

## KARADENİZ TECHNICAL UNIVERSITY - SUSTAINABLE LAND USE, CONSERVATION AND RESTORATION POLICY -

### PURPOSE OF THE POLICY

This policy is designed to create a holistic framework for sustainable land use, ecosystem conservation, and restoration of degraded areas on Karadeniz Technical University (KTU) campuses. The policy is designed to support the academic and social contribution mission of the University; It aims to protect natural and cultural heritage, increase green areas and biodiversity, efficiency in resource use, reduce waste and improve the quality of campus life.

### RELEVANCE OF THE POLICY

**Relevant Sustainable Development Goal (SDG) Criterion:** This policy is primarily related to the following goals from the United Nations Sustainable Development Goals:

- SDG 6 (Clean Water and Sanitation)
- SDG 11 (Sustainable Cities and Communities)
- SDG 12 (Responsible Consumption and Production)
- SDG 13 (Climate Action)
- SDG 15 (Life on Land)

### Relevant Metrics:

- UI GreenMetric
- THE Impact Rankings

### SCOPE OF POLICY

This policy covers on-campus green space management, forest ecosystem maintenance, water resource protection, site planning and construction decisions, waste management, energy and water efficiency, sustainable transportation practices, research, and educational activities.

**Target Audience:** Academic and administrative units, academic and administrative staff, students, visitors, and all businesses serving on campus are within the target audience of this policy.

**Application Area:** The principles of this policy are applied in all campus and external units used by the university, public or leased lands and facilities.

### BASIC PRINCIPLES AND LEGAL BASES

KTU adheres to the following basic principles regarding sustainable land use, conservation and restoration policy;

- **Ecological integrity and biodiversity:** Forests , water, agricultural land, landscapes and cultural assets on KTU campuses are protected. Areas that have been destroyed by nature are supported by restoration projects in line with scientific principles.
- **Sustainable and participatory planning:** Land use decisions and construction decisions are in line with the university's Strategic Plan, Kanuni Campus Strategic Master Plan and other spatial plans. Relevant faculties, Environmental Problems Application and Research Center (UYGAR), Research Coordinatorship, Zero Waste Coordinatorship, student representatives and internal/external stakeholders are included in the planning processes. Planned development is ensured in land use.
- **Resource efficiency and circular economy:** Preventing waste generation, efficient use of resources, separate collection and recycling of waste at the source are important. Waste management processes



are carried out within the scope of the university's "Waste Management System". Food waste is composted and reused.

- **Climate action and energy efficiency:** To achieve the goal of carbon-neutral campus by 2053, energy efficiency and the use of renewable energy are at the heart of land-use decisions. Energy efficiency and renewable energy projects are carried out in buildings; Reducing greenhouse gas emissions and adaptation to climate change are supported.
- **Sustainable transportation: Pedestrian** paths and bicycle paths are supported within the campus to reduce the use of personal motor vehicles. Within the framework of the protocols signed with the relevant stakeholders, public transportation and sharing systems between the campus and the city are encouraged. In addition, necessary service areas (electric charging stations, etc.) are provided for zero-emission vehicles on campus.
- **Community engagement and training:** Trainings, seminars, and volunteering programs are organized to raise awareness of students, staff, and the local community about sustainability. Research and educational activities include ecosystem management, climate change and sustainable design. Environmental Problems Working groups of the UYGAR center such as ecology and landscape, waste management, climate change support research and applications. Participation in national/international competitions related to sustainability is ensured and projects are produced.
- **Legal Bases:** Policy; It is compatible with the Environmental Law No. 2872, the Law on the Protection of Cultural and Natural Heritage No. 2863, the Soil Conservation and Land Use Law No. 5403, the Zero Waste Regulation of the Ministry of Environment, Urbanization and Climate Change, the Waste Management Regulation, the National Strategy and Action Plan on Biological Diversity, the KTU Zero Waste Directive, the Legal Campus Strategic Master Plan, the Strategic Plan and other relevant national/international regulations.

## RESPONSIBILITIES AND ROLES

### Implementing Units

- **Faculty of Forestry:** Conducts research on natural structures/ecology/landscape at the university. Collaborates with research groups. When necessary, it conducts on-campus analyzes and reports with the relevant units.
- **Environmental Problems Application and Research Center (UYGAR):** Conducts ecosystem inventory, habitat restoration, biodiversity monitoring, and training activities. When necessary, it conducts on-campus analyzes and reports with the relevant units.
- **Zero Waste Coordinatorship:** Carries out waste management processes; coordinates zero waste trainings, waste separation, compost and recycling practices; It ensures the establishment and monitoring of the Zero Waste Management System.
- **Department of Construction and Technical Affairs (YİTDB):** Implements sustainable architectural and landscaping practices in on-campus constructions; applies standards for energy efficiency, water conservation and use of green materials.

