AGÜ

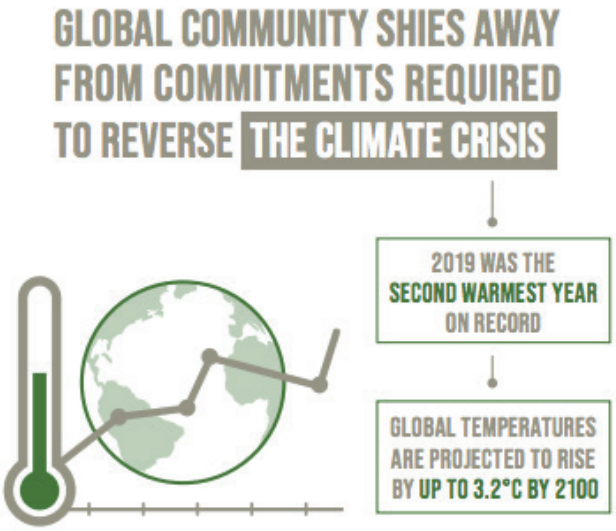
2021
Sustainability Report
SDG13

ABDULLAH GÜL
UNIVERSITY

SUSTAINABLE DEVELOPMENT GOALS

SDG 13 aims to **take urgent action to combat climate change and its impacts.** Climate finance from developed countries to developing countries has increased day by day. Annex I Partied to the Paris Agreement indicated that total climate finance reached an average of $48.7 billion in 2017-2018.

The Paris Agreement, adopted in 2015, aims to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 1.5 degrees Celsius above pre-industrial levels. The agreement also aims to strengthen the ability of countries to deal with the impacts of climate change, through appropriate financial flows, a new technology framework and an enhanced capacity building framework.



A total of 85 countries have reported having a national disaster risk reduction strategy aligned with the Sendai Framework for Disaster Risk Reduction 2015–2030 to some extent since its adoption in 2015 2021 is one the seven hottest years between 2015-2021, with a global average temperature of 1.11±0.13 °C above predicted pre-industrial levels.

It is vitally important to explore how universities are acting to address climate issues through research, low carbon use and education[1].

AGU'S POLICIES AND PRACTICES

Climate change is affecting every country on every continent. It is disrupting national economies and affecting lives. Weather patterns are changing, sea levels are rising, and weather events are becoming more extreme. Universities need to be at the forefront of action to reduce the impact of climate change, especially amongst the poorest that will be the most affected. Therefore, the Abdullah Gul University (AGU) adapts policies in order to reduce the negative impacts of climate change.

Within the scope of the Regulation on "Increasing Efficiency in the Use of Energy Resources and Energy" and guide to renovating energy efficiency of public buildings prepared by the ministry of environment and urbanism, data such as AGU energy con-

[1] *Https://sdgs.un.org/goals/goal13*
https://www.un.org/sustainabledevelopment/climate-change/ n

sumption and carbon emissions are regularly sent to the Ministry of Energy. As it is stated AGU has Energy Efficiency Strategy the old fuel boilers using fuel oil in the existing buildings on AGU campus were changed to natural gas boilers to reduce carbon emissions to nature. In addition, it is aimed to reduce carbon emissions in the campus, reducing vehicle traffic and encouraging pedestrian-bicycle use. A wind turbine has been established in Mimarsinan Campus, and experimental studies are ongoing within the scope of alternative energy sources. Thanks to this application consumed energy, the energy obtained from low-carbon energy source in 2021 is 87.6% of the total energy used which increase from 79.2% in 2020.

In addition, activities carried out in 2021 can be found in report submitted by the Department of Construction and Technical Works and information such as solar energy system installation can be accessed from there (page37).

A Solar Power Plant was built on the roof of our department.

AGU has a university Climate Action Plan: As part of its Strategic Objective 5.1. AGU is committed to support the development of sustainable practices including some related to climate change. AGU contributes to the global fight against climate change by reducing its greenhouse gas emissions.

