



**NET ZERO DECLARATION
of Kyiv National University of Construction and
Architecture (KNUCA)**

Date: 03 September 2024

Signed by: Rector

1. Preamble and Institutional Commitment

Kyiv National University of Construction and Architecture (KNUCA) recognises that climate change represents one of the most pressing global challenges of our time. The University fully supports the principles of the Paris Agreement (2015), the UN Framework Convention on Climate Change (UNFCCC), and the European Green Deal, aligning its long-term development strategy with Sustainable Development Goal 13 – Climate Action and the national Low-Carbon Development Strategy of Ukraine.

As a leading centre of education and research in sustainable construction, urban planning, and environmental engineering, KNUCA acknowledges its institutional responsibility to mitigate greenhouse gas emissions (GHG), adapt to climate risks, and foster climate resilience in society. The University declares its full commitment to contribute to climate neutrality, energy transition, and sustainable development through science-based actions, innovation, and public engagement.

2. Vision and Strategic Objectives

KNUCA's vision is to become a model of low-carbon and climate-resilient university campus in Eastern Europe. The University hereby commits to achieve Net Zero greenhouse gas emissions by 2040, ensuring that all residual emissions are balanced by verified carbon offsetting or carbon sequestration projects.

The following quantitative targets are set:

- 70 % reduction in total GHG emissions by 2030 (relative to 2022 baseline).

- 100 % renewable electricity consumption by 2035 (from solar, wind, hydro and biomass sources).
- Full decarbonisation of campus heating and transport by 2040.

These objectives support climate mitigation while enhancing climate adaptation capacity in the built environment sector.

3. Scope, Boundaries and Accounting Framework

This Declaration applies to all university activities: education, research, administrative operations, construction and renovation projects, student housing, waste management, transport and mobility, and procurement of goods and services.

Emission sources are classified according to the Greenhouse Gas Protocol:

- Scope 1: Direct emissions from on-campus combustion (boilers, vehicles, laboratories).
- Scope 2: Indirect emissions from purchased electricity and district heating.
- Scope 3: Indirect emissions from procurement, waste, student travel, and construction materials.

KNUCA applies ISO 14064-1:2018 for GHG inventory and energy efficiency auditing. The baseline year 2022 serves as reference for calculating emission intensity and carbon footprint. Data verification follows Green Campus Standards and Environmental Management System (EMS ISO 14001) procedures.

4. Governance, Leadership and Institutional Structure

The University Senate approves this Declaration and establishes the Office for Climate Action and Sustainability (OCAS). This office coordinates climate policy implementation, data collection, climate risk assessment, and GHG reporting.

A Sustainability Steering Committee, chaired by the Rector and including vice-rectors, faculty representatives, students, and external experts, supervises progress, integrates climate change adaptation principles into strategic planning, and ensures alignment with UN Sustainable Development Goals (SDGs).

Each faculty must adopt a local climate action plan addressing its disciplinary impact — from architectural design for energy efficient buildings to urban drainage resilience and low-carbon materials in construction.

5. Key Action Pillars

a) Energy Transition and Renewable Energy Use

KNUCA will prioritise renewable energy sources (solar photovoltaics, geothermal, and biomass heating) to replace fossil fuels and reduce carbon intensity.

- Installation of solar panels on university buildings to supply ≥ 25 % of campus electricity by 2028.
- Conversion of heating systems to low-carbon district networks or heat pumps by 2035.

- Energy management platform for real-time monitoring of energy consumption and GHG emission tracking.
- Adoption of energy efficiency standards in new campus buildings meeting EU Nearly Zero Energy Building (NZEB) criteria.

b) Sustainable Mobility and Transport Decarbonisation

- Replacement of University fleet with electric vehicles (EVs) and charging infrastructure.
- Promotion of cycling lanes and shared transport schemes for students and staff.
- Integration of green mobility policies to reduce transport-related emissions by 60 % by 2030.
- Encouragement of virtual meetings and low-carbon travel planning for academic missions.

c) Sustainable Procurement and Circular Economy

- Implementation of a climate-responsible procurement policy requiring suppliers to report their carbon footprint and apply life-cycle assessment (LCA) principles.
- Prioritisation of local and sustainable materials in construction projects to minimise embedded emissions.
- Circular economy model for campus operations: reuse, repair and recycling of equipment, furniture, and electronic waste.

d) Waste Management and Resource Efficiency

- Establishment of zero waste targets with ≥ 70 % recycling rate by 2030.
- Composting of organic waste from canteens and green areas.
- Reduction of single-use plastics and implementation of biodegradable alternatives.
- Integration of water conservation and rainwater harvesting systems to support climate adaptation on campus.

e) Research, Innovation and Climate Education

- Development of interdisciplinary research on climate modeling, urban heat islands, building resilience, and renewable technologies.
- Inclusion of mandatory courses on climate literacy, environmental engineering, and sustainable construction in all degree programmes.
- Cooperation with industry and municipalities to apply research in green infrastructure, energy-efficient design, and carbon-neutral urban planning.
- Support for student climate initiatives and the creation of a Green Campus Living Lab for testing low-carbon solutions.

f) Climate Adaptation and Disaster Risk Reduction

- Conduct climate risk assessments for all facilities to identify vulnerability to floods, heatwaves, and extreme weather events.
- Integrate resilient landscape design and stormwater management in urban projects.

- Develop an Emergency Response and Climate Adaptation Plan to protect students and staff.
- Strengthen community engagement in disaster preparedness and local climate resilience programmes.

g) Partnerships and Global Engagement

- KNUCA joins national and international networks on climate action (e.g. Race to Zero, COP University Network, ICLEI Europe, TOMORROW Charter of Brest Métropole).
- Collaboration with local governments for urban climate strategies, energy transition projects, and low-carbon districts.
- Engagement with business partners to develop green innovation ecosystems and sustainable construction technologies.

6. Monitoring, Reporting and Transparency

KNUCA will publish an annual Climate and Sustainability Report, detailing GHG emission inventory, progress towards targets, renewable energy use, climate education activities, and community outreach.

All data will be verified internally and audited every three years by independent experts.

Reports will be publicly available on the University's website in both Ukrainian and English, in accordance with THE Impact Ratings evidence rules (Existence + Evidence + Public Access).

A dashboard for tracking emissions and energy use will be integrated into the University's digital management system, supporting data-driven decision-making and continuous improvement.

7. Continuous Improvement and Innovation

KNUCA commits to update its Net Zero Roadmap every five years in line with scientific advances and policy developments (IPCC AR6 Guidelines).

The University will continue investing in green innovation, climate-smart technologies, energy efficiency research, and training for engineers, architects, and urban planners to accelerate the climate transition.

Knowledge sharing and stakeholder dialogue will remain core values in promoting climate justice, resilience, and sustainable development for future generations.

8. Signature and Endorsement

On behalf of Kyiv National University of Construction and Architecture, we endorse this Net Zero Declaration and affirm our determination to achieve carbon neutrality, promote climate resilience, and support the global goal of limiting temperature rise to 1.5 °C.

Dr. Oleksii Dnipro

**Rector of Kyiv National University
of Construction and Architecture**