### Monitor Units

- **Rectorate and Senate:** Gives official approval of the policy and conducts necessary audits. It ensures that the objectives of the policy are achieved in accordance with institutional priorities.
- **Research Coordinatorship:** Monitors the progress of the implementation of the policy, collects and reports data on performance indicators. The Sustainability Unit compiles the necessary data for sustainability indices such as UI GreenMetric and THE Impact Rankings. It also analyzes the results of the activities carried out within the scope of the policy and develops improvement suggestions.
- **Institutional Development and Planning Coordinatorship (KGPK):** Keeps policy-related data under record. It aligns policy with corporate strategy. Reports by associating them with the strategic plans and activities of the university.

## APPLICATION STEPS

1. **Initial Inventory and Target Setting:** The relevant UYGAR and Construction Affairs Department prepare an inventory of existing green areas, forests, water resources and biodiversity. The Research Coordinatorship determines performance indicators and targets according to GreenMetric and other national/international indices.
2. **Planning and Design Process:** Necessary plans and projects on sustainable land use, conservation and restoration management are prepared in line with the targets determined according to the current inventory and relevant metrics and submitted to the Rector's Office for approval.
3. **Execution of Conservation, Improvement, and Restoration Works:** Projects and studies approved by the Rectorate are carried out by the relevant units.
4. **Monitoring, Reporting and Improvement:** The studies carried out and the projects carried out are evaluated annually within the framework of the determined performance indicators and reported by the relevant units. When necessary, environmental impact assessments are made by the relevant UYGAR. The results are compared with the determined targets and the necessary revision processes are completed. In addition, all work done is shared with internal and external stakeholders.

## PERFORMANCE INDICATORS

| Indicator  | Goal  | Source of Verification                                    |
|--|---|---|
| Separate Collection Rate of Wastes at the Source | 50% recovery rate by 2030; Implementation of recycling and composting practices on all campuses   | Zero Waste Coordinatorship annual waste report            |
| Bicycle Path and Stations                        | By 2030, at least 5 km of bicycle paths and 10 stations will be completed on campus and in the surrounding neighborhoods.   | Ortahisar Municipality-KTU protocol implementation report |
| Green Area Ratio and Afforestation               | Increase the proportion of green spaces by 10% per student by 2030, afforestation with native species and carry out habitat restoration   | UYGAR inventory reports and Campus Master Plan            |
| Energy Efficiency and Renewable Energy Use       | Reduce total energy consumption by 5% by 2030; Supplying at least 30% of new buildings with renewable energy  | YİTDB Reports   |
| Rainwater Retention with Water-Sensitive Design  | To design a rain garden by 2030 and to ensure an annual water retention of 300 m <sup>3</sup> by implementing the design in an area with intense water retention within the campus. | YİTDB Reports   |
| Creation of the Vegetable Waste Area             | Reduction of inappropriate plant waste by 40% by 2030 (behind lodging)  | YİTDB environmental management reports                    |
| Education and Awareness Activities               | At least 4 sustainability seminars/trainings per year; All new students and staff receive environmental training  | UYGAR and KGPK training records                           |



## AUDIT AND REPORTING

- **Monitoring Frequency:** Performance indicators are evaluated at annual intervals; data related to indicators are regularly monitored by the relevant units every year. The changes in the values in the indicators during the year are determined and necessary measures are taken in a timely manner.
- **Reporting Frequency: Annual** data is recorded in sustainability reports within six months following the end of the relevant year and shared with the public on the university's website. Four-year data is compiled to form an input for the next strategic planning period. In addition, the relevant data obtained each year is reported to UI GreenMetric and other international sustainability indices.
- **External Verification:** Participation in national and international certification programs is provided to certify the performance of the university within the framework of the relevant indicators. The participation program and decision are taken by the senate. The implementation and effects of the policy are verified through audits carried out by independent organizations.
- **Revision Conditions:** In case 60% of the targeted values of the determined performance indicators cannot be reached for two consecutive years or in case of changes in national/international legislation; the policy is reviewed by the implementing units, revision proposals are prepared, and the policy is submitted to the senate for approval again.

## EFFECTIVE DATE

This policy comes into effect from the date it is approved by the KTU Senate. University units are obliged to comply with and implement the provisions of the policy.