



UNIVERSITY OF  
THESSALY

# SUSTAINABLE DEVELOPMENT PLAN



December 2024

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## INTRODUCTION

The University of Thessaly was established in 1984 and admitted its first students in the academic year 1988–1989. With its administrative headquarters located in the city of Volos, the University has expanded across the Region of Thessaly and Central Greece, operating in Volos, Larissa, Lamia, Karditsa, and Trikala. The University of Thessaly is organized into 8 Faculties, 35 Departments, and more than 90 postgraduate study programmes. Currently, the University hosts 43,384 undergraduate students and approximately 4,540 postgraduate students and doctoral candidates, staffed by 721 members of academic and research staff and 437 administrative staff. According to the ARWU Academic Ranking of World Universities (Shanghai Ranking 2023), the University of Thessaly ranks among the top 801–900 universities worldwide.

In 2019, the University presented its vision and strategy, structured around the following key pillars:

1. Education
2. Research, innovation and partnerships
3. Human resources and modes of work
4. Internationalisation and global relations
5. Physical and digital infrastructures
6. Sustainability

Within its 2019 Strategic Plan, the University initiated and continues to implement an environmental upgrading of all facilities, including innovative studies on favourable microclimates, energy and water savings, and the creation of an attractive working environment. An Environmental Actions Committee was established, composed of specialised scientists offering voluntary services, launching initiatives not only within the Institution but also across the wider region and nationwide, in collaboration with local authorities and relevant stakeholders.

Initiatives undertaken include:

- Awareness campaigns for the academic community, combined with incentive schemes for those reducing environmental impact.
- Recycling programmes (paper, ink, equipment, etc.) and “environmental volunteers.”
- Utilisation of renewable energy sources.
- Redesign and necessary adjustments to existing building infrastructures.

The systematic monitoring of the University’s educational and research activities is carried out through the Quality Assurance Unit (MODIP), utilising the experience gained over the years to support the achievement of the Institution’s objectives (recording of teaching and research outputs, application of codes of ethics, etc.).

Additional structures operating at the University of Thessaly include:

- The Research Ethics and Deontology Committee (E.H.D.E.).
- The Innovation, Excellence and Entrepreneurship Structure.
- The Outreach Office of the Research Committee.
- A Volunteer Group composed of students and members of Special Teaching Staff (EDIP).
- The Student Counselling and Psychological Support Centre (KESYPSYS).
- The Equal Access Unit for Persons with Disabilities and Students with Special Educational Needs.
- The Gender Equality and Anti-Discrimination Committee.
- The Anti-Bullying and Harassment Service.
- The Student Ombudsman.
- Occupational Health and Safety Physician (healthcare service).

- The Career Office.
- The Library and Information Centre.
- The Office of Physical Education.
- Cultural and artistic groups – Student associations.
- The University Nursery.
- Student Restaurants.
- Student Residences.

Recently, the University of Thessaly became the first Greek Higher Education Institution to declare a state of emergency, in response to the natural disasters that struck Thessaly, affecting its facilities, students, academic and administrative staff, as well as local and state services.

The new Sustainable Development Plan articulates ambitious goals for the University: aiming for carbon neutrality, adopting circular economy principles, equipping all students with the knowledge to understand sustainability challenges and to assume leadership in identifying solutions through research, and ensuring active involvement of staff, students, and stakeholders in the implementation of our vision for a sustainable University.

The Sustainable Development Plan was drafted by the Sustainable Development Committee under Article 228 of Law 4957/2022 (Government Gazette A 141), established pursuant to Decision No. 5076/24/GP/19-03-2024 (ADA: 68PA469B7Ξ-50K) of the 25th/27-02-2024 meeting of the University Council of the University of Thessaly, as amended by Decision No. 12501/24/GP/18-06-2024 (ADA: Ψ4PΘ469B7Ξ-KΛ2) of the University Council (Meeting No. 34/21-05-2024). The composition of the Committee is as follows:

1. **Spiliotis Xenophon**, Emeritus Professor, Department of Environment, School of Technology, University of Thessaly – Coordinator
2. **Polyzos Serafeim**, Professor, Department of Planning and Regional Development, Polytechnic School, University of Thessaly
3. **Vagropoulos Stylianos**, Assistant Professor, Department of Energy Systems, School of Technology, University of Thessaly
4. **Gkafas Georgios**, Associate Professor, Department of Agriculture, Ichthyology and Aquatic Environment, School of Agricultural Sciences, University of Thessaly
5. **Lachana Eleni**, Associate Professor, Department of Public and Integrated Health, School of Health Sciences, University of Thessaly
6. **Aggelis Athanasios**, Deputy Head, Directorate of Technical Services, University of Thessaly

The proposed Plan is structured around four fundamental pillars: (i) studies and research, (ii) infrastructures and operations, (iii) governance and social policy, (iv) engagement with society, operationalised through fourteen thematic areas aligned with the United Nations Sustainable Development Goals (SDGs). This approach is expected to be supported by an Environmental Management System (ISO 14001).

## STRATEGY FOR SUSTAINABLE DEVELOPMENT 2025–2030

Our sustainability strategy is central to achieving the University’s overall strategic objectives, supporting a high-performing institution in a rapidly changing world.