AGU's Climate Action plan millstones are given below;

The inventory of Greenhouse Gas emissions of AGU has been verified in accordance with ISO 14064-3:2018 as meeting the requirements of ISO 14064:2018 by QSI CERT. (highlight edilecek) AGU has been regularly calculating and reporting

Greenhouse Gas emissions according to ISO 14064 Standard since 2019, taking 2018 as the base year. For 2021 emissions, AGU aimed to independently and objectively review the emissions that it directly and indirectly controls and the compliance of the greenhouse gas report with the requirements of TS EN ISO 14064-1:2018.

In this context, AGU, for the realization of the greenhouse gas information system and controls; A documentary system has been prepared explaining the greenhouse gas records including the following items.

- Compliant with the relevant principles of the TS EN ISO 14064 standard,
- consistent with the intended use of the greenhouse gas statement,
- will ensure the accuracy and completeness of the greenhouse gas statement,
- provide routine and consistent controls,
- information management system activities that will reveal errors and omissions.

Data collection, processing and reporting processes have been verified by field audits.

By include the Indirect Greenhouse Gas Emissions such as employee commuting, employee travel, and accommodation, product purchased, assets purchased, waste disposal, well to tank in its inventory in 2021, in addition to Scope 1 Direct Greenhouse Gas Emissions and Scope 2 Indirect Greenhouse Gas Emissions from Imported Energy, AGU has shown its commitment to become climate neutral. The fact that the AGU has made such an effort to extend its emission inventory—efforts that were made in order to enhance measurements and offer harmonized approaches—is evidence of the priority that the organization places on this matter.

QSI®
CERTIFICATION & INSPECTION

Verification Statement

The inventory of Greenhouse Gas emissions of

ABDULLAH GÜL ÜNİVERSİTESİ

Barbaros, Sümer Kampüsü, Erkilet Biv., 38080 Kocasinan/Kayseri

has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

ISO 14064-1:2018

Total GHG Emissions	:	7.180,69 t CO_2 eq
Direct GHG Emissions	:	733,11 t CO_2 eq
Indirect GHG Emissions from Imported energy	:	1.116,21 t CO_2 eq
Indirect GHG Emissions from other sources	:	5.311,37 t CO_2 eq
Emissions from the the combustion of biomass	:	Nil
Level of Assurance	:	Reasonable
Reporting Period	:	01.01.2021 - 31.12.2021
Emission Report Date / Version	:	07.11.2022 / 01
Statement No	:	SGGNL-2433

Authorized by
Okay Kayhanlı – Director

Carbon Verified Company

QSI Belgelendirme, Muayene ve Test Hizmetleri Ltd. Şti.
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According to the results, AGU's scope 1 and scope 2 emissions per capita decreased by 17% and 68%, respectively, compared to the base year 2018. On the other hand, calculations for Scope 3 emissions have been performed for the very first time in such a comprehensive manner, yielding a grand total of 5,311.37 tCO2 equivalents. These findings provide evidence that both the legitimacy and efficacy of AGU's climate action plan in action and the organization's aim to become carbon neutral in 2029 are supported by empirical evidence. For results please see AGU progress section in this report.

AGU PROGRESS

AGU tracks publications, projects, courses, theses, dissertations, congress and symposium participation for all SDGs through AVESIS (Academic Data Management System).

