

THE SUSTAINABILITY REPORT

SDG 7

7 AFFORDABLE AND
CLEAN ENERGY



2023-2024

TABLE OF CONTENTS

No.	Titles	Page No.
1.	Background	1
2.	Workshop On Sustainable Energy	1
3.	Energy Efficient Appliances Usage	2
4.	Renewable Energy Sources in Campus	4
5.	Ratio Of Renewable Energy Production Divided by Total Energy Usage Per Year	5
6.	GU Sustainability Week	5
7.	Summary of Activities by Type	5
8.	Activities For SDG 7: Affordable & Clean Energy	7

BACKGROUND

Gulf University is actively supporting the Kingdom's efforts in achieving SDG 7, which focuses on Affordable and Clean Energy. By collaborating closely with the government and private sector, GU is dedicated in developing and implementing innovative solutions to promote affordable and sustainable energy sources. Through community-driven projects such as energy-efficient initiatives, and educational workshops emphasizing the importance of clean energy, GU is playing a significant role in shaping a more sustainable future for Bahrain while contributing to the advancement of SDG 7. Through engagement with the community and addressing the underlying causes of energy challenges, the university is making a substantial impact towards the global objective of ensuring access to affordable, reliable, sustainable, and modern energy for all.

WORKSHOP ON SUSTAINABLE ENERGY

The workshop was delivered by an expert from the energy sector, Prof. Isa Qamber, Specialist in Energy and Power Engineering Reliability Bahrain Society of Engineers BSE – IEEE Bahrain branch. The workshop is aimed to provide engineering college students with a range of real-life practical knowledge about sustainable and affordable energy solutions via well-established hands-on.



Energy Efficient Appliances Usage: 97%



LED lighting in all the campus building and along with light sensors



5 Star Energy Saving Air Conditioners in all the offices and buildings, beside insulation.



Replacing 5 Star Energy Saving AC with inverter ACs



Inverter AC installed in all the classrooms, labs, & library



Solar Panels

GU is implementing a comprehensive plan to enhance energy efficiency across its campus, i.e. a transition to more energy-efficient appliances. This involves replacing no-LED lighting with LEDs in all campus buildings. Additionally, the university has also incorporated light sensors, which automatically adjust lighting levels based on natural light availability, further optimizing energy usage.

Solar panels are also installed on rooftops or in designated areas to generate renewable electricity. This helps to offset the reliance on conventional power sources and reduces the university's carbon footprint.

"Gulf University has transitioned from its energy-efficient 5-star air conditioners to inverter AC units. Additionally, the university utilizes appliances and equipment with high energy efficiency ratings. This initiative involves the adoption computers, which consume reduced energy while ensuring optimal functionality."

In addition, the university also utilize lighting curtains or blinds to maximize the use of natural light. By strategically managing natural light, energy consumption for artificial lighting is reduced during daylight hours.

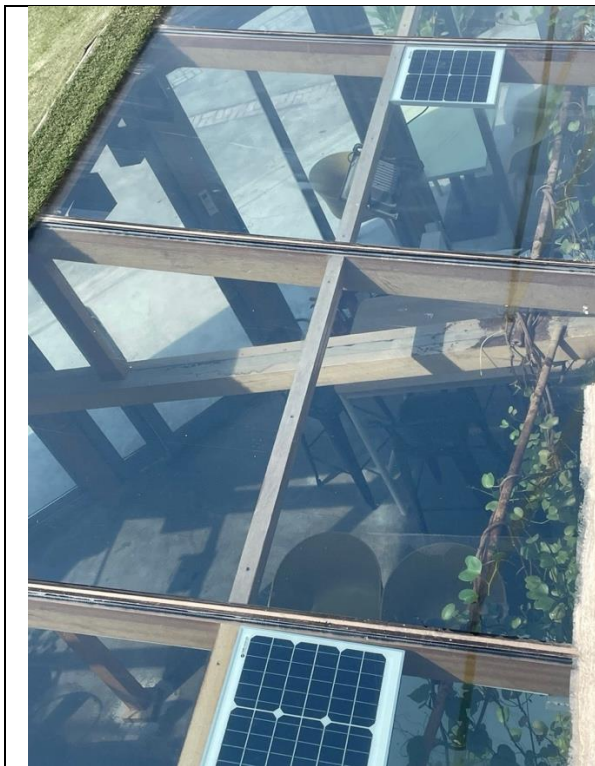
By implementing these energy-efficient measures and employing energy efficient appliances, Gulf University demonstrates its commitment to sustainability and environmental responsibility and creating more eco-friendly campus environment.

