

THE SUSTAINABILITY REPORT

SDG 13

13 CLIMATE
ACTION



2023-2024

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BACKGROUND

Gulf University is committed to supporting the Kingdom's efforts towards achieving SDG 12: Responsible Consumption and Production. GU actively promotes sustainable practices within its campus and community while Sustainable Engineering Hub is on of example. By organizing events such as waste reduction campaigns, energy efficiency initiatives, and sustainable procurement programs, the university is reducing its environmental footprint. Additionally, GU encourages students and staff to adopt sustainable lifestyles through educational workshops and awareness campaigns.

By promoting a culture of responsible consumption and production, the university is making a significant contribution to the global goal of ensuring sustainable consumption and production patterns.

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.

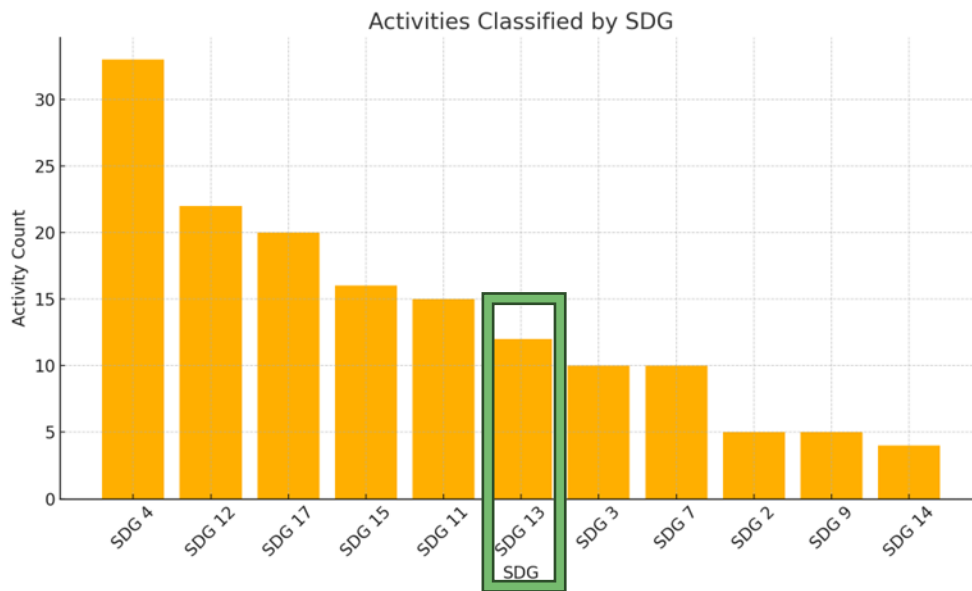
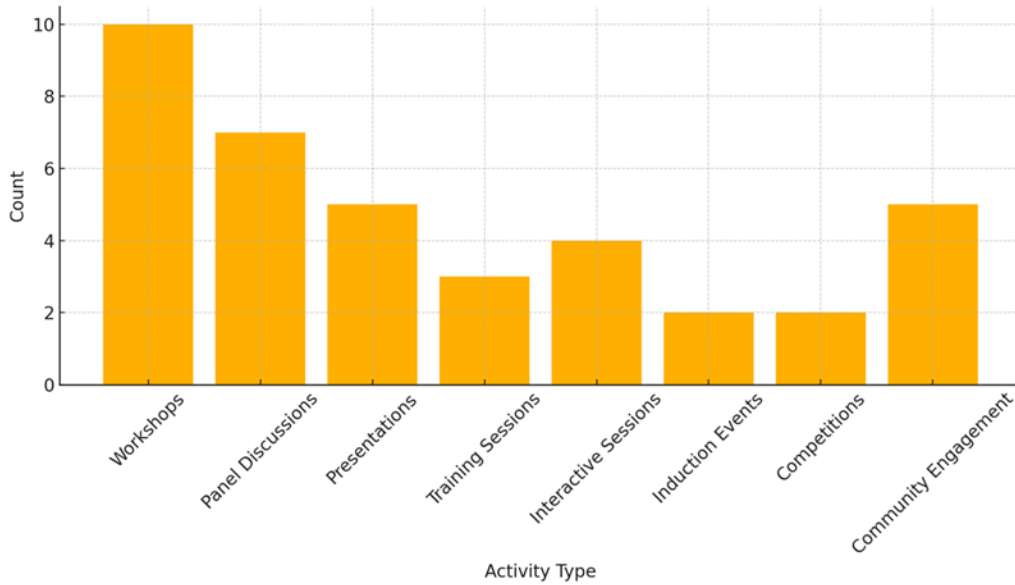
Activities during Sustainability Week

