Climate Agreement, the Kyoto Protocol, the European Green Deal and the GHG Protocol.

- 1.1. The main goal of this Plan is to ensure the achievement of carbon -neutral status of Poltava State Agrarian University (hereinafter referred to as the University) by 2030 through a systematic reduction of greenhouse gas emissions, transition to renewable energy sources, implementation of energy-efficient technologies, and formation of an environmental culture in the university community.
- 1.2. Achieving carbon -neutral status involves inventorying and continuous monitoring of emissions, increasing the energy efficiency of buildings and transport infrastructure, expanding the use of environmentally friendly technologies, introducing a system of separate waste collection and recycling, as well as implementing measures to compensate for residual emissions through greening areas and creating carbon projects .

1.3. Relevance and relevance.

Ensuring the policy of striving for carbon -neutral development of Poltava State Agrarian University is extremely relevant in the current conditions of global climate challenges. The increase in the concentration of greenhouse gases in the atmosphere, the increase in average annual temperatures and the negative impact on agriculture directly require educational and scientific institutions not only scientific analysis, but also practical actions aimed at reducing the carbon footprint.

The University's plan is consistent with Ukraine's national commitments to implement the Paris Climate Agreement, the Kyoto Protocol, Ukraine's Nationally Determined Contribution to reduce greenhouse gas emissions, as well as with the priorities of the European Green Deal. It corresponds to the strategic documents of

the state environmental policy and energy strategy of Ukraine, which set a benchmark for reducing anthropogenic impact on the climate system.

In addition, the implementation of the plan is fully consistent with the UN Sustainable Development Goals, in particular:

- Goal 7. Affordable and clean energy through the introduction of renewable sources and energy-efficient technologies;
- Goal 11. Sustainable development of cities and communities through the development of environmental infrastructure and transport solutions;
- Goal 12. Responsible consumption and production through optimizing resource use and waste management systems;
- Goal 13. Combat climate change by reducing emissions and implementing offset measures;
- Goal 15. Conserve terrestrial ecosystems through the expansion of green areas and agroforestry programs .

Thus, the plan is not only an internal document of the university, but also an important component of the national and international strategy to combat climate change, which enhances the reputation of the University as a modern educational and scientific center integrated into the global movement for sustainable development.

- 1.4. Basic principles of the plan.
- 1. Scientificity use of international standards and emission accounting methods .
- 2. Transparency public disclosure of data on emissions and measures to reduce them.
 - 3. Systematicity covering all areas of the University's activities.
 - 4. Innovation implementation of modern technologies and green solutions.
- 5. Participation involving higher education students of all levels, scientists, scientific and pedagogical workers, and partners in the implementation of the plan.
- 6. Responsibility taking into account environmental aspects in strategic planning and management.

2. Strategic and specific objectives

2.1. Strategic goals.

Conduct a complete inventory of the University's emissions, identifying all sources of greenhouse gases, including direct (fuel combustion, equipment operation, transport) and indirect (electricity, water, heat consumption, waste) emissions, which will ensure the formation of a baseline for further monitoring and the development of effective measures to reduce their volumes.

Ensure a 30% reduction in energy consumption by 2027 through the gradual introduction of energy-saving technologies, modernization of buildings and engineering networks, insulation of premises, use of LED lighting and automated energy metering systems. By 2030, switch to 50% use of renewable energy sources, introducing solar power plants, heat pumps, biogas plants and other modern technologies that will significantly reduce the university's carbon footprint

Optimize the University's transportation policy by gradually reducing the use of traditional fossil fuels and developing bicycle infrastructure, stimulating the use of public transport, which will contribute to reducing emissions, reducing traffic congestion, and promoting a healthy lifestyle among students and staff.

To implement a comprehensive waste management system, including sorting, recycling, and composting, which will ensure the minimization of the university's negative impact on the environment, contribute to the implementation of international climate standards, and raise the environmental awareness of students and staff.

Integrate issues of climate neutrality and sustainable development into the University's educational programs, including lectures, practical classes, laboratory work and seminars, as well as ensure the inclusion of these topics in scientific research, projects and dissertations in order to form students' environmental competence and increase the University's scientific contribution to the field of reducing greenhouse gas emissions.

To form partnerships with international organizations and educational and scientific institutions, as well as donor and grant institutions to integrate the university into global sustainable development networks, attract financial resources for the implementation of environmental and energy-efficient projects, as well as ensure the exchange of experience and technologies to achieve carbon neutrality.

2.2. Specific objectives and initiatives.

Energy management – modernization of lighting, heating, ventilation systems, use of renewable energy sources (solar panels, heat pumps, bioenergy).

Transport strategy – creating conditions for the use of bicycles, optimizing the company fleet.

Rational use of resources – digitalization of document flow, reduction of paper and plastic consumption.

Green projects – planting trees, maintaining green areas, creating biodiverse areas.

Educational and scientific activities – opening courses on climate policy and green economy, creating research laboratories on renewable energy.

International partnership and funding – participation in grant programs (Horizon Europe , Erasmus +, USAID, GEF), cooperation with business and communities.

3. Analysis and monitoring stage

- 3.1. Introduction of a system for accounting for greenhouse gas emissions at all levels of the university's activities with regular collection, analysis and systematization of data, which will ensure the preparation of an annual "University Carbon Report", providing transparent information on the volume of emissions, progress in their reduction and the effectiveness of implemented measures.
- 3.2. Assess progress against key indicators, including energy consumption reduction, waste reduction, renewable energy use, and the effectiveness of greenhouse gas emission reduction measures, in order to regularly monitor, analyze,

and ensure achievement of established goals in the field of climate neutrality and sustainable development.

3.3. Conducting internal and external audits, including regular verification of all emission accounting systems, energy consumption, waste management and use of renewable energy sources, in order to assess the effectiveness of implemented measures, identify potential shortcomings and develop recommendations to increase the level of carbon neutrality of the University.

4. Expected results.

- 4.1. Achieving carbon -neutral status of the University by 2030.
- 4.2. Formation of the University as a regional center for climate education and innovation.
 - 4.3. Improving the environmental culture of students and employees.
 - 4.4. Contribution to the implementation of Ukraine's climate commitments.