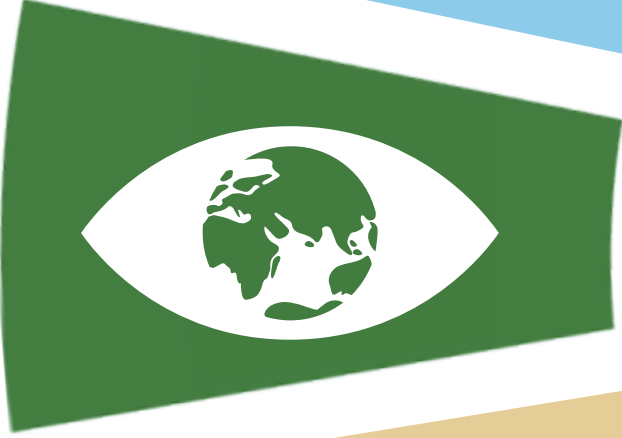


SDG PROGRESS REPORT

on SDG-13 CLIMATE ACTION

20
21



SDG PROGRESS REPORT

ISTANBUL MEDENIYET
UNIVERSITY

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Sustainability Office**

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SDG Icons

<https://www.un.org/sustainabledevelopment/news/communications-material/>

Sustainable Development Report Maps

<https://dashboards.sdgindex.org/profiles/turkey>

SDG Statics

<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

https://www1.undp.org/content/seoul_policy_center/en/home/sustainable-development-goals.html



There is no country in the world that is not experiencing first-hand the drastic effects of climate change. Greenhouse gas emissions continue to rise, and are now more than 50 percent higher than their 1990 level. Further, global warming is causing long-lasting changes to our climate system, which threatens irreversible consequences if we do not take action now.

The annual average losses from tsunamis, tropical cyclones and flooding amount to hundreds of billions of dollars, requiring an investment of US\$6 billion annually in disaster risk management alone. The goal aims to mobilize \$100 billion annually by 2020 to address the needs of developing countries and help mitigate climate-related disasters.

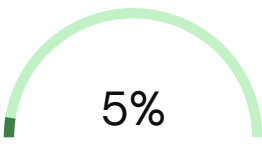
Helping more vulnerable regions, such as land locked countries and island states, adapt to climate change must go hand in hand with efforts to integrate disaster risk measures into national strategies. It is still possible, with the political will and a wide array of technological measures, to limit the increase in global mean temperature to two degrees Celsius above pre-industrial levels. This requires urgent collective action.

+3,2°C

expected increase in Global temperature by 2100

26 TRILLION \$

in economic benefits could be triggered through bold climate action, by 2030



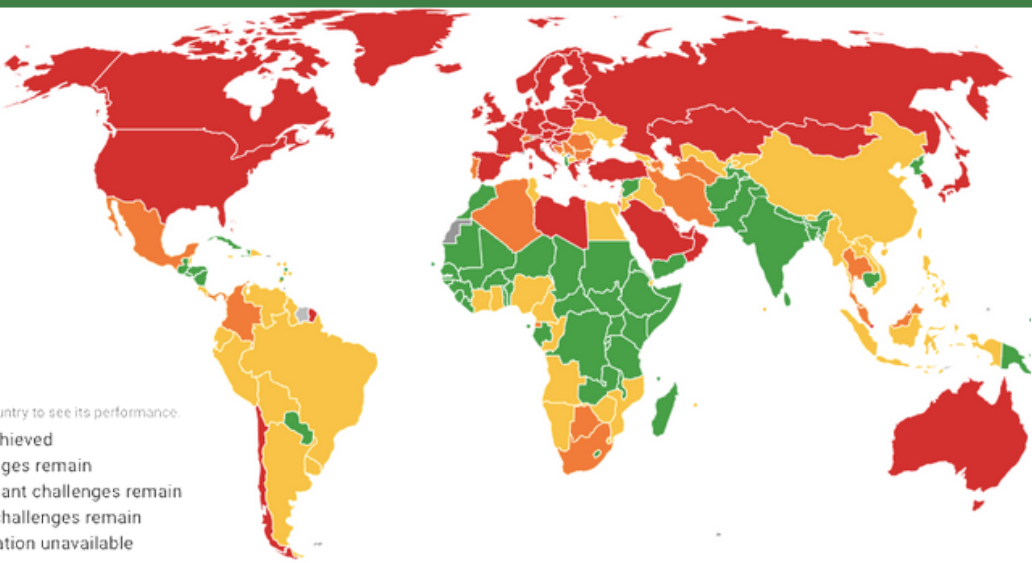
for each 1°C of temperature increase, grain yields decline by about