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 12 activities conducted for SDG 13 Climate Change

To achieve SDG 13, Climate Action, Gulf University organizes a variety of activities, including workshops, panel discussions, presentations, training sessions, interactive forums, induction events, competitions, and community engagement initiatives. These events feature key speakers and panelists, promoting dialogue and collaboration to drive progress in creating clean environments for the communities. Through these initiatives, the university aims to promote climate change mitigation, adaptation, and awareness, contributing to a more sustainable future.

Day One: Introduction to the SDGs: Global Interactive Presentations: SDG 13: Climate Action



- Opening ceremony and introducing the week's activities and University commitments to continued action towards SDGs.
- Overview presentation on the 17 SDGs and their significance.
- Interactive work session to explore how each SDG relates to everyday life of local communities.
- Panel discussion with selected experts & Keynotes on the progress and challenges in achieving the SDGs in local/regional context.
- Sustainable Living Day and Partnerships for the Goals: bringing together local organizations and businesses to discuss collaboration for achieving the SDGs
- University Tour to explore Campus settings and the launching of Sustainability Week Activities & Workshops (for Guests/Dignitaries).
- SDGs & Community Engagement Workshop: "Participate-Collaborate-Create-Donate".
- Healthy activities and mindfulness session promoting mental health and well-being.
- Community wellness fair featuring health screenings and activities promoting physical and mental well-being.
- Nutrition workshop focusing on healthy and sustainable diets.
- Community potluck lunch with dishes made from locally sourced, seasonal foods and different environment friendly culinary traditions/cultures.
- Eco-friendly personalized & custom gifts distribution.

Day Two: Climate Action: Energy Conservation, Reduce & Reuse, Waste Reduction, Responsible Consumption and Production Day

Activities:

- Campus-wide energy audit and awareness campaign: Energy-saving tips and tricks session.
- Recycling and composting workshop.
- The 3Rs & Life-cycle Extension Workshop: Co-creativity workshop on upcycling old items into useful products and the Campus clean-up Challenge.
- Kick-off event with a presentation on the importance of reducing waste and reusing resources.
- Workshop on upcycling old items into useful products: Innovation Competition & Rewards.

- Movie screening of documentaries focusing on environmental issues and solutions.
- Workshops and Panel discussions on renewable energy sources, such as solar and wind power.
- Presentations on sustainable transportation options, including electric vehicles, bike-sharing programs, and carpooling trends towards reducing GWP.

WORKSHOPS: ENERGY CONSERVATION

Energy conservation goals aim to reduce energy consumption, improve efficiency, and transition to more sustainable practices, ensuring long-term environmental, economic, and social benefits. Setting effective goals often requires a mix of policies, technologies, and behavioral changes tailored to specific sectors like residential, industrial, transportation, and commercial systems.

PRESENTATIONS: CLIMATE CHANGE

Protection from climate change involves implementing strategies and actions to reduce its impacts on natural systems, human societies, and economies. The main objectives include:

1. Mitigation of Climate Change



- **Reduce Greenhouse Gas (GHG) Emissions:** Minimize emissions from industries, transportation, energy production, and agriculture.
- **Promote Renewable Energy:** Transition to sustainable energy sources like solar, wind, and hydropower.

- **Increase Energy Efficiency:** Enhance efficiency in buildings, manufacturing, and appliances to lower overall energy consumption.
- **Reforestation and Afforestation:** Enhance carbon sinks by planting trees and protecting forests.

INTERACTIVE SESSIONS: MARINE CONSERVATION AWARENESS

The objectives of raising awareness about marine environment conservation include:

1. Promote Sustainable Practices

- Encourage responsible fishing, waste management, and resource use to prevent overexploitation of marine resources.

2. Reduce Pollution

- Highlight the dangers of plastic waste, chemical runoff, and oil spills, motivating individuals and industries to reduce pollutants entering marine ecosystems.


3. Protect Marine Biodiversity

- Educate people on the importance of marine life, from coral reefs to whales, emphasizing their roles in ecological balance and global health.