This strategy builds upon previous policies, strategies, and plans, advancing the University’s approach to Sustainable Development through improvements in **four broad directions**:

### 1. Curriculum and Research

We aspire to ensure that students understand how sustainability challenges affect their personal lives and identify opportunities for deeper engagement with sustainability-related subjects within the formal

curriculum. Conducting world-class research on the environment, social justice, and development, in alignment with the UN Sustainable Development Goals, will remain a strategic priority, as well as disseminating our research knowledge and results to our communities and policymakers.

**2. Infrastructures and Operations – making the University a model of sustainable solutions**

This concerns the necessity for the University to operate sustainably, minimising the use of materials, space, and energy. In doing so, we shall achieve our educational, research, and community goals while adequately addressing the climate and ecological crisis.

**3. Governance and Social Policy within the University**

We aim to create a University that ensures broad participation of individuals and communities, both within and outside the Institution, in shaping research, education, and wider academic life in relation to sustainability. The University shall promote social responsibility, transparency, equality, justice, and diversity through its policies and initiatives, enhancing its interaction with society.

**4. Engagement with Society at all levels**

Our goal is to establish the University as a meeting point for diverse forms of expertise and experience from across society. The University must disseminate knowledge outward to society while receiving educational and research stimuli from it, responding to societal needs and concerns.

The four pillars are implemented through fourteen thematic areas:

- Sustainability through education
- Research and knowledge transfer
- Engagement of staff and students
- Cooperation with our communities
- Optimisation of space use
- Constructions
- Campus, biodiversity, and natural environment
- Energy, carbon, and water management
- Sustainable transport
- Emissions, discharges, and Environmental Management System (EMS)
- Circular economy
- Procurement
- Sustainable food
- Governance

Table 1 presents the mapping of the fourteen thematic areas to the four pillars of the Sustainable Development Plan.

Thematic area/pillar	Studies – Research	Infrastructure and Operations	Governance and Social Policy	Institution’s Intergration with Society
Sustainability through education	+			

Research and knowledge transfer	+			
Engagement of staff and students			+	+
Cooperation with our communities			+	
Optimisation of space use		+		
Constructions		+		
Campus, biodiversity, and natural environment				+
Energy, carbon, and water management		+		
Sustainable transport		+		
Emissions, discharges, and Environmental Management System (EMS)				
Circular economy			+	+
Procurement		+		+
Sustainable food		+		
Governance			+	

## Vision and Mission

### Vision

The vision of the University of Thessaly regarding its sustainable development encompasses the adoption of applicable practices aimed at achieving sustainability at multiple levels and ensuring financial viability, through the development of partnerships with other universities, organizations, and networks at the international level, for the exchange of knowledge and practices that promote sustainable development.

### Mission

The mission of the University of Thessaly with respect to its sustainable development entails specific actions and initiatives aimed at integrating sustainability across all its functions and activities, including educational, research, social, environmental, and economic dimensions.

This mission underscores the University's commitment to assume a leading role in promoting sustainable development through education, research, and social contribution.

### Pathways to Achieving Sustainability

Our sustainability strategy is guided by ambitious objectives and targets, and will be implemented through the following core values and approaches:

### Innovation

Expanding the boundaries of knowledge and thought, and applying new technologies, processes, and practices that advance sustainability.

### Ambition

The University's ambition for sustainable development reflects a broad vision that includes the pursuit of excellence and leadership in sustainability, thereby shaping the future of education and research with sustainability at its core, and exerting a positive impact both locally and globally.

### Participation

Within the University community, active engagement of all members—students, faculty, administrative staff, and broader stakeholders—is promoted in decision-making processes and in the implementation of sustainability initiatives. Participation fosters a culture of sustainability within the University, ensuring that all actions and initiatives are aligned with the principles of sustainable development and supported by the entire community.

### Collectivity

Collective action and collaboration among members and departments of the University community contribute to the attainment of common sustainability objectives, creating an environment where all members work jointly towards a shared sustainable future.

### Integration

Sustainability permeates all University activities and cannot be approached in isolation. It entails the incorporation of sustainability principles across all aspects of University life, reinforcing the sustainability culture and creating a sustainable future for the academic community and society at large.

## Exogenous and Endogenous Factors

### Exogenous Factors

The University has focused on sustainability issues since the 2010s, while the external political and social environment has evolved considerably in subsequent years. The most significant exogenous factors affecting sustainability include:

- COP21 (21st Conference of the Parties), held in Paris in 2015, where 190 countries committed to drafting plans to address climate change under the auspices of the United Nations.
- The “Blue Planet” phenomenon, which brought to the forefront a range of issues, from single-use plastics in the oceans to the promotion of plant-based diets.
- The Intergovernmental Panel on Climate Change (IPCC) report of October 2018, which addressed the consequences of global temperature rise and the imperative to reduce greenhouse gas emissions so that warming does not exceed 1.5°C.
- The 17 United Nations Sustainable Development Goals (SDGs), adopted in 2015 by 193 countries, encompassing 169 targets aimed at ending poverty, protecting the planet, and ensuring prosperity by 2030. The European Union has committed to working towards the attainment of these goals both within Europe and with its external partners.
- The EU Action Plan for the Circular Economy (2015) and subsequent measures implemented thereafter.
- The commitment of the European University Association (EUA), expressed in its 2020 strategic plan, to exhaust all means to ensure compliance with the SDGs.
- The European Green Deal, adopted in 2020.
- Policy shifts at the national level regarding the decarbonization of the economy and the transition to renewable energy, which have reinforced and accelerated the University's policies towards meeting its energy needs through investments in sustainable energy sources.