+20 CM

the global average sea level rose since 1880

85 COUNTRIES

have national disaster risk reduction strategies aligned to the Sendai Framework



- SDG achieved
- Challenges remain
- Significant challenges remain
- Major challenges remain
- Information unavailable

2 PROGRAMMES for local education on climate



university climate ambassador

4 COLLABORATES with NGOs on environmental education

160+ TREES

planted to neutralize released carbon



Istanbul Medeniyet University collaborates with numerous public institutions, research institutions, universities, local schools, and NGOs toward numerous goals that would help us achieve the objective of taking urgent action to combat climate change and its impacts.

In addition to our operational efforts, we, as a university, also see our students as leaders of the future. Therefore, we aim for each and every one of our students to become leaders in the society in implementing sustainable development goals through their research and social responsibility projects and thus, support them in their urgent action to combat climate change efforts.

Local Education Programmes on Climate

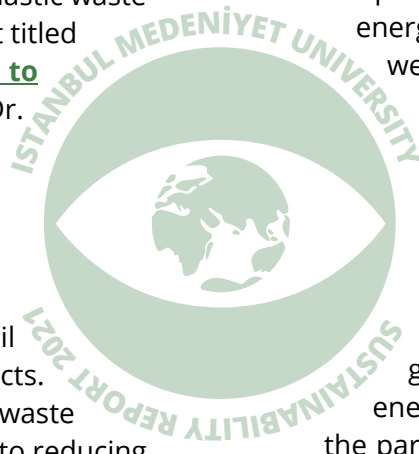
Yüsra TEMEL, a student of the Department of Preschool Education, developed a student project to raise awareness about reducing plastic waste and waste recycling. TEMEL's project titled **"Don't Let our Tomorrows Go to Waste"** was consulted by Asst.Prof.Dr. Nihan ŞAHİNKAYA, and supported by Gül Nesil Private Kindergarten. Activities on zero waste and recycling were held for 9 weeks. In the activities, she explained the importance of reuse and recycling to reduce fossil fuel consumption from plastic products. State that the transition to a zero-waste cycle will make a major contribution to reducing emissions and tackling the climate crisis. Also, recycling bins were provided to the project school. Brochures were distributed to inform the target audience about zero waste and recycling. With the information given, the wastes suitable for recycling in the school and students' houses were collected and thrown into the recycle bins to contribute to recycling. As the last activity of the project, municipal teams were called to the school, and the wastes delivered to the teams for recycling.



27 July 2021

Zero Waste Education for Kindergarten Students

A workshop on renewable and clean energy production was held on the second day of Istanbul Medeniyet University Sustainability Week events. **"ElectriCITY: Energy Preferences Game"**, a role game, which the participants produce energy policies as decision makers in the energy production of the city, was played at the workshop. The workshop was conducted by the Department of City and Regional Planning Research Assistant Ayça ÇELİKBİLEK and geological engineer Gökhan SAPMAZ. At the beginning of the workshop, general information about the energy system and energy management used in cities was given. In this context, the participants were informed about primary energy sources such as fossil fuels, renewable energy sources and other energy sources. Finally, in order to understand why energy policies are important for the environment, information was given to the participants about air pollutants, greenhouse gases and water consumption resulting from source selection in energy production. Thus, the participants were made to understand the importance of energy management in the global climate crisis. In the second part of the workshop, the game, which is a simple simulation of the energy system in cities, was introduced to the participants and the rules of the game were explained. During the game, as in real life, the carbon costs of energy investments were increased and the participants were made to understand the effects of their energy choices on the climate crisis. In the 6 different stages played in the game, two special stages were played where carbon emissions must be kept at a certain level and carbon trade can be made between groups. Thus, the issue of justice in the climate crisis was discussed. At the end of the workshop, the total cost of the energy policies produced by each team for their city was calculated. The workshop ended with the announcement of the first three teams that became low-carbon society at the end of the 6 stages.



Enerji ve Çevre: Neden Önemli?

