

2024–2025 ACADEMIC YEAR RESPONSIBLE CONSUMPTION AND PRODUCTION REPORT SDG 12

ISTINYE UNIVERSITY

İSTİNYE ÜNİVERSİTESİ İSTANBUL

CONTENTS

ABOUT US 3
Our Mission 3
Our Vision 3
Our Values 3
APPLICATION AND RESEARCH CENTRES 4
ENVIRONMENTAL AND ZERO WASTE POLICIES 5
OPERATIONAL MEASURES 6
ACTIVITIES 8
Activity List 13
ACADEMIC PROJECTS 14
STUDENT PROJECTS 16
SOURCES 20

ABOUT US

Our Mission

Istinye University's mission is to provide innovative and sustainable education in a student centred institution working closely with industry; to conduct research based on advanced technology; to produce new knowledge and technologies; and to contribute to society by developing solutions to local and global problems.

Our Vision

Istinye University's vision is to become one of the world's leading universities pursuing excellence in education, research, innovation and technology development, with artificial intelligence at its centre.

Our Values

- Respect for people and differences
- Commitment to professional ethics and human values
- Social and community responsibility
- Justice and merit
- Environmental awareness and sustainability
- Lifelong learning
- Collective wisdom
- Participation
- Innovation
- Entrepreneurship
- Leadership

Source: [1] Mission and Vision

APPLICATION AND RESEARCH CENTRES

International Sustainability Application and Research Centre

Istinye University International Sustainability Application and Research Centre (ISU-IRCOS) supports interdisciplinary research, education and practice in sustainability. Guided by the United Nations Sustainable Development Goals, it aims to develop national and international cooperation, strengthen knowledge exchange and contribute to sustainability policies and action plans.

Focus Areas

- Sustainable universities
- Strategic process management for institutional sustainability
- Environmental responsibility and climate change
- Use of natural capital
- Circular economy
- Social impact management
- Community development programmes
- Regional sustainable development strategies and policies

Source: [2] International Sustainability Application and Research Centre

Climate and Environmental Research Centre

Established in 2023, the Climate and Environmental Research Centre aims to raise awareness of climate change and environmental issues and develop interdisciplinary research and institutional cooperation. Its areas of work include scientific and social events, education and sustainable policy development.

Source: [3] Climate and Environmental Research Centre · [4] Climate and Environmental Research Centre Directive

ENVIRONMENTAL AND ZERO WASTE POLICIES

Environmental Policy

Istinye University aims to contribute to environmental protection and public health, beginning with its campuses. Reducing environmental impacts associated with greenhouse gases and other pollutants, water and wastewater, natural resources and waste is central to this approach.

Conservation and efficiency are addressed across education, research, operations, infrastructure and social responsibility, with an emphasis on inclusion, an integrated approach and continuous improvement.

Source: [5] Environmental Policy

Natural Resource Use and Zero Waste Policy

The university considers water and other living and non-living natural resources through a natural capital approach. Efficient resource use, waste prevention and the continued use of materials within the economy form the basis of its circular economy approach.

Education, research and practical work are encouraged to reduce natural resource consumption and the environmental impacts of domestic and hazardous waste. Raising awareness among students, staff and other stakeholders forms part of this work.

Source: [6] Natural Resource Use and Zero Waste Policy

OPERATIONAL MEASURES

Separation of Waste at Source

Waste prevention, material reuse and separation by waste type are central to the university's Zero Waste work. Collection units for glass, paper, metal, plastic and domestic waste support separation at source.



Collection units supporting separation of waste by type at source.

Keeping recyclable materials separate from other waste supports natural resource conservation and material recovery. Waste separation and resource use are topics addressed through education and awareness activities.

Source: [6] Natural Resource Use and Zero Waste Policy · [7] 2024 Institutional Self-evaluation Report, Community Engagement

Management of Medical and Hazardous Waste

Medical and chemical waste are managed separately from domestic and recyclable waste. Appropriate collection equipment and packaging, labelling, safe transport and temporary storage are central elements of these processes.

Collecting sharps separately from other medical waste and using containers appropriate to waste characteristics are practices intended to protect staff and the environment.

Source: [5] Environmental Policy · [6] Natural Resource Use and Zero Waste Policy

Single-use Materials and Resource Efficiency

Reducing the consumption of single-use materials forms part of the university's approach to natural resource use. Choosing reusable products and extending the useful life of materials are central principles for preventing waste.

The circular economy approach considers material production and use together. Education, research and student projects in this area address waste recovery, sustainable materials and responsible consumption.