### Endogenous Factors

In relation to its 2019 vision and strategy, the University's Sustainability Plan (2025–2030) will support the implementation of our academic strategy through:

- Improvement of the teaching and learning environment (heating, air conditioning, ventilation, lighting).
- Provision of learning systems, utilizing the University's five campuses as living laboratories for learning, offering volunteering opportunities, strengthening graduate attributes, and enhancing employability.
- Addressing global challenges such as climate change, waste management, the broader notion of sustainability in the economy, food, public health, deforestation, mental health, and the reduction of social inequalities. These challenges create research opportunities that will further elevate the University's international standing.
- Achievement of the University of Thessaly's aspirations for operational sustainability.
- Being at the epicenter of the recent catastrophic floods in Thessaly, the University of Thessaly was the first higher education institution in Greece to participate with data collection and impact assessments, proposing strategies for addressing future challenges and highlighting the need to revise the agricultural production model and water management policies.



# Thematic Areas of the Sustainable Development Plan

## 1. Sustainability through Education



The University of Thessaly seeks to achieve sustainability through education by integrating sustainability principles into its curricula and by promoting a culture of environmental awareness.

### **Purpose**

The objective is for students to comprehend how sustainability challenges may impact their personal and professional lives, while also identifying opportunities for deeper engagement with sustainability through academic programs.

### **Goals**

1. Integration of sustainability-related education into every academic program.
2. Provision of interdisciplinary sustainability learning options, available to all students across undergraduate and postgraduate programs, as well as continuing education and professional training, wherever feasible.
3. Development of an interdisciplinary community with expertise in education for sustainability, complemented by appropriate institutional support.
4. Offering formal extracurricular sustainability experiences to students.
5. Creation and support of a network of active students and staff, driven by bottom-up initiatives (student-led) in collaboration with top-down support (staff).

### **Actions**

1. Broad consultation with staff and development of a strategy on the scope and mode of integrating education for sustainability across the University's curricula.
2. Incorporation of Education for Sustainable Development (ESD) and Climate Change into the curricula of all Departments and other relevant processes and activities of the University of Thessaly.
3. Development of staff training programs and dissemination of best practices, ensuring the effective sharing of resources both within and beyond the University.
4. Establishment and expansion of an interdisciplinary Sustainable Development Unit, extending its availability to a larger number of students.
5. Implementation of an innovative program to support sustainability-related activities initiated by staff and students ("bottom-up" initiatives).
6. Support for an active student community through events, mailing lists, social media, and systematic connection with interested staff.
7. Adoption of sustainable practices in the University's daily operations, such as the introduction of green infrastructure management (e.g., recycling, energy efficiency) and sustainable mobility initiatives (e.g., provision of electric vehicle infrastructure, promotion of bicycle use).

### **Benefits**

1. Students gain the opportunity to become agents of change, contributing to sustainability both within and beyond the University.
2. Enhancement of students' knowledge and leadership skills.
3. Improvement of student employability.
4. Embedding sustainable practices in students' daily life at the University.

## 2. Research and Knowledge Transfer



Research constitutes a core activity of the University and may generate one of the most significant impacts on sustainability.

### **Purpose**

The conduct of research of global scope in the fields of environment, social justice, and development, in alignment with the United Nations Sustainable Development Goals (SDGs), shall continue to constitute a strategic priority for the University of Thessaly, with particular emphasis on the dissemination of research findings to its communities.

### **Objectives**

1. To promote research focusing on environmental protection, the improvement of social conditions, and the proposal of solutions based on a broad interdisciplinary body of evidence.
2. To adopt socially responsible investments within the University and to develop technological and social innovations, as well as to examine their impacts on sustainability.
3. To cultivate “future sustainability leaders” through research-led education and postgraduate research, making use of research laboratories and university campuses for the development of skills and knowledge.

### **Actions**

1. Organization of events.
2. Development of interdisciplinary research initiatives addressing technological and other issues, as a strategic choice. Support for interdisciplinary research and the advancement of innovative solutions to environmental challenges.
3. Provision of funding for research projects focusing on sustainability and renewable energy sources.
4. Collaboration with other academic institutions, governments, and industries for the development and implementation of sustainability projects.
5. Establishment of networks and digital platforms for the exchange of knowledge and best practices in the field of sustainability.

### **Benefits**

1. The dissemination of research knowledge may have a greater impact on sustainability beyond the production of graduates with expertise in sustainability.
2. Interdisciplinary, solution-oriented research is of vital importance for addressing complex social challenges.
3. Utilization of research to achieve an environmentally sustainable University.