ENERJİ İLE İLİŞKİLİ ETKİLER	
Hava Kirlenimler*	
NO _x	%93
CO	%61
SO ₂	%81
PM _{2,5}	%63
Sera Gazları	
CO ₂	%97
Metan	%42
Azot Oksit	%12
Su Kullanımı	
Tatlı yeryüzü suyu çekimlerinin %51'i elektrik enerjisi için kullanılmakta	
<small>* yakıt sistemi elektrik, sanayi vd.3. petrol ve ilgili emisyonları ve etkilerini içerir</small>	



21 December 2021

ElectriCITY: Energy Preferences Game



Environmental Education Collaborate with NGOs

The first of "**Urban Workshops**" organized by the Department of Urban and Regional Planning of Istanbul Medeniyet University was held online on Thursday, 14th October 2021. The workshop, that is open to general public, was held in partnership with **350org**, an international environmental organization addressing the climate crisis and was moderated by our Urban and Regional Planning Department Res.Asst. Ayça ÇELİKBİLEK was coordinated by Efe BAYSAL and Ege TOK from 350 Türkiye. The workshop hosted 16 participants from different disciplines and it was carried out interactively through the game "**Parata: A Story of Climate Justice**" designed by 350 Türkiye. In the workshop, primarily, basic environmental literacy training was given to the participants; Information on the climate crisis, the impact of human activities on climate change and the effects of climate change on living things was presented, and then a game based on the climate crisis was played. In the game built on a fictional country, every single participant had a unique role and evaluated the effects of climate justice on different social groups. The global problem of 'whether we all in the same boat or not?' was questioned in terms of climate justice and its impacts by considering social and personal disparities.



The third-year students in the Turkish Language Teaching Department collected donations by reaching to their immediate circles via social media in order to **donate saplings to TEMA** Foundation, a NGO for reforestation and the protection of natural habitats in Turkey, under the guidance of their instructor Prof. Dr. Özlem FEDAI as part of the Social Service Practices course.

The 20th seminar of the "**Istanbul Urban Studies**" seminar series organized by the Department of Urban and Regional Planning was held online on October 12, 2021. The seminar, that is open to general public, was held in partnership with **Kadıköy Climate Ambassadors**, a NGO formed by Kadıköy residents, which produces new projects by raising awareness and information on climate change. At the seminar IŞIK BAŞTUĞ, coordinator of Kadikoy Climate Ambassadors, presented the study titled "**İklim Krizinde Yerel Katılımın Önemi ve Kadıköy Örneği**" (Importance of Local Participation in Climate Crisis: Kadıköy Example). BAŞTUĞ firstly evaluated the global climate change crisis and its current and expected risks on ecological balance. The researcher also referred to the essential precautions to prevent cities from climate crisis. BAŞTUĞ who mentioned the impacts of climate change across the world and Istanbul.

The 26th seminar of the "**Istanbul Urban Studies**" seminar series organized by the Department of Urban and Regional Planning was held online on November 24, 2021. The seminar, that is open to public, was held in partnership with Public Expenditures Monitoring Platform, a NGO that aims to monitor the process through which the Parliament decides on the distribution of the public expenditures, researchers. Prof. Dr. Nurhan YENTÜRK and Işık BAŞTUĞ presented their study titled "**İklim Krizi ile Mücadelede Belediye Bütçeleri ve İstanbul Örneği**" (Municipal Budgets in the Fight against Climate Crisis and the Case of Istanbul). The researchers shared the results of their research report published in November 2021 about monitoring public fundings allocated to fight against environmental protection and climate change in Turkey. BAŞTUĞ started her presentation by reminding that most countries including Turkey will be facing an extensive ecocide and climate-related disasters in near future. She further added that lack of climate change related policies of central and local bodies is the main factor creating this situation. However, she mentioned that legal agreements and financial aids for implementing adaptation and mitigation policies to fight against global climate crisis are encouraging steps for the future. Evaluating the results of the study, YENTÜRK pointed out that allocated budgets of 14 metropolitan municipalities for environmental protection and climate change have been decreasing since 2018 and melting due to the high inflation rate.