Table #1:

Appliance	Total Number	Total number energy Efficient appliances	Percentage
LED Lamp	412	412	100%
LED Sensor lights	365	365	100%
Air conditioners	105	117	89.74%
Computers	212	212	100
Average Percentage			97.43%

Renewable Energy Sources in Campus

Gulf University has taken significant steps towards embracing renewable energy sources on the campus. One important initiative is the installation of solar panels, which serve as the sole renewable energy source. These solar panels harness sunlight and convert it into usable energy, primarily for lighting purposes after sunset.



Solar Panels installed accross GU campuses



Solar panel lights at main areas of the campus of Gulf university

By utilizing solar energy for lighting, the university effectively reduces its reliance on electric energy. This not only contributes to a more sustainable campus but promoting energy efficiency and environmental conservation.

The energy saved or produce thru solar panel in GU is [27,684 kWh](#).

Ratio of renewable energy production divided by total energy usage per year

No	Renewable Energy	Production (in kWh)
1	Solar panel	27,684
	Total	27,684

Total average electricity consumption = 713,873 kWh

Renewable energy produced from Solar energy = 27,684 kWh

27,684/713,873 = (Electricity usage) = 3.8% approx.

GU Sustainability Week | 20th -24th October 2024 | Gulf University -Bahrain Campus

The “Sustainability Week 2024” organized by Gulf University, Kingdom of Bahrain from the 20th to the 24th of October 2024 was a significant initiative dedicated to promoting sustainable practices aligned with the United Nations' 17 Sustainable Development Goals (SDGs). This event brought together a diverse array of participants, including students, faculty, staff, industry partners, experts, government representatives, and community members. Through a range of activities and initiatives, this event aimed to promote environmental, social, and economic sustainability efforts. By bringing together academia, industry, and the community, Gulf University's Sustainability Week 2024 has made a significant contribution to promoting sustainability in Bahrain and beyond.