### 3. Engagement of staff and students



Communication plays a central role in delivering all aspects of sustainability, assisting staff and students in understanding the key issues involved across a range of sustainability matters. There must be a common basis of understanding regarding what the University seeks to achieve, which actions may be undertaken individually and collectively, and how sustainable behaviors may be encouraged.

#### **Purpose**

To identify opportunities and methods for the effective use of communication with the aim of activating staff and student engagement in promoting sustainability and achieving sustainable change.

#### **Objectives**

1. To develop and implement an annual program of awareness-raising initiatives to enhance the understanding of sustainability among staff and students, in all areas of the University's Sustainability Strategy, as well as in relation to the United Nations Sustainable Development Goals.
2. To provide annual training and skills-development programs enabling staff and students to contribute to the improvement of the University's sustainability.
3. To conduct annual behavior-change campaigns on matters of sustainability.
4. To issue monthly sustainability updates to internal and external audiences through a variety of communication channels.
5. To monitor the annual increase of sustainable behaviors, ensuring the achievement of the sustainability targets set for the next five years.
6. To investigate methods for recording the impact of behavior-change campaigns and to monitor the reduction in energy consumption and waste generation.
7. To develop and disseminate a stakeholder engagement program aimed at encouraging sustainable behaviors, raising awareness within the wider community, and strengthening the University's connection with the communities in which it operates.

#### **Actions**

1. Implementation of a behavior-change campaign under the title *"Be Part of the Change"*.
2. Development of the student volunteering program under the title *"Going Green"*.
3. Integration of sustainability-related topics into undergraduate and postgraduate dissertations, providing support and resources for research in this field.
4. Promotion of student participation in sustainability projects outside the University, in cooperation with local organizations and municipalities.
5. Encouragement of student participation in conferences and events promoting sustainability.
6. Integration of staff into committees and working groups engaged in the development and implementation of sustainability policies.
7. Encouragement of active staff participation in shaping sustainability strategies and actions.
8. Adoption of sustainable practices in the daily operations of the University by both students and staff (e.g., use of public transportation, reduction of energy and water consumption, waste reduction, etc.).

#### **Benefits**

1. A sufficiently informed staff and student community, capable of improving sustainability.

#### 4. Cooperation with our communities



The University operates within a complex network of communities and partners, with whom it aims to engage and collaborate.

##### **Purpose**

To establish a University that shall serve as a meeting point. To create a University which, through targeted strategies, shall foster cooperation and interaction with the local and wider community, ensuring that a broad range of individuals and communities have opportunities to participate in and co-shape research, education, and the wider university life.

##### **Objectives**

1. To ensure that partner organizations may contribute to shaping the University's research and innovation agenda.
2. To incorporate the participation of partner organizations in the education and pedagogy of the University.
3. To embed relationships extending "beyond the campus walls."
4. To create inclusive campuses accessible to all visitors.

##### **Actions**

1. Development of attractive learning opportunities in the cities and regions where the University operates.
2. Promotion of the arts with an emphasis on social issues.
3. Establishment of programs that support the local economy and promote social cohesion, such as local markets, skills workshops, and lifelong learning initiatives.
4. Collaboration with local authorities and organizations for the development of joint policies and sustainability actions.
5. Organization of open lectures, seminars, and workshops to raise awareness on environmental challenges and sustainable practices.

##### **Benefits**

1. Enhanced student experience, employability, and learning outcomes.
2. Strengthened relationships with partner organizations leading to the adoption of sustainable practices.

## 5. Optimisation of space use



The spaces, both within and surrounding the buildings, constitute valuable resources and must be utilized effectively. Efforts shall be directed towards maximizing their use through well-designed initiatives that optimize their positive impact on the teaching and research activities of the University of Thessaly. Operational spaces require maintenance, cleaning, and heating, so as to ensure the right space is available at the right time and place—essential conditions for improving our sustainability impact.

There is a need to achieve the highest and most efficient use of spaces within the core areas of the campus (libraries, cafeterias, restaurants, student clubs, etc.).

### **Purpose**

The adoption of an optimal approach to space utilization, through a management and performance framework for facilities, in order to support sustainability objectives.

### **Objectives**

1. Strategic focus on the optimization of underutilized or abandoned university spaces, maximizing occupancy and improving user experience.
2. Transform building infrastructures into hubs of new services that facilitate their use and accessibility, such as wayfinding applications, meeting room management software, and guidance systems for locating offices, laboratories, and other facilities.
3. Incorporate requirements and contextual factors into rational action plans for the use of spaces.
4. Enhance stakeholder participation in the design, construction, operation, and maintenance of facilities, rendering them more efficient.
5. Automate core data collection processes and systematize data analysis, in order to enhance user experience and reduce energy consumption of facilities.
6. Extract operational intelligence from real-time data to facilitate informed decision-making.
7. Develop procedures for the optimal use and allocation of spaces (e.g., reserving common areas for meetings, real-time monitoring of space utilization).
8. Define Key Performance Indicators (KPIs) for short-, medium-, and long-term performance management of facilities, with an emphasis on improving procedures for reallocation of spaces, introducing new technological and cultural venues, and monitoring waste management processes.

