# NATIONAL TECHNICAL UNIVERSITY OF ATHENS



# SUSTAINABILITY GOALS 2024-2030





# **NATIONAL TECHNICAL UNIVERSITY OF ATHENS**







#### **NTUA CLIMATE TARGET**

The National Technical University of Athens (NTUA) adheres to the GHG Protocol's corporate standard by focusing on Scope 1 and Scope 2 emissions for mandatory reporting, placing its strategic emphasis on areas where it has direct control and influence.

- Scope 1 encompasses direct emissions from stationary sources like fuel combustion for heating, electrical consumption for cooling and mobile sources such as fuel-burning vehicles.
- Fugitive emissions, such as those from refrigeration and air conditioning systems, can be significantly more impactful than CO2 due to the high global warming potential of refrigerant gases.
- Scope 2 emissions refer to the indirect emissions from purchased energy supplied by the utility provider, encompassing all greenhouse gases emitted into the atmosphere from the consumption of acquired electricity, heating and cooling.



#### **NTUA CLIMATE ACTION PLAN**

NTUA aims to integrate key performance indicators (KPIs) into our climate target, ensuring a sustainable campus environment.

We focus on optimizing open space and green coverage relative to both campus area and population, emphasizing energy and climate change by tracking electricity use per capita and per conditioned area, increasing our renewable energy share, and driving down CO2 emissions per person.

Our commitment extends to waste management through robust recycling and waste treatment programs, water usage efficiency, sustainable transportation options, and educational initiatives that include sustainability courses and research funding. By aligning our policies and programs with these KPIs, we strive for a reduced environmental footprint and enhanced campus sustainability.



#### **SUSTAINABILITY GOALS**

To align the sustainability goals outlined for NTUA with the United Nations Sustainable Development Goals (SDGs), we mapped each initiative to specific SDGs, and then set clear actions and targets to ensure measurable progress.

#### 1. Energy Efficiency and Renewable Energy

<u>Related SDGs</u>: SDG 7 (Affordable and Clean Energy), SDG 13 (Climate Action)

<u>Actions</u>: Install PV panels and Hybrid PVT panels on campus, retrofit buildings with energy-efficient lighting and HVAC systems.

**Targets**: Achieve a 20% reduction in campus energy consumption and source 10% of electricity from renewable sources by 2030.



#### 2. Water Conservation

**Related SDGs**: SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production)

<u>Actions</u>: Implement rainwater harvesting systems, install low-flow fixtures in restrooms, and use drought-resistant plants in landscaping.

<u>Targets</u>: Reduce campus water usage by 30% and increase rainwater harvesting capacity to cover 20% of the campus's water needs by 2030.







#### 3. Waste Management

**Related SDGs**: SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production)

<u>Actions</u>: Establish comprehensive recycling and composting programs, ban single-use plastics on campus, and host regular waste reduction workshops.

**Targets**: Achieve a 75% waste diversion rate (away from landfills) and reduce overall waste generation by 50% by 2030.





# 4. Sustainable Transportation

**Related SDGs**: SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action)

**Actions:** Expand bike-sharing programs, improve access to public transit, and install electric vehicle charging stations.

**Targets:** Increase the use of sustainable transportation modes to 60% of all campus-related travel by 2030.





## 5. Green Building Standards

<u>Related SDGs</u>: SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities)

<u>Actions:</u> Ensure all new buildings are certified according to the new National Standards for Buildings, and existing buildings are retrofitted to meet green standards. Enhance microclimate conditions for both building and city best bioclimatic and energy performance

**Targets**: 100% of new constructions and major renovations to be green-certified by 2025.



#### 6. Academic and Research Initiatives

**Related SDGs:** SDG 4 (Quality Education), SDG 17 (Partnerships for the Goals)

<u>Actions:</u> Enhance sustainability topics into curricula across all departments, and promote interdisciplinary research on sustainability issues.

**Targets:** Offer at least one sustainability-focused course in each department by 2025 and double sustainability research funding by 2027.



#### 8. Sustainability Governance

**Related SDGs:** SDG 13 (Climate Action), SDG 17 (Partnerships for the Goals)

<u>Actions:</u> Expand the Senate Committee for Energy Management & Sustainability in order to address all environmental implications with representation from all campus stakeholders, develop a sustainability tracking and reporting system.

<u>Targets:</u> Establish the governance body by the end of the year and publish an annual sustainability report detailing progress and future

plans.



## 7. Community Engagement

<u>Related SDGs:</u> SDG 11 (Sustainable Cities and Communities), SDG 17 (Partnerships for the Goals)

**Actions:** Organize sustainability workshops and seminars, engage in community service projects focused on environmental conservation.

<u>Targets:</u> Engage 50% of the campus population in sustainability activities annually and establish at least 4 community partnerships for sustainability projects by 2025.



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