Source: [6] Natural Resource Use and Zero Waste Policy

Stakeholders and Campus Services

Efficient resource use and waste prevention are addressed through an environmental responsibility approach involving students, staff and other stakeholders. Separate waste collection and reducing environmental impacts in campus services are areas in which this shared approach applies.

Source: [5] Environmental Policy · [6] Natural Resource Use and Zero Waste Policy

ACTIVITIES

Sustainable Future Summit

28 May 2025 · Vadi H Campus

Hosted by Istinye University in cooperation with Genç TEMA, the Sustainable Future Summit brought together academics, students and participants from different sectors. Panels, exhibitions and presentations addressed zero waste, marine microplastics, sustainable food, industrial transformation and environmental awareness.



A photograph from the Sustainable Future Summit.

Exhibition and Demo Day sessions provided a setting for sharing sustainable innovation ideas and young entrepreneurs' projects. Packaging, plastic use and supply chain sustainability were considered alongside industry experience.

Source: [8] Sustainable Future Summit Announcement · [9] Sustainable Future Summit News

Sustainable Textile Designs with Gönül Paksoy

19 March 2025 · Vadi H Campus

The Department of Textile and Fashion Design announced Gönül Paksoy as the guest for its “Sustainable Textile Designs” programme within the design talks series. The programme connects sustainability with textile and fashion design education.



Announcement for the talk on sustainable textile designs.

The talk, scheduled for the V-123 Conference Hall at Vadi H Campus, focuses on knowledge sharing about sustainability in design.

Source: [10] Sustainable Textile Designs with Gönül Paksoy

Terra Madre

17 December 2024 · Vadi H Campus

The Department of Gastronomy and Culinary Arts' Terra Madre programme focuses on the sustainability of local and seasonal foods and biodiversity conservation. Its product presentation and tasting format connects responsible food consumption with gastronomy education.



Announcement poster for the Terra Madre programme on local and seasonal foods.

Source: [11] Terra Madre

Sustainability and Lean Healthcare Symposium

28 November 2024 · Topkapı Campus

Organised through cooperation between the Department of Health Management, MLPCARE and Kaizen Institute Turkey, the symposium brought together healthcare managers, academics and students. Quality, efficiency and sustainability in hospital services were addressed alongside lean management.



Programme poster for the Sustainability and Lean Healthcare Symposium 2024.

Source: [12] Sustainability and Lean Healthcare Symposium 2024 · [13] Sustainability and Lean Healthcare Symposium News

Sustainability in Interdisciplinary Studies

16–17 December 2024 · Vadi H Campus

The theme of the 1st Interdisciplinary Student Symposium, prepared by the Faculty of Economics, Administrative and Social Sciences, is “Sustainability in Interdisciplinary Studies”. The two-day programme was planned as an academic forum for student work on sustainability across disciplines.



Announcement poster for the 1st Interdisciplinary Student Symposium.

Source: [14] 1st Interdisciplinary Student Symposium

Activity List

Date	Activity	Source
08.11.2024[1]	Coffee Workshop	News
28.11.2024	Sustainability and Lean Healthcare Symposium 2024	Announcement
16–17.12.2024	1st Interdisciplinary Student Symposium: Sustainability in Interdisciplinary Studies	Announcement
16.12.2024	Lip Balm Workshop	News
17.12.2024	Terra Madre	Announcement
19.12.2024	Bread Festival	Announcement
03.01.2025	Arab Cuisine Workshop	Announcement
08.01.2025	Perfume Workshop	News
19.03.2025	Sustainable Textile Designs with Gönül Paksoy	Announcement
15.04.2025	The Future of Our Planet	Announcement
28.05.2025	Sustainable Future Summit	Announcement

[1] The publication date is shown for the Coffee Workshop. Announcement links identify scheduled programmes; news links describe completed activities.

Source: [15] 2024–2025 Consolidated Event List, SDG 12 Records

ACADEMIC PROJECTS

Research related to responsible consumption and production addresses the conversion of waste into value-added materials, the circular economy, sustainable food, renewable resources, green transformation and the reduction of environmental impacts.