On the third day of the **Sustainability Week**, planned and organized by IMU International Performance Development Center and Medeniyet Gemisi student club on 20-24 December 2021, a presentation on green transition was delivered by Prof.Dr. Hasan MANDAL, President of Scientific and Technological Research Council of Turkey. In his presentation titled **"Co-Development and Co-Achievement toward a Sustainable Future and Green Transition"**, Prof. MANDAL shared with the audience the global risk landscape of the next decade, which predicts that in addition to the risks of infectious diseases, food and fiscal crises, information infrastructure breakdown, and cyberattacks, green issues such as climate action failure, biodiversity loss, natural disasters, human-made environmental disasters, and extreme weather events will come under the global spotlight in the near future. From an academic point of view, he underlined that the scientific community systematically perceives a stronger probability and greater impact for these global risks when compared to the business world and that the environmental risks and inequalities require our immediate concern. He stressed that conventional methods would fall short of resolving all these risks and the solution depends on social co-learning or the "co-development and co-achievement" approach. He then shared the main bullet points from the newest report of the Intergovernmental Panel on Climate Change (IPCC) with the audience. Prof. Dr. MANDAL noted that the impact of climate change on ecosystems is no longer a potential scenario and has manifested itself in real life in our country particularly since last year. He informed the audience that the best-case scenario about climate change predicts a temperature increase of 1.5°C, commenting that unfortunately, we will be having more of such increases in temperature which lead to more frequent heatwaves along with heavy rainfall and drought.

On the fourth day of the Sustainability Week, a presentation on global climate change was delivered by Prof.Dr. Barış ÇALLI from Marmara University. In his presentation titled **"Can We Turn the Climate Crisis into an Opportunity?"**, Prof.Dr. ÇALLI first explained the greenhouse gases that are the cause of global climate change, informing that the amount of these gases in the atmosphere, which actually make life possible on our Earth, is increasing day by day as a result of human activities. ÇALLI pointed out that the effects of the climate change such as heat waves, heavy rains, and droughts have already become visible in the world and provided information about Paris Agreement, the most comprehensive climate agreement that world leaders have agreed upon which aims to limit the global temperature increase to 2°C and to 1.5°C if possible. He noted that the two main solutions to combat the climate crisis are to reduce our carbon emissions and increase our carbon sequestration capacity. He noted that the goal of the European Green Deal is to reset net greenhouse gas emissions in 2050.



İklim Mücadele

2050 -60 yılına kadar karbon emisyonunu azaltarak net sıfır emisyon (net zero) hedefini gerçekleştirmeli.
Karbon emisyonunu azaltmak için yenilenebilir enerji kaynakları kullanmalı.
Karbon emisyonunu azaltmak için zengin ülkelerin gelişmekte olan ülkelere finansal destek sağlaması sağlanmalı.



23 December 2021

Seminar on Global Climate Change

In the 2nd seminar of the **"Istanbul Urban Studies"** seminar series organized by our Urban and Regional Planning Department, Geological Engineer Gökhan SAPMAZ presented his study **"Kent Planlamasında Mikrobölgeleme ve Risk Yönetimi: İstanbul İçin Bir Analiz"** that is prepared with our department member Res.Asst. Ayça ÇELİKBİLEK. He mentioned the importance of microzoning maps for disaster risk reduction and risk management. He discussed that microzoning underestimated in Turkey's planning system is an obligation to impose for a healthier urban transformation in Istanbul which is prone to disaster based risks. Sapmaz also evaluated the risks of secondary disasters caused by climate change. He said that the rise in sea level in particular poses a great risk not only for residential areas, but also for post-disaster assembly areas, and drew attention to the need to reschedule temporary accommodation areas.

İklim Değişikliğinin Etkileri Halihazırda Gerçekleşiyor ve Çözüm Bekliyor
İklim değişikliğinin ekosistemler üzerindeki etkileri halihazırda gerçekleşmekte olup bu etkilerin geleceğe yönelik şiddet ve sıklığı net -sıfır salım hedefleri içeren azaltım senaryolarına dayanacaktır.