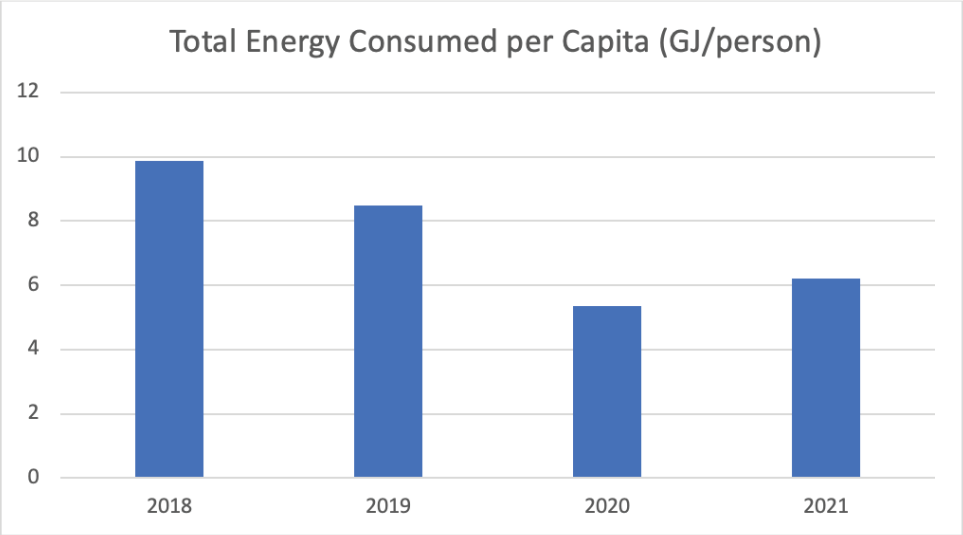
Number of Course Offered
22

Number of Students Enroll the Courses
1969

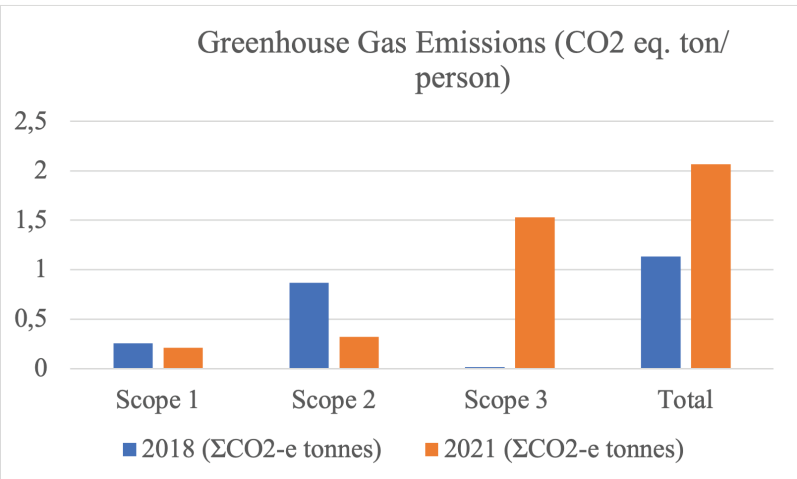
Number of Publications
18

Number of Projects
1

Number of Theses
2



Total energy consumed per capita in the campus was measured by AGU's construction and technical works department. Total energy consumed per capita are showed in the graphs on the years, 2018, 2019, 2020 and 2021. According to this graph, despite pandemic-related decrease in 2020, the total amount of energy consumed per capita in 2021 is less than in 2018 and 2019 thanks to a result of policy and practices held by AGU.



According to the ISO 14064:2018 verification certificate, AGU's scope 1 and scope 2 emissions per capita decreased by 17% and 68%, respectively, compared to the base year 2018. On the other hand, calculations for Scope 3 emissions have been performed for the very first time in such a comprehensive manner, yielding a grand total of 5,311.37 tCO2 equivalents. These findings provide evidence that both the legitimacy and efficacy of AGU's climate action plan in action and the organization's aim to become carbon neutral in 2029 are supported by empirical evidence. Please visit website for more information.

EDUCATIONAL PROGRAMS, RESEARCHES AND PROJECTS

AGU provides education programs and campaigns on climate change. AGU's GLB - Global Courses, mandatory for all undergrad students, educate them on the SDGs and current global challenges (Climate change, Health/Food, Sustainability, etc). AGU also joined the SDG Academy to disseminate and create online course content focused on the SDGs, and participates in Online Global Courses to teach UN SDGs to students globally. AGU students exhibited the projects they prepared as a part of the "GLB 301 Sustainability" course. The students worked on these projects in order to understand the concept of sustainability, to have knowledge, to identify and evaluate problems related to sustainability, and to develop their critical thinking skills.