### **Actions**

1. Implementation of a workplace space optimization agenda.
2. Development of a new spatial model for teaching and learning for undergraduate and postgraduate communities.
3. Updating existing spatial management standards.
4. Improvement of mobility practices for staff and resources across the organization, in order to enhance efficiency.

### **Benefits**

1. Reduced carbon emissions and lower energy consumption.
2. More effective use of institutional assets.
3. Improvement of the working environment.
4. Enhanced collaboration.

## 6. Constructions



As with physical space, the built environment is key to achieving our teaching and research aspirations and requires appropriate resources. Sustainable construction not only reduces operational costs but also mitigates long-term impacts on sustainability.

### **Purpose**

To create sustainable buildings and spaces through the construction process. This shall encompass aspects such as minimal energy consumption and reduction of carbon dioxide emissions, adherence to circular economy principles, transportation, biodiversity, waste management, as well as user health, well-being, and overall experience.

### **Objectives**

1. To implement the University's agreed standard for the assessment and certification of building sustainability across all current projects.
2. To monitor each ongoing project against the standard and submit reports regarding compliance.
3. To conduct an annual review of the standard in order to improve its applicability, ensure it remains relevant and up to date, and to keep university building design at the forefront of sustainable design.
4. To develop a standard applicable to smaller renovations and projects.

### **Actions**

1. To review industry approaches to sustainable construction in smaller-scale projects in order to identify methodologies that may be applicable to the University of Thessaly.
2. To utilize energy-efficient materials and technologies, such as thermal insulation, double glazing, and external insulation of older buildings, thereby contributing to the preservation of interior building temperature with minimal energy consumption and improving indoor air quality.
3. To enhance tree planting with species that support biodiversity and attract local fauna.
4. To apply bioclimatic building design in order to maximize the use of natural light and ventilation.
5. To deploy renewable energy sources, such as the installation of photovoltaic panels, wind turbines, and geothermal systems for the production of clean energy.
6. To establish energy centers and laboratories dedicated to education and research in renewable energy sources.

### **Benefits**

1. Reduced carbon emissions.
2. Lower operational costs for the University.
3. Enhanced user experience and well-being.

## 7. Campus, biodiversity, and natural environment



The campuses of the University of Thessaly constitute living natural spaces within the built environment, where staff and students may reside, work, and spend their leisure time. Campuses fulfill multiple functions, two of which are of particular significance: providing a green environment that enhances mental well-being, and conserving and augmenting biodiversity in support of a healthy and therefore sustainable ecosystem, both terrestrial and coastal.

### **Purpose**

The Biodiversity and Natural Environment Plan, responding to climate challenges, shall promote the development of green infrastructure. This shall include the enhancement of the population and condition of key species whose function and status can indicate the qualitative level of the environment, the expansion of tree canopy coverage, and the preservation of the existing natural environment to the benefit of the mental well-being of students, visitors, and University staff. The University's agricultural estate in Larissa and Velestino may serve as a site for the conservation of rare and threatened endemic flora of Thessaly and beyond, thereby constituting part of the University's commitment to biodiversity preservation. Furthermore, the Pagasitikos Gulf constitutes an important ecological habitat for numerous megafauna species, such as cetaceans, elasmobranchs, and marine reptiles, several of which are classified as protected, including the Mediterranean monk seal, with 50% of the global population residing in Greek waters.

### **Objectives**

1. To conserve any existing habitats hosted within or supported by University premises, through the development of an action plan for the biodiversity of the five cities in which the University of Thessaly operates: the marine region of Pelion (Pagasitikos Gulf, Eastern Pelion), rivers, forests, hedgerows, species-rich meadows, standing waters, habitats in previously developed land, and university habitats including green roofs, parks, gardens, and open spaces.
2. To maintain or enhance current levels of tree canopy coverage in multiple locations.
3. To expand flora and fauna in parks, gardens, and open spaces.
4. To collaborate with appropriate organizations and local communities, playing a significant role at the regional level in initiatives for the creation, conservation, and enhancement of networks for nature.
5. To map habitats and establish a biodiversity research program, utilizing mapping and survey data with quantifiable indicators to strengthen existing biodiversity.
6. To raise awareness regarding the estates and campuses of the University of Thessaly and the biodiversity they host.
7. To preserve marine biodiversity and increase awareness of the need to protect marine megafauna.

### **Actions**

1. To cooperate with students, volunteers, and staff for the active support and enhancement of the University's estates.
2. To collaborate with the "University of Thessaly Asset Utilization and Management Company" in order to strengthen coordination, commitment, and awareness regarding University properties.
3. To continue advancing biodiversity through proper land management, by means of established design, evaluation, and certification standards for building sustainability (e.g. BREEAM, "Building with Nature").



4. To fully utilize technology and social media for monitoring, displaying, and communicating narratives concerning the campuses of the University of Thessaly.
5. To provide specialized sustainability seminars to diverse groups within society (e.g. fishers, eco-tourism enterprises, coast guard, marine recreation businesses, shipping).