22 December 2021

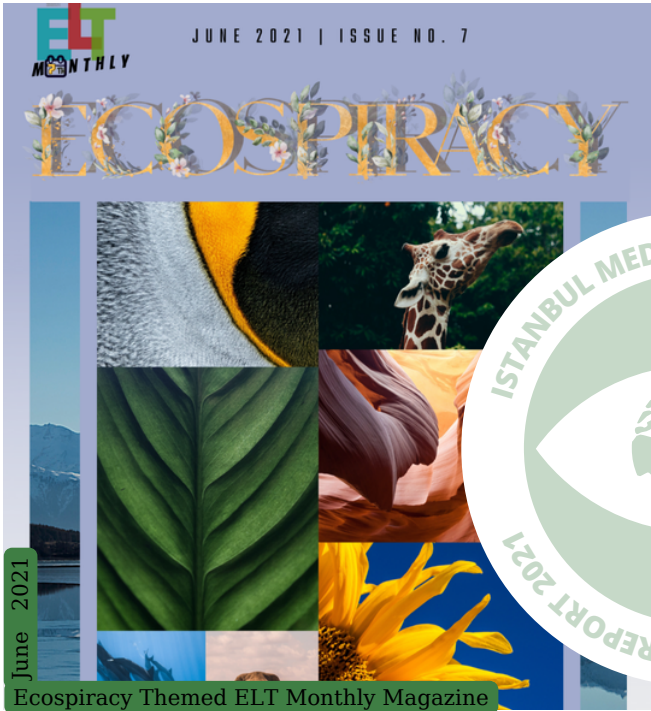


- Aşırı sıcaklar**
 - Daha sık
 - Daha yoğun
- Sajanak yağış**
 - Daha sık
 - Daha yoğun
- Kuraklık**
 - Bazı bölgelerde artış
- Yangın havası**
 - Daha sık
- Okyanusidenizler**
 - Isınma
 - Asitleşme
 - Okyanus azalması

Seminar on Sustainable Future and Green Transition



The seventh edition of Istanbul Medeniyet University English Language Teaching Department's **"Ecospiracy"** themed **ELT Monthly Magazine** has been issued with the hard work of our students. This issue aims environmental education for readers and, included topics are ecology and its history, secrets of the meat industry, eco-friendly buildings, and urban planning, art representing ecological culture, cruelty-free emblems, mysterious places to visit, music by recycling and its effects on the human brain, the unknown side of commercial fishing and its effects on the oceans. Also this issue included, a recipe for a vegan meal with mushrooms from our chef-writer Ekin BÜT.



The Psychology Club of our university held an online event called **"2nd Psychology Days"** on May 29-30, 2021. Many psychologists and students, who are experts in the field, participated in this event with the theme of 'Boundaries'. In the last session of the event, postgraduate student İpek DEĞİRMENCI delivered a speech on **"Environment and Border Awareness: Ecological Life Practices"**. She stated that global climate change has devastating effects on ecosystems and living things and suggested that these effects, created by nature and human beings, can be resolved on a social basis with ecological reasons. She further stated that the solution should start from the person himself/herself and his/her own environment and touched on the conflict between human life and wildlife. She emphasized that people should approach the living space they share with other living things, plants, and nature with a respectful attitude.

Our University's Psychology Club organized an online event called **"Sustainable Living: Global Climate Change and Water Management"** on May 27, 2021. The speaker of the event was Prof.Dr. Erkan ŞAHİNKAYA from our University. In this event, global climate change, which has become a major threat to the world, was addressed and aimed to raise awareness on this issue. In addition to climate change, topics such as water management and sustainable life were also discussed and the steps that people would take towards climate change were emphasized.



Our university's IMU Career Club hosted Halit Buğra ÇELİK, from the field of textile, under the topic of **"Sustainable Fashion and Entrepreneurship"** at the event held online on October 20, 2021. ÇELİK stated that the ready-made clothing and textile industry is the largest sector in the world in terms of greenhouse gas emissions constituting 10% of the total carbon emissions. He mentioned the environmental and material footprint of the fabric industry. He stated that their goal is to reduce the impact on global climate change by producing products with materials suitable for recycling. In addition, he underlined that they are trying to minimize environmental damage by planting a tree for each product sold by the brand.



Dr. Cem KINAY was the guest speaker of the **"Tourism in the Future"** Seminar, which was held online on November 11, 2021 by the Department of Tourism Management, Istanbul Medeniyet University Faculty of Tourism. In his speech, in which future tourism trends were the main theme, Cem KINAY shared information about experiences, sustainable living criteria and tourism of the future, as implemented in line with the United Nations' Sustainable Development Goals. Among the interesting concepts discussed the seminar were climate and environmental responsibility, cherishing and protecting the nature, sustainable agriculture and rural tourism, minimum carbon footprint, responsible consumption, innovation in tourism, local rural life and respecting, protecting and cherishing historical legacies, space tourism, holistic tourism, metaverse, virtual reality experiences, a new generation of life, technology, and digital funds, and new-generation hotel concepts.