Funder	Programme or Call	Project Title
TÜBİTAK	Scientific and Technological Research Projects Funding Programme	Investigation of the Effects of New-generation Functional Nanoparticles on the Performance Properties and Interfacial Adhesion of Polyamide 11/Hemp Fibre Biocomposites
TÜBİTAK	Centres of Excellence Support Programme	Value-added Advanced Nanotechnological Materials and Systems for a Sustainable Circular Economy — LignoNANO
TÜBİTAK	Domestic Postdoctoral Research Fellowship Programme	Production of Bacterial Nanocellulose from Waste Using Novel Strategies
TÜBİTAK	2023 Joint Call in Science, Technology and Innovation in Clean, Accessible and Secure Energy Supply	Circular Economy for Waste-to-Energy Conversion: Transforming Local Plastic Waste into Multifunctional Catalysts for Green H_2 Production
TÜBİTAK	Career Development Programme	Synthesis of Innovative Bismuth Sulphide-based Magnetic Nanocomposites and Their Use in Heavy Metal Determination by Flame Atomic Absorption Spectrometry
TÜBİTAK	Priority Areas R&D Projects Support Programme	Development of New Olive Cultivars with Superior Traits and DNA Markers for Advanced Breeding through Innovative Approaches
European Union	PRIMA2020 Section 1 Call 2020 - Agro-Food Value Chain	Development of New Wheat-derived Foods of the Mediterranean Diet with Improved Nutritional and Health Value
TÜBİTAK	Green Innovation Technology Mentoring Call	ÜSİMP Green Transformation Platform

Funder	Programme or Call	Project Title
TÜBİTAK	University–Industry Cooperation Support Programme	Production of Pressure-sensitive Adhesive Polymers through the Synthesis of Bio-based Butyl Acrylate Monomer and Its Use in Emulsion Polymerisation
TÜBİTAK	Short Term R&D Funding Programme	Production of EPS from Different Yeast Genera and Determination of Their Technofunctional, Antioxidant and Probiotic Properties
TÜBİTAK	Career Development Programme	Development of Targeted Nanocarriers for the CRISPR/Cas9 System Using Renewable Resources
Republic of Türkiye Ministry of Industry and Technology	Agricultural Infrastructure Development Project	Production of Pistachio Rootstocks and Plantlets through Tissue Culture
TÜBİTAK	Short Term R&D Funding Programme	Ecological Improvement for Gases Used in Gas-type Particle Detectors

Source: [16] TTO Academic Projects List, TÜM Sheet, SDG 12 Records

STUDENT PROJECTS

Student projects address food waste recovery, sustainable nutrition, materials development, textile upcycling, environmental awareness and resource efficiency.

TÜBİTAK 2209 2024/1 Call Period

Project Title	Funder
Sustainable Campus: From the Green Teaching Kitchen of the Department of Gastronomy and Culinary Arts to a Green Campus	TÜBİTAK
Use of Hazelnut Waste (Shells, Husks and Skins) as a Cocoa Substitute in Cookie Production	TÜBİTAK
Baklava Culture in the Ottoman Period from the 15th to the 19th Century and Practical Sustainable Recipes	TÜBİTAK
Comparison of Sustainable Dietary Preferences among Graduate Chefs of the Department of Gastronomy and Culinary Arts and Industry Chefs	TÜBİTAK
The Conscious Kitchen: Compost Production from Kitchen Waste by Istinye University Gastronomy and Culinary Arts Students	TÜBİTAK
Potential Use of Coffee Waste in Cookie Production	TÜBİTAK
Evaluation of the Use of Mulberry Flour in Gluten-Free Cookie Production	TÜBİTAK
Isolation of EPS from Probiotic S. boulardii and Its Use in the Encapsulation of Selected Probiotics	TÜBİTAK
An AI-supported Campus Sustainability and Energy Optimisation System Developed in Python	TÜBİTAK
Development of a Smart Upcycling Application That Tracks Food Shelf Life and Suggests New Uses to Prevent Household Food Waste	TÜBİTAK
Implementation of Lean Production Techniques in Jewellery Workshops	TÜBİTAK
Investigation of Consumers' Sustainable Fashion Purchasing and Disposal Behaviour through Conjoint Analysis and Development of a Market Simulation	TÜBİTAK

Project Title	Funder
Analysis of Consumer Footwear Choices Using Adaptive Choice-based Conjoint Analysis	TÜBİTAK
Synthesis, Functionalisation and Polymerisation of Phenyl-based Silsesquioxane Cages	TÜBİTAK
Measuring the Nicotine Concentration in Solanum melongena Cooked with Different Methods	TÜBİTAK
Synthesis of the Mineral Kenyaite through Waste Glass Recycling and Its Potential for Catalytic Applications	TÜBİTAK
Highly Sensitive Determination of Heavy Metals in Camellia sinensis and Matcha Tea Samples by Flame Atomic Absorption Spectrophotometry after Adsorbent-assisted Extraction Using Magnetic Dispersive Solid Phase Extraction	TÜBİTAK
Application of Magadiite Synthesis from Waste Glass as a Layered Silicate for Sustainable Energy and the Environment	TÜBİTAK
Relationship between Emotional Eating Habits and Sustainable Nutrition in Adolescents	TÜBİTAK
Investigation of the Effects of Coffee Consumption on Raven's Standard Matrices Test Performance Using Electroencephalography	TÜBİTAK