4. Combat Climate Change Impacts

- Spread awareness of how rising sea temperatures, ocean acidification, and melting ice caps affect marine environments and their connection to global climate patterns.

Impactful University programs on climate change

No	Programs	Scope (international/ regional/ national)	Total Participants	Photo	Short Description
1	Sustainability Week October 20-25, 2024	International (Physical)	259 participants from 17 different countries including local community, shopkeepers of handicraft goods etc.	 <p>GISW – DAY 2 21/10/2024 Climate Action: Energy Conservation, Reduce & Reuse, Waste Reduction, Responsible Consumption and Production Day</p> <p>10:00: Campus-wide energy audit and awareness campaign: Energy-saving tips and tricks session. Eng. Mustafa Emad Al Meari / Dr. Walid Eltezzani</p> <p>10:30: Recycling, Waste Management and composting workshop. Nabakid – Bahrain / Sustainable Bahrain</p> <p>11:30: The 3Rs & Life-cycle Extension Workshop: Co-creativity workshop on upcycling old items into useful products and the Campus clean-up Challenge. Kinwa Bahrain/ Nidubki - Bahrain</p> <p>12:30: Clothing swap and donation drive. Kinwa Bahrain</p> <p>12:30: Kick-off event with a presentation on the importance of reducing waste and reusing resources. Sustainable Bahrain</p> <p>13:00: Workshop on upcycling old items into useful products: Innovation Competition & Rewards. Kinwa Bahrain</p> <p>14:00: Movie screening of documentaries focusing on environmental issues and solutions. Bahrain TV / GU Media Production Center</p> <p>14:30: Workshops and Panel discussions on renewable energy sources, such as solar and wind power. Prof. Dr. Issa Qamber / Eng. Mustafa Emad Al Meari / Eng. Ali Saliman Baki</p> <p>15:00: Presentations on digital transformations, smart urban planning, sustainable transportation options, including electric vehicles, bike-sharing programs, and carpooling trends towards reducing CWP. Eng. Heier Krichene INSOMEA/ Arch. Mohammad Dadabhi/ UN-Habitat Bahrain/ Eng. Arch. Kai Muehlig, WQBS</p> <p>15:30: Themed Lunch using local products and sustainable ingredients. Sustainable Bahrain</p>	The Sustainability Week organized by Gulf University, in Kingdom of Bahrain, is vocal to promote sustainable practices as adopted by UN's 17SDGs. The event involves students, faculty, staff, industry, governmental organizations, and relevant individuals and stakeholders representing community in activities and initiatives that engaged to strengthen environmental, social, and economic sustainability. The principal objective of the event is to raise the awareness about sustainability issues, engage collaborative work amongst community, promote sustainable practices and choices, and track key indicators pertaining to sustainability. These objectives will be achieved through a series of seminars, talks, lectures, workshop, exhibitions, hands-on, social and cultural activities, directly linked to SDGs and reflected in developing both awareness and skills to assimilate sustainability in everyday life.

2

“ Together for Carbon Neutrality ”