The second meeting of the **"Turkey& Ukraine Law Seminars"**, organized within the framework of the 5-year Memorandum of Understanding agreement signed between our university and Ukraine Yaroslav Mudryi National Law University, was held online on November 26, 2021. The meeting started with the presentation of Res.Asst.Dr. Feyzan OLGUNSOY of our Constitutional Law Department titled **"Challenges of Evoking Environmental Rights before Turkish Constitutional Court"** on the suability of environmental rights within the framework of human rights before the Constitutional Court. She was followed by Lect.Rinata KAZAK, Yaroslav Mudryi National Law University Legal History Department member, who delivered her presentation on sustainable development goals, climate change and environmental protection in Ukraine, titled **"Concept of Sustainable Development and Environmental Protection: Case Study of Ukraine."**

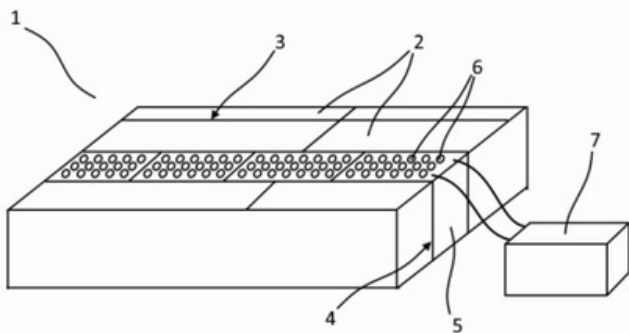
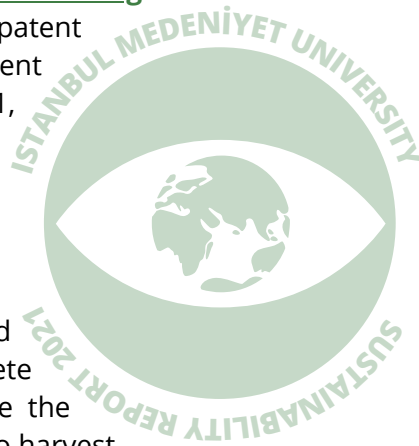
The academic staff members of our university carry out research on strengthening resilience and adaptive capacity to climate-related disasters; integrating climate change measures into policies and planning; improving awareness-raising and capacity on climate change; implementing the United Nations Framework Convention on Climate Change; and promoting mechanisms for raising capacity for climate change-related planning and management, publish the results of their research and share them with other researchers, decision-makers, stakeholders, and the public as a foundation for policies toward achieving SDGs.

The project titled **"Potential Losses and Gains of Government Incentives for Renewable Energy Resources"**, involved Istanbul Medeniyet University Faculty of Political Sciences Public Finance Department Member Asst.Prof.Dr. Sinan ATAER as a researcher, has reached the final stage. At first, a field study on environmental literacy was applied to citizens. The participants were asked questions about traditional energy production methods, renewable energy sources and renewable energy production methods. Then, once views were collected about the role of the state in energy production and in creating energy policies, researchers obtained necessary data from the participants who make up the individual consumption side of energy. After that, the data requested from both the industrialists representing the industrial energy consumption and the representatives of the energy production and transmission companies representing the supply side were obtained by interview. This study aims to develop policy suggestions accurate in terms of energy efficiency and also form public opinion about clean energy technologies. The number of projects based on such qualitative data on renewable, affordable and clean energy is increasing day by day.



The book titled **“Global Transformation in Energy System, Renewable Energy, and Public Policies”** authored by Asst.Prof.Dr. Dilek AKBAŞ AKDOĞAN from IMU Department of Public Finance was published. The author first explained how renewable energy sources are used as a tool in the fight against climate change and its effects within the framework of climate action plans of countries. Then, she emphasized the importance of renewable energy sources for economic goals such as sustainable economic growth. For the purposes of using and disseminating renewable energy resources for sustainable economic growth and economic development, she analyzed in detail the EU’s renewable energy policy within the scope of partnerships at EU level and Turkey’s renewable energy policy.

An invention by Asst.Prof.Dr. Fatih ÖZALP, from the Department of Civil Engineering titled **“Concrete Roads and Grounds Harvesting Energy”** has been patented. The patent was registered by the Turkish Patent and Trademark Office on October 21, 2021. The project aims to meet this need and to achieve energy conservation by harvesting the energy caused by vibration on concrete roads or floors. Thanks to the piezo-electric transducer system positioned in the slots formed on the concrete blocks of the roads or floors that are the subject of the invention, it is aimed to harvest energy from the loads of the vehicles passing over them. In this way, it was aimed to reduce the consumption of harvested energy and fossil fuels and undesirable effects such as greenhouse gas emissions to the environment, and to prevent carbon emissions caused by electricity production equivalent to the estimated harvestable energy.



Concrete Roads and Grounds Harvesting Energy