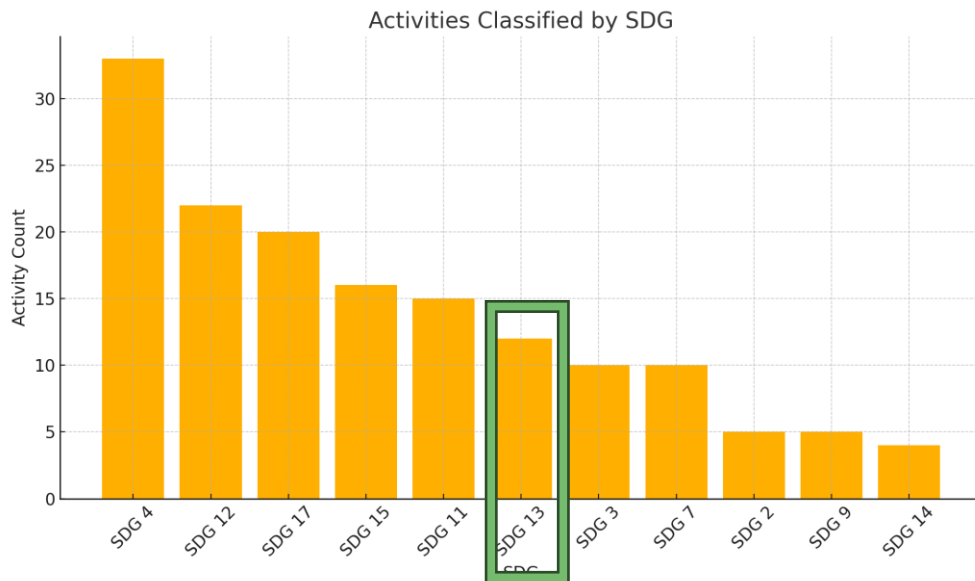
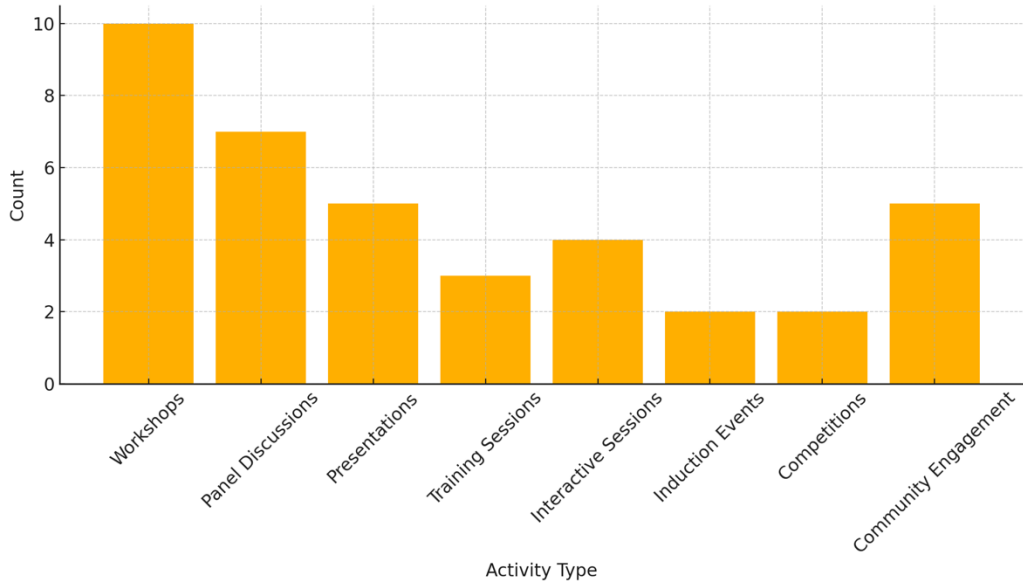
SUMMARY OF ACTIVITIES BY TYPE

This section provides an overview of all activities conducted during the Sustainability Week, broken down by type and specific examples.

Table 1: GUSW Activities Count

GUSW Activity Type	Count	Topic/Scope
Workshops	10	Energy Conservation, Recycling & Waste Management, Nutrition, Digital Solutions, Clean Energy
Panel Discussions	7	Climate Action, Biodiversity, Circular Economy, Urban Planning
Presentations	5	SDG Overview, Climate Change, Smart Mobility, Urban Design
Training Sessions	3	“AI & Metaversity for Sustainable Development” Workshop, ESG Engagement, Smart Cities
Interactive Sessions	4	Marine Conservation Awareness, SDG Exploration, Tree Planting, Community Wellness

Induction Events	2	Sustainability Club Formation, Campus Clean-Up Challenge
Competitions	2	SDG Quiz, Best Innovative Research/Project Competition
Community Engagement Activities	5	Farmers Market, Potluck Lunch, Tree Planting, On-Campus Clean-Up, Donation Drives
Key Speakers/Panelists	20+	Including representatives from Ministries, KPMG Bahrain, UNIC, Bahrain Science Center



Total 10 activities conducted for SDG 7: Affordable & Clean Energy

Activities for SDG 7: Affordable & Clean Energy

The university conducted a total of 11 activities aligned with SDG 7: Affordable and Clean Energy. These initiatives encompassed workshops, panel discussions, presentations, training sessions, interactive sessions, induction events, competitions, and community engagement activities. The topics covered a wide range of areas, including energy conservation, renewable energy, energy efficiency, and sustainable energy solutions. The university also invited renowned experts and industry leaders as key speakers and panelists to share their insights and experiences.

By organizing these diverse activities, the university aimed to promote affordable and clean energy access for all.

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