At graduate level, AGU offers an MSc in Sustainable Urban Infrastructure Engineering where students are sensitized to global challenges & climate issues. Within the curriculum of the Civil Engineering Department, students learn about environmental policies on pollution control, climate change, conservation and biodiversity (CE 476). In addition to these courses, AGU Civil Engineering Department has courses such as Sustainable Energy Resources, Sustainable Concrete Technology, Hydrology and Water Resources Engineering, Water and Wastewater Treatment Engineering.

AGU academicians published 18 research articles in 2021. Those are listed in AVESIS system.

In addition, AGU academician has been working on a research project. This project is:

"Behavior and Strength of Structural Columns and Beams Produced of Fly Ash Based Geopolymer Concrete", TUBITAK Project, Hürmet KUCUKGONCU.

COOPERATION AND EVENTS

AGU organizes events educating the public on sustainability, including climate change risks and impact. In collaboration with its international partners, AGU educates and promotes topics such as the use of 100% renewable energies. AGU has been involved in various sustainability projects, including the "AGU Bostan" (AGU Garden) project. The main target of the project, to be realized on an 800-square-meter area on the Sümer Campus, is designing an ecological, sustainable and public campus experience.

AGU Bostan Project

AGU collaborates with NGOs on climate adaptation. AGU is a partner of Sustainable Development Solutions Network (SDSN) and SDG Academy, which tackle all SDGs including climate change and the need for adaptation. One of the University's student clubs is affiliated with the Turkish Foundation for Combating Erosion, Reforestation and the Protection of Natural Habitats (TEMA) and jointly organized events tackling climate change and ways to decrease its impact.

AGU is also an official knowledge partner of GSI (a global collaborative enterprise to propose policy responses to major global problems, addressed by the G20, the G7 and other global governance fora) and therefore tackles and supports the solution finding process for SDG 13 (policy brief for the G20), guiding governments with their related policies and supporting NGOs with their related activities.

AGU has been, since 2015, a leading member of in the Municipality's "Kayseri 2050" project. This project aims at determining the city's strategic roadmap and, among other topics, addressing urban planning issues, transportation systems, planning for climate change disasters, insuring that citizens can continue to reside in affordable housing, etc. AGU participated in the Kayseri 2050 Conference and suggested the implementation of sustainable measures, Smart City systems, Eco-friendly city transportation systems, etc., which have a direct impact on climate change. Regularly, and in collaboration with its international partners and local governments, AGU educates and promotes on topics such as the planning for Climate Change disasters and the use of 100% renewable energies.

In the "EU-Turkey Youth Climate Forum", which was moderated by the head of Architecture Department of AGU Prof. Dr. Burak Asıliskender, in partnership with the EU Delegation to Turkey, Kayseri Chamber of Commerce, Abdullah Gül University and Kayseri EU Information Center, Dr. Ahmet Çoymak , psychology department head of AGU, gave a speech on "Climate Change and Migration-Justice and Rights" for the youth and Dr. Fatma Şener Fidan addressed the issue of Climate Change and University. After the forum on climate change attended by academics, youth participants held workshops in 4 fields and produced solution-oriented suggestions against climate change.

AGU's Students received top three awards at Climate Ambassadors competition. "The Time is Now" campaign was launched with the collaboration of the EU Information Centres Network and Bilim Virüsü. Designathon Works, based in the Netherlands, organized the "Global Children's Design-a-thon 2021" around the "Clean Energy and Climate" theme. The AGU Children's University acted as a local organizer for Kayseri. Children aged 9-12 took part with their projects. The finals for Kayseri were held online.

At the world environment day symposium held in June 2021, Prof. Nigmet Uzal held a session on "Renewable Energy and Environment" related with SDG 7 and SDG 13.
https://www.youtube.com/watch?v=UUP-xR-24fo

AGU participated in the nationwide "11 Million Trees: With One Sapling Today, Breathe For Tomorrow" campaign in order to raise future generations with environmental awareness, and to help decrease carbon pollution. The campaign was realized simultaneously in 81 cities of Turkey. Many saplings were also planted at AGU. The event took place on the Sümer Campus where 350 walnut, cedar and pine saplings met the soil on designated areas.

11 Million Trees Campaign

www.agu.edu.tr