

2023-2024
SDG 12 REPORT



12. Responsible Consumption and Production



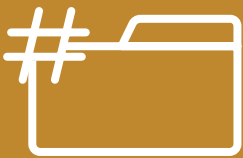
Scholarly Output:
45



International
Collaboration:
2



Field-weighted
Citation Impact:
0.84



Number of Current
Projects:
13



Number of Annual
Events:
41

1. We Are Melting What We Consume

This project, initiated to raise awareness about recycling and enhance environmental sensitivity, involves providing information to students about waste management practices at ÖzÜ. After the information session, students join the cleaning staff to collect waste on campus.

2- Organic waste

Organic waste from the cafeteria is regularly collected and utilized as animal feed and compost.

3. Limited Edition

İzel Ergül, Selen Bulut, students from Faculty of Architecture and Design, offer an abstract perspective on vital messages that water, losing its ability to communicate, can no longer carry. Each drop bears deep traces of environmental pollution caused by humans; it whispers memories of the past and warnings about the future to us. 'Limited Edition' presents an interactive experience with a 'dirty water vending machine' designed to illustrate that water resources are finite and demonstrate their future impacts. Inside the machine are containers filled with dirty water collected from streams and crushed plastic bottles. When users wish to obtain water, the machine dispenses tokens with impactful messages aimed at raising awareness.



*Limited Edition by
İzel Ergül, Selen
Bulut*

4. Waste Management of Özü Campus

In 2023, the total waste at the campus was 194,254 kg, 45% of this waste is recyclable, 50% is organic waste and 5% is hazardous waste. Apart from the packaging wastes and garbage that are routinely given to the municipality, hazardous waste and other waste are given for disposal and recycling in return for a fee. By generating income from waste instead of spending waste with the principle of polluter pays, while the cost of the expenditure was covered, an extra corporate profit was achieved.

5. Evaluating Sustainable Technologies in Air Cargo through Digital Transformation

Celal Havle, with a scholar from Galatasaray University addressed the critical role of sustainability within the context of digital transformation, reflecting the increasing focus of global economic contributors on sustainable practices. Amid rapid technological advancements, companies worldwide began integrating digital technologies into their sustainability strategies. This shift underscored the need for businesses, especially those undergoing transformation, to invest in technologies that promote sustainable practices.

Notably, the expansion of digital transformation has fueled a global increase in e-commerce, which has, in turn, heightened the size and complexity of supply chain networks. The air cargo industry emerged as a pivotal player in this network, influencing the sustainability of economic, social, and environmental aspects on a global scale. Recognizing this, the study proposed a model for evaluating sustainable future technologies within the air cargo sector, viewed through the lens of digital transformation.

A multi-criteria decision-making (MCDM) approach was used, employing the intuitionistic fuzzy analytical network process (IF ANP) to validate the proposed model. This validation was conducted within the Turkish air cargo industry, highlighting how advanced decision-making techniques can support responsible and sustainable innovations in air cargo, aligning closely with SDG 12's goal of fostering more sustainable production and consumption patterns.

6. Lost Waters of Istanbul: Deciphering Cultural and Natural Landscapes Through Mapping:

Kaan Özgün and Beliz Bayraktar's research study examines Istanbul, historically known as a water city, has long relied on aquifers and conveyance structures. Today, urbanization and excessive groundwater use threaten these systems, leaving only 174 of 321 creeks. The paper explores how natural elements like creeks and springs influenced Istanbul's urban heritage, including bostans and hagiastas. Using GIS, researchers compared historical and modern land use through maps like the 1845 Mühendishane-i Berri Hümayun map and the "Carte de Constantinople." Focusing on the historical peninsula, they analyzed its past and present features, revealing significant insights for land use, tourism, and heritage policies.

7. Electronic Waste Management at Özü

Özyeğin University developed a comprehensive electronic waste management plan in 2023 based on the 3R (Reduce, Reuse, Recycle) approach in alignment with environmental legislation and the ISO 14001 Environmental Management System Standard. The plan includes the following items.

1. Awareness and Training: One of the fundamental principles is to raise awareness among all stakeholders. Training sessions are conducted and announcements were made to educate students, faculty, administrative staff, and the entire university community about the importance of responsible electronic waste management.
2. Electronic Devices Usage: Özü provides laptops to all of academicians and administrative staff, total of 159 units. To reduce electronic waste, Özü operates on a 6-year laptop replacement cycle. When laptops are replaced, their old components are carefully evaluated for reusability. This practice not only minimizes electronic waste but also results in substantial cost savings. This approach not only minimizes electronic waste but also contributes a significant financial value of 110,000 Turkish Lira