#### **Benefits**

1. Voluntary participation (staff, students, and external stakeholders) in the development and management of spaces supports the implementation of the University's Strategic Plan.
2. The University of Thessaly shall be recognized for its high standards in estate management and as a long-term contributor to the improvement of the natural environment in the five cities where it operates.
3. The green areas of the University's campuses provide open spaces for exercise, collaboration, observation of flora and fauna, and reflection.
4. The development of flora and fauna for the benefit of plant pollination supports the food supply chain.
5. The cultivation of trees and the natural growth of their canopies reduces CO<sub>2</sub> emissions, mitigates urban heat island effects, and removes particulate pollutants from the air (with an ideal tree canopy coverage of 40% per site).
6. The protection of the marine environment, particularly cetaceans, shall initially result in increased fish stocks and biodiversity, while also enhancing CO<sub>2</sub> absorption from anthropogenic activities. The preservation of biodiversity in the area shall also generate inflows of capital and alternative forms of tourism.

## 8. Energy, carbon, and water management



CO<sub>2</sub> emissions and other greenhouse gases constitute one of the greatest challenges faced by humanity. The University of Thessaly, particularly in light of the recent devastating floods in Thessaly, prioritizes climate action as a response to this threat. Decarbonization is essential in order to prevent destructive impacts on the ecosystem.

### **Purpose**

1. To achieve net zero carbon for Scope 1 and 2 emissions (GHG Corporate Protocol Standard) by 2035 and to continuously monitor the implementation timeline.
2. To identify additional emissions associated with buildings operated by partner organizations of the University of Thessaly, as well as all Scope 3 emissions (GHG Corporate Protocol Standard).
3. To develop a comprehensive climate change adaptation plan for the University of Thessaly.

### **Objectives**

In order to reduce Scope 1 and 2 emissions to zero by 2035:

1. Optimization of space utilization.
2. Energy conservation.
3. More efficient use of energy.
4. Construction and renovation in line with the most cost-effective energy standards.
5. Utilization of self-generated heat and electricity from zero/low-emission sources.
6. Procurement and use of heat and electricity supplied by zero/low-carbon energy networks.
7. Offsetting of residual carbon emissions.

### **For the reduction of Scope 3 emissions:**

1. Establishment of science-based targets and determination of a timeline for achieving net zero carbon emissions.
2. Development of circular economy and transport plans to enable the transition to net zero emissions.

### **Actions**

1. Preparation of a financial program, funded either through the Public Investment Program or other sources, to implement efficiency measures in the University's most energy-intensive buildings.
2. Development of science-based, well-documented carbon reduction targets.
3. Establishment of an internal carbon offsetting system linked to biodiversity.
4. Systematic monitoring and analysis of the University's energy consumption in order to develop targeted energy-saving measures.

### **Benefits**

1. Contribution to climate change mitigation.
2. Reduction of the University's operational costs..

## 9. Sustainable transport



Transport constitutes a fundamental aspect of the operational functioning of the University of Thessaly: commuting to and between campuses is a daily, if not hourly, necessity. The implementation of transport systems in a non-polluting, low- or zero-carbon manner is essential to reducing the University's environmental footprint and its impacts on the communities it serves.

### **Purpose**

To minimize the environmental impacts arising from all transport-related activities of the University, including staff and student commuting as well as professional travel.

### **Objectives**

1. To develop and implement an integrated travel plan encompassing all University campuses, addressing commuting, the operational vehicle fleet, and professional travel.
2. To support the development of the University's campuses by ensuring the integration of sustainable mobility infrastructure into all new construction and renovation projects, and by collaborating with municipal transport networks.
3. To minimize the environmental impacts associated with the operation of the University's transport fleet and professional travel by staff, including air travel.
4. To foster synergies with Municipal Councils, local communities, and organizations in the five cities where the University operates, in order to secure collaborative transport solutions for the benefit of broader social groups.
5. To establish a framework supporting sustainable modes of transportation for all members of the University community (e.g., walking, cycling, public transport, and car-sharing).

### **Actions**

1. Collaborate with internal and external stakeholders to develop a comprehensive University transport plan and related parking policies.
2. Develop and implement a transport strategy for the University's vehicle fleet and professional travel, including measures to reduce air travel and emissions from fleet operations.
3. Establish and implement a cycling strategy, incorporating new infrastructure, cycling training, and the sale of discounted locks and lights.
4. Establish and implement a bus transport strategy for the University, including the management and further development of an integrated transport network to and from campuses.
5. Support Schools and Departments in implementing the transport components of their climate action plans.
6. Ensure the University's presence in relevant urban transport forums in its host cities, e.g., with Municipal Councils, Urban Transport Organizations, intercity bus operators, regional divisions of the Technical Chamber of Greece, the Hellenic Railways Organization (OSE), Chambers of Commerce, and trade associations.
7. Electrify University transport and develop an internal charging network for the University's electric vehicles.

## 10. Emissions, discharges, and Environmental Management System (EMS)



The University of Thessaly must operate in accordance with the Environmental Management System, ISO 14001. Its scope of application encompasses all functions, teaching, and research. This constitutes a systematic approach to environmental management, subject to annual external audits, in order to provide assurance that the University achieves best practices in environmental management.

### **Purpose**

To establish a systematic and auditable framework ensuring compliance with legislation, including controls for the prevention of pollution; efforts to reduce atmospheric emissions and discharges to land and water; as well as the minimization of environmental impacts. The framework will enable the University to balance socio-economic needs with environmental considerations.