Local community

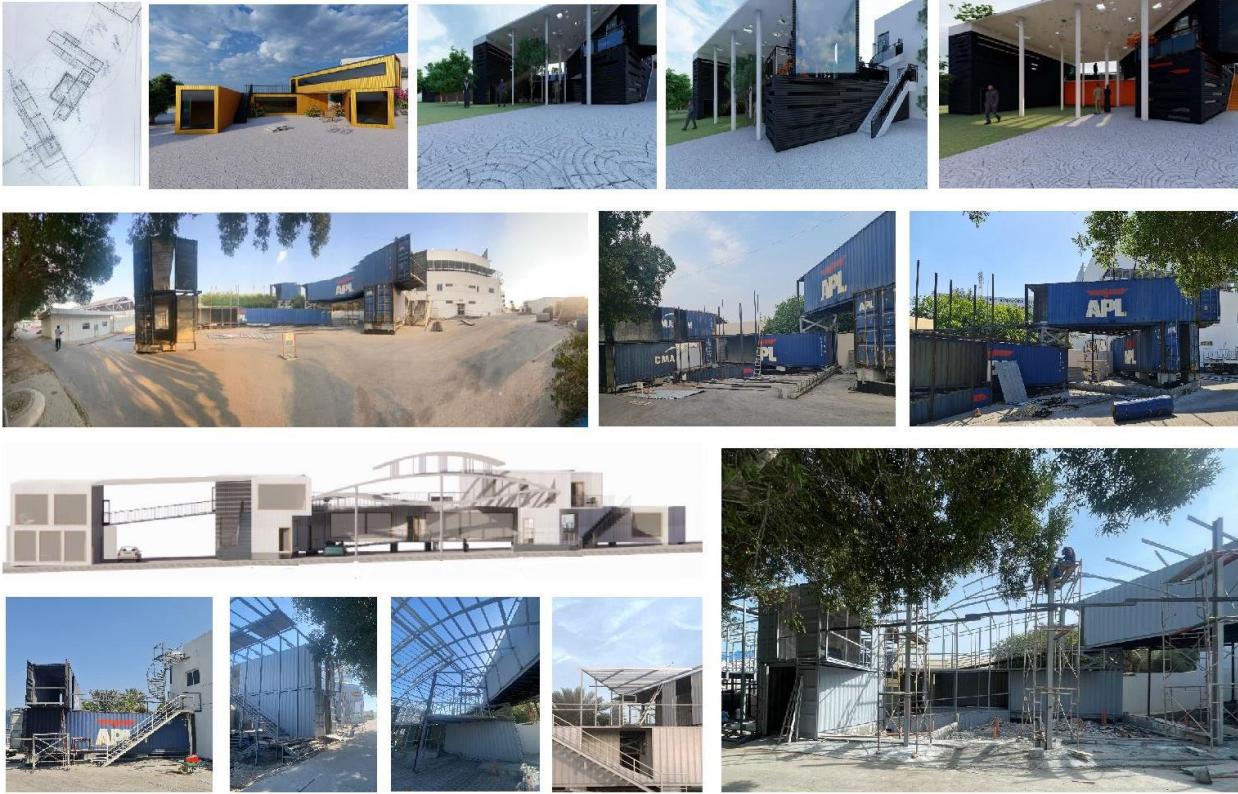
78 locals, students, faculty members participated



The College of Financial and Administrative Sciences’ Community Engagement Committee successfully organized a “Tree Planting” event on Thursday, November 7, 2024, at 12:00 PM on the Gulf University campus in Sanad, in line with the initiative of His Royal Highness Prince Salman bin Hamad Al Khalifa, Crown Prince and Prime Minister. The event was themed “Together for Carbon Neutrality,” highlighting the importance of collective action in combating climate change. By planting trees, the committee aimed to contribute to carbon sequestration, improve air quality, and enhance the campus’s ecological footprint. The event provided an opportunity for students, faculty, and staff to actively participate in environmental conservation efforts and foster a sense of community.

INNOVATIVE PROGRAMS IN ENERGY AND CLIMATE CHANGE: FOUR

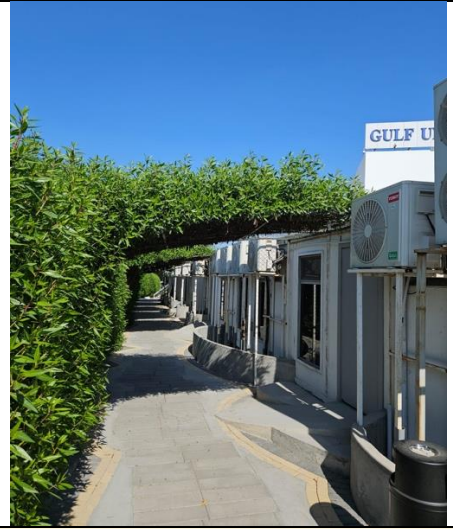
Initial Design & Site Progression



1. Innovative and creative use of recycled containers at Gulf university mitigating climate change and proposing Sustainable Building Solutions



2. Recycled containers to be redesigned into Sustainable Engineering Hub



Green Campus: increase green areas/Green constructions/Greenhouse (local production), Green Roof.

GU Sustainability Week | Gulf University Campus
 "5-Days Activity" | October 20-24th 2024.
 PROGRAMME

The poster details the activities for the Sustainability Week, organized by the Sustainability and Development Makers Center and Sustainable Engineering HUB. It lists activities for each day from October 20th to 24th, 2024, covering various themes like climate action, circular economy, and sustainable cities. A legend indicates the locations of activities: GU Auditorium, Ground Floor, First Floor, Second Floor, Third Floor, and GU Campus.