Source: [17] TÜBİTAK 2209 Student Projects List, 2024/1 and 2025/1, SDG 12 Records

TÜBİTAK 2209 2025/1 Call Period

Project Title	Funder
Determination of Advanced Glycation End-product Precursors in Commonly Sold Commercial Pet Foods: Methylglyoxal and Glyoxal	TÜBİTAK
Data Collection through Value Stream Mapping and Development of a Carbon Footprint Algorithm at Köprü Metal	TÜBİTAK
Determination of Heavy Metals in Green Tea Samples by an AAAS System after CaO Nanoparticle-based Dispersive Solid-phase Extraction	TÜBİTAK
Development of Environmentally Friendly Lignin/MSN/CMC/Cyclodextrin Microspheres for Dual-mode Adsorption of Pharmaceutical Pollutants	TÜBİTAK
Synthesis and Performance Evaluation of an Environmentally Friendly Nano-adsorbent for Removing Pharmaceutical Pollutants from Water	TÜBİTAK
Development of Sugarcane-based Biofilm Systems Incorporating Silver Nanoparticles Produced through Green Synthesis: Biocompatibility and Antibacterial Analyses	TÜBİTAK
Development of a High-protection-factor Dermocosmetic Formulation with Barrier Properties Containing Pomegranate (Punica granatum L.) Peel Extract	TÜBİTAK
The Effect of Problematic Social Media Use and Appearance-related Social Media Consciousness on Sustainable and Healthy Eating among University Students	TÜBİTAK
Investigation of the Relationship between Perceived Stress, Eating Behaviour and Sustainable Nutrition Attitudes among People Working in Institutional Food Services	TÜBİTAK
The Effect of Food Waste Awareness Education on University Students' Food Waste Knowledge, Attitudes and Eating Behaviour: A Pre-test/Post-test Quasi-intervention Study	TÜBİTAK
The Relationship of Food Packaging Choices with Sustainable Eating Behaviour and Environmental Sensitivity among Young Adults	TÜBİTAK
Sensor-based Toy Design Using Upcycled Textile Materials: Supporting the Motor and Emotional Development of Children with Special Needs through the "Safe in My Heart" Toy	TÜBİTAK

Project Title	Funder
Reusing Waste Fabrics: Jewellery Design with Handmade Paper	TÜBİTAK
Evaluation of Vegetable and Fruit Peel Powders as Functional Ingredients in Sustainable Gluten-free Rusk Production	TÜBİTAK
Investigation of University Students' Attitudes towards Environmental Pollution	TÜBİTAK
Measuring Awareness within the Framework of Multiple Crises and the Sustainable Development Goals: The Case of Istinye University	TÜBİTAK
Biosensor Production from Food Waste: Jujube-derived Carbon Dots with Chitosan Biofilm	TÜBİTAK
Development of a Biodegradable Food Packaging Film from Coffee Grounds	TÜBİTAK
Reinterpreting Traditional Turkish Oya Motifs in Local Product Packaging: A Proposed Model for Sustainable Packaging with Cultural Identity	TÜBİTAK

SOURCES

Institutional Sources

[1] Mission and Vision

[2] International Sustainability Application and Research Centre

[3] Climate and Environmental Research Centre

[4] Climate and Environmental Research Centre Directive

[5] Environmental Policy

[6] Natural Resource Use and Zero Waste Policy

[7] 2024 Institutional Self-evaluation Report, Community Engagement

[8] Sustainable Future Summit Announcement

[9] Sustainable Future Summit News

[10] Sustainable Textile Designs with Gönül Paksoy

[11] Terra Madre

[12] Sustainability and Lean Healthcare Symposium 2024

[13] Sustainability and Lean Healthcare Symposium News

[14] 1st Interdisciplinary Student Symposium

Project Activity and Waste Records

[15] 2024–2025 Consolidated Event List, SDG 12 Records

[16] TTO Academic Projects List, TÜM Sheet, SDG 12 Records

[17] TÜBİTAK 2209 Student Projects List, 2024/1 and 2025/1, SDG 12 Records