### **Objectives**

1. To utilize ISO 14001:2015 for the management of environmental and social impacts, the identification of risks and opportunities, and the achievement of environmental compliance.
2. To identify aspects of the University's activities that may have positive or negative impacts on the environment, prioritizing those deemed significant.
3. To review the operational aspects of the University's activities with both positive and negative environmental impacts, identifying risks and opportunities.
4. To implement and manage pollution prevention processes.
5. To assess environmental performance in order to establish operational controls that lead to improved environmental outcomes and continuous improvement.
6. To manage internal compliance audits to ensure the maintenance of best practices.

### **Actions**

1. Maintain an annual implementation register.
2. Conduct University-wide management reviews.
3. Promote the profile and principles of ISO 14001 across the University.
4. Reassess risk evaluations and control documentation in light of audits and reviews.

### **Benefits**

- a. Achievement of economic or operational efficiency through the implementation of environmentally sound initiatives.
- b. Reduction of the risk of non-compliance with legislation.
- c. Enabling the University to respond to changing environmental conditions, to manage related risks, and to enhance opportunities for improvement.

## 11. Circular economy



The University of Thessaly adopts a circular economy approach to the management of its resources. This will redefine the manner in which the Institution manages its assets, shifting from a linear model to one based on the following principles:

### **Purpose**

1. To align economic and environmental objectives in order to maximize the efficiency of the University's resources.
2. To minimize environmental impacts arising from resource use, including public procurement and supply chains, utilization, end-of-life management, and waste hierarchy prioritization, ultimately ensuring improved cost-efficient management.
3. To implement the core principles of the Circular Economy, such as waste reduction and enhanced utilization of resources through reuse, recycling, and renewal of products and materials within the University's operational activities.

### **Objectives**

A University based on the Principles of the Circular Economy:

1. Prioritizes the use of regenerative resources that reduce environmental impacts: reusable, non-toxic, renewable.
2. Maintains and extends the life cycle of existing assets: repair, upgrade, recycle.
3. Transforms waste into a resource: reuse, remanufacture, creation of secondary resources, recycling, prevention of landfilling, waste prevention and minimization.
4. Designs for the future: longevity, low maintenance, reusability, adaptability.
5. Collaborates with the supply chain as partners, within and beyond the University, integrating circularity into procurement activities.
6. Reviews its business model: full life-cycle costing and life-cycle analysis.
7. Integrates digital technology: connecting organizations to implement the six principles above.

### **Actions**

1. Development of a costing model to be applied during the tendering process for goods and services.
2. Training on the principles of the circular economy and their integration into the University's operations.
3. Management in accordance with the waste hierarchy.

### **Benefits**

1. Reduction of purchasing and disposal costs.
2. Enhanced community engagement.
3. Reduced carbon emissions.

## 12. Procurement



The University of Thessaly is an institution that leverages its resources, influence, and networks to contribute to the economic, social, and environmental well-being of the communities it serves. The University can play a significant role in advancing sustainable development through its procurement practices, by reducing its environmental footprint and promoting social responsibility.

### **Purpose**

To integrate responsible procurement across all aspects of the University's procurement activities—embedding sustainability, social value, responsible sourcing, and supply chain transparency.

### **Objectives**

1. To embed sustainability assurance, social value, and supply chain transparency at every stage of the contracting process, through the Responsible Procurement Plan.
2. To ensure that the Procurement Department continuously enhances its understanding of sustainability and social value, thereby seizing opportunities to reduce negative impacts of procurement activities while maximizing value creation for the environment and society. As part of the University's commitment to sustainability and social value, the Department will support several green commitments.
3. To engage with the business community to develop and strengthen contracting relationships and experience, while contributing to the strengthening of the local and regional economy.
4. To review procurement documentation by integrating sustainable and responsible procurement practices into the University's processes, ensuring that sustainability and social value are systematically considered in all procurement activities.
5. To eradicate modern slavery and forced labor from the University's supply chain.

### **Actions**

1. Utilization of a sustainability tool for each procurement tender.
2. Implementation of training, guidelines, and policies that incorporate sustainability criteria into procurement practices, for all staff involved in procurement.
3. Publication of the University's Modern Slavery Statement in the relevant database (e.g., TISC Report) and enforcement of measures on suppliers who fail to publish a compliance statement or where concerns arise regarding supply chain compliance.
4. Incorporation of sustainability criteria in supplier selection, such as environmental management, social responsibility, and compliance with labor standards.
5. Engagement of the university community in procurement-related decision-making, thereby enhancing transparency and acceptance.
6. Development of equipment and material reuse programs, such as the exchange of furniture and equipment between departments.
7. Establishment of systems for monitoring and reporting on sustainability performance in procurement.

### **Benefits**

1. Cost reduction.
2. Achievement of decarbonization objectives.
3. Addition of social value.

### 13. Sustainable Food



The connection between health and well-being derived from proper nutrition is well established, and this is reflected in the food offered at the University's dining facilities. However, the environmental and social impact of food production and food waste is often overlooked. Food is typically produced far from the point of consumption, transported across great distances with a significant carbon footprint, only to result in approximately two million tons of food waste annually in Greece alone (Eurostat 2021).