Under GU Sustainability Week for 5 Days, Second Day was given to SDG6,7,10, 12, & 13 "Discussed the issues related to Climate Action."

- 1. Use of recycled containers at GU:** The utilization of recycled container at GU in new canteen sitting area is an innovative and creative program which is align with the goal of mitigating climate change by minimizing resource consumption and carbon emissions.
- 2. Recycled containers to be redesigned into Sustainable Engineering Hub:** Converting shipping containers into Sustainable Engineering Hub, reduces the need for new construction materials and minimizes waste generation. These containers will be equipped with energy-efficient features, such as insulation, sensor LED lighting, and a part of Air Condition system on solar panels, to further enhance their environmental footprint and mitigate the climate change. The water collectors will

install at the roof of the container which will store the moisture from humidity drop and can be used for various purposes including watering plants.

3. Green Campus: increase green areas/Green constructions/Greenhouse (local production), Green Roof

The GU's commitment to Green Campus is the testimony of a sustainable educational institution that prioritizes environmental responsibility.

It incorporates various strategies like increasing green areas with native plants, using eco-friendly materials in construction, and implementing energy-efficient designs. Greenhouses promote local food production and serve as educational tools. Green roofs provide ecological benefits, energy efficiency, and aesthetic appeal.

Additionally, waste reduction, renewable energy, sustainable transportation, and community engagement are crucial components of a successful Green Campus.

The Approach

An innovative space with multidisciplinary and collaborative work environments, formal and informal experiential learning environments to co-think, co-create and co-develop initiatives, actions and alternatives in alignment with University vision towards Lifelong Learning and Sustainable Development Goals. Sustainable Engineering Hub Project is developed via a collaborative work involving both engineering staff and students. The design development considers a 3Rs approach where overall project components, structures and materials promote a life cycle extension process, aligned with university initiatives for climate actions. The progression of the designed environment with recycled shipping containers supports a well-established real-life observation for campus inhabitants, raising their awareness towards sustainable development and the role of community engagement in a higher education institution, revealing how small actions can lead to big changes.

The Development Process

The design of the Sustainable Engineering Hub refers a well-established process where both pre-design development phase and design development phase were considered with reference to relevant conceptual and technical approaches in regard of the architectural reuse of shipping containers to create living, working and studying environments. Additionally, within the pre-design phase, range of environmental and life cycle studies were deployed with reference to international similar projects in the context of Higher Education institutions or other applications and contexts. The design development examined such trendy sustainable solutions in terms of feasibility and viability to initiate designing the Hub Project using five 40ft old shipping containers, exploring all functional and aesthetic alternatives with a focus on their

environmental aspects, qualities and impact on campus habitants experience, thinking and awareness towards sustainability... As a way to think globally and act locally.

Greenhouse gas emission reduction program



GU using Recycled containers as an initiative to reduce Greenhouse gas emission reduction Program





Afforestation Day event organized by GU and planting trees in and around the campus



Ride share, an environmentally friendly practices is always promoted by GU



Solar panels installation an example of renewable energy

Description:

1. Gulf University using recycled containers into their infrastructure, it demonstrates its commitment to energy efficiency, greenhouse gas emission reduction, and sustainable practices.
2. Afforestation Day event religiously organized by GU and planting trees in and around the campus
3. Using solar energy as renewable energy for electricity that reducing purchased electricity, an efforts towards Greenhouse gas emission reduction program
4. The ride share (carpool) an environmentally friendly practice which is always promoted by GU
5. Replacement to Inverter ACs.

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Links:

- <https://sw.gulfuniversity.edu.bh/>
- <https://www.gulfuniversity.edu.bh/centers/community-engagement-and-continuing-education-center/community-services/community-workshops/upcoming-workshops/>
- <https://www.gulfuniversity.edu.bh/gulf-university-launches-tree-planting-initiative-in-support-of-national-environmental-initiatives/>
- <https://www.gulfuniversity.edu.bh/centers/sustainability-and-development-makers-center/center-projects/>
- <https://www.gulfuniversity.edu.bh/centers/sustainability-and-development-makers-center/center-activities/>
- <https://sw.gulfuniversity.edu.bh/>
- <https://www.youtube.com/watch?v=tM5QxMIFZPk>