#### **Purpose**

The University of Thessaly aims to procure food, beverages, and related catering services in a manner that reduces negative and enhances positive social, ethical, and environmental benefits, while simultaneously encouraging and promoting healthy nutrition and enabling cultural dietary diversity. The objective is to integrate sustainability, including the carbon emissions impact, into the product and service selection process. The University acknowledges its responsibility to encourage its suppliers to minimize the environmental and social impacts associated with the products and services they provide. Active collaboration with all stakeholders will be pursued to ensure continuous development of policy and procedures concerning healthy and sustainable food.

#### **Objectives**

1. To obtain Fairtrade University status from Fairtrade International by 2030 for all food-related activities, and to collaborate with stakeholders on non-food-related fair trade initiatives.
2. To remove all ruminant meat from University procurement that does not comply with agreed standards of animal welfare, low-carbon emissions, and positive environmental practices by 2030.
3. To adopt zero-waste packaging for all new coffee outlets, including the promotion of reuse and refund programs.
4. To increase plant-based food provision by 30% across all catering services by 2030, ensuring that such foods deliver positive environmental and low-carbon benefits.
5. To map carbon emissions associated with food and beverage procurement by 2024 and achieve a 30% reduction by 2030, through measures such as reducing meat-based meals, limiting transport and processing, and promoting the use of local, seasonal, and plant-based foods.
6. To reduce sugar content in University catering outlets by 20% by 2030.
7. To investigate the feasibility of replacing palm oil in food products offered by the University with alternative edible oils.

#### **Actions**

1. Ban on sales of beverages in plastic bottles by 2030.
2. Organization and delivery of activities promoting the importance of fair trade systems.
3. Introduction of refund schemes in University cafés and bars by 2030 in compliance with the University's packaging return objectives.
4. Promotion of plant-based foods and dissemination of environmental and health benefits through campaigns involving staff and students on social media.
5. Delivery of educational seminars and awareness sessions encouraging staff and students to engage in carbon footprint awareness activities related to their diet.
6. By 2030, all University food suppliers shall comply with the University's sustainability criteria and report as a contractual KPI.

7. Procurement of food from local producers and University farms to reduce the carbon footprint associated with transport.
8. Preference for organic and certified products free from pesticides and other harmful chemicals.
9. Development of educational gardens for students across all departments to learn about sustainable agriculture and food production.
10. Promotion of reusable utensils and containers to reduce plastic waste.
11. Development of monitoring and evaluation systems to track progress on sustainable food initiatives.
12. Public dissemination of achievements and improvements in the field of sustainable food.



## 14. Governance



Sustainability is intrinsically linked to all areas of the University's activity. Governance at the University of Thessaly encompasses the formulation of policies, procedures, and structures that enable the institution to embed the principles of sustainability into every aspect of its operations. For the University to be truly sustainable, the thematic areas within this strategy must be addressed across its entire strategic framework, activities, and operations. Teaching, research, operations, and community engagement must all integrate sustainability in order to avoid adverse impacts on the environment and society. Sound governance in the field of sustainable development is critical for the successful implementation and long-term maintenance of programs and initiatives that aim to secure the environmental, social, and economic sustainability of the University.

### **Purpose**

To integrate sustainability across all governance streams, ensuring that decision-making incorporates, wherever possible, sustainability impacts.

1. To develop a set of sustainability criteria to assist decision-making at all levels within the University and provide relevant guidance.
2. To consider the application of a Sustainability Impact Assessment methodology for all University committees (using the sustainability criteria mentioned above), in order to identify the principal impacts of any proposed activity swiftly and effectively.
3. To include core sustainability requirements within the Integrated Planning Process.

### **Objectives**

To embed sustainability within all governance streams, ensuring that decision-making both defines and, where feasible, takes into account sustainability impacts.

1. Development of a comprehensive set of sustainability criteria to support decision-making and provide guidance at all institutional levels.
2. Examination of the potential implementation of a Sustainability Impact Assessment methodology for all University committees, enabling the identification of the principal impacts of any proposed activity swiftly and effectively.
3. Integration of key sustainability requirements into the University's Integrated Planning Process.
4. Achievement of sustainability criteria by December 2030.

### **Actions**

1. Formulation of an action plan to embed sustainable development into all University activities, including teaching, research, and operations.
2. Assurance that appropriate structures and mechanisms are in place at the governance level to support sustainable development, with clear responsibilities and accountability for the implementation of sustainable practices.
3. Promotion of education and research initiatives, including the development of relevant research projects.
4. Sustainable management of the University's financial resources, including energy management, financial investments, and circular economy practices.
5. Establishment of a system for the active participation of members of the University community in decision-making and initiatives related to sustainable development.
6. Implementation of systems for measuring sustainability performance and reporting results to the University community and the wider public.

### **Benefits**

1. Supports the avoidance of unintended consequences arising from decisions that may impact not only the environment and society but also the internal functioning of the University.
2. Enhances the reputation of the University of Thessaly by embedding sustainability within its governance processes.