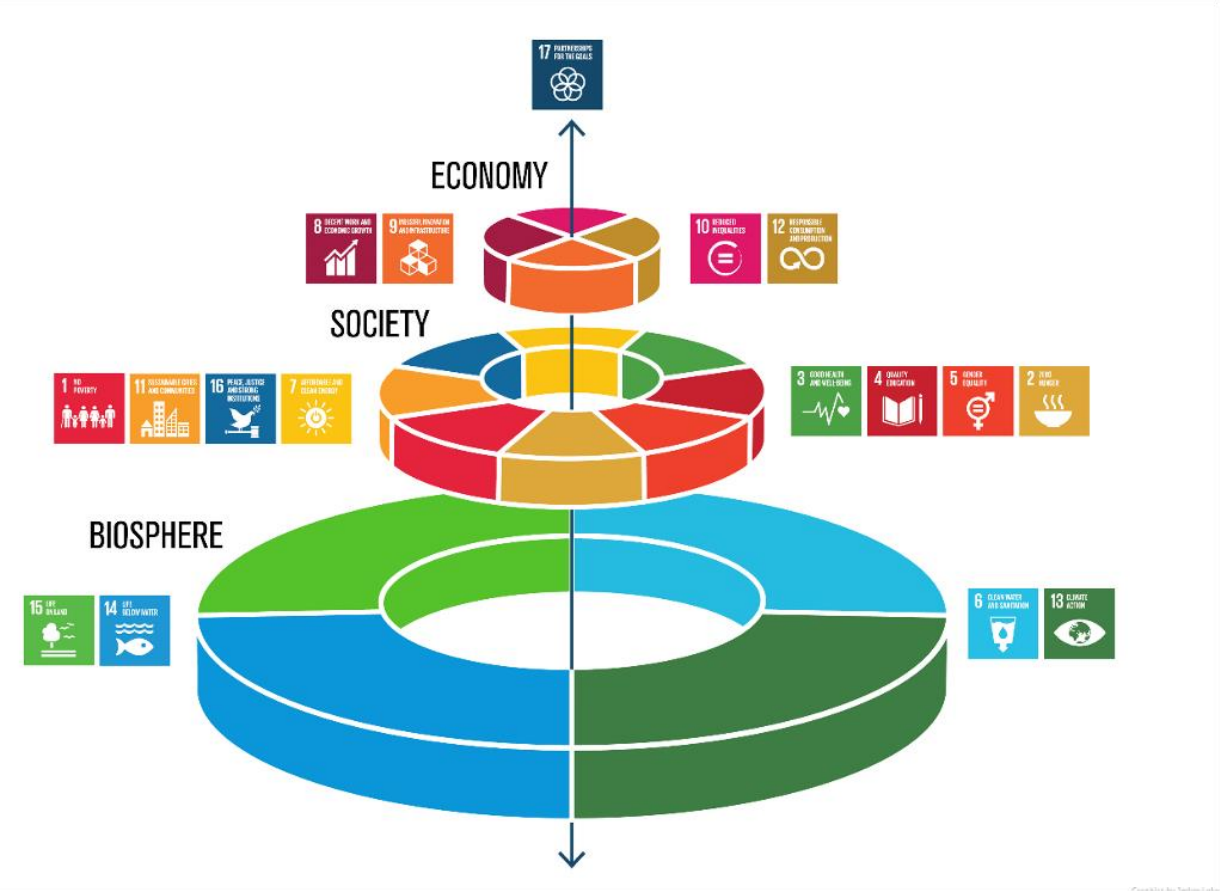


SDG7: Affordable and Clean Energy

SDG7: Affordable and Clean Energy

SDGS 7

Galala University plays a pivotal role in advancing Sustainable Development Goal 7 (SDG 7): Affordable and Clean Energy, through a multifaceted approach that encompasses education, research, and community engagement.

Solar Energy Systems

Renewable Power Generation:

Solar panels installed on rooftops or building facades harness sunlight to generate electricity. This reduces dependency on fossil fuels and lowers greenhouse gas emissions.

Cost Savings:

Utilizing solar energy can significantly decrease electricity bills. Over time, the initial investment in solar technology is often offset by savings on energy costs.

Energy Independence:

Buildings equipped with solar systems can produce their own energy, enhancing resilience against energy price fluctuations and supply disruptions.

Natural Lighting

Reduced Energy Consumption:

Maximizing natural light through strategic window placement, skylights, and open spaces minimizes the need for artificial lighting, leading to lower energy use.

Enhanced Well-being:

Natural light has been shown to improve mood, productivity, and overall well-being. Well-lit spaces contribute to a healthier indoor environment for occupants.

Sustainable Design:

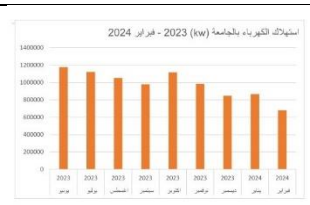
Incorporating features that enhance natural light, such as light wells and reflective surfaces, aligns with sustainable architectural practices, reducing the environmental impact of a building.

SDG7: Affordable and Clean Energy

Energy and Climate Change Standard

Item	Brief Description	Verification and Evidence Guide
1- Energy Consumption Reduction Program		
	Reducing lighting in corridors and utilizing natural light.	
	Using centralized air conditioning systems with inverter (VRV) technology, achieving up to 35% savings over standard levels.	
	Harnessing solar energy by installing two stations with a capacity of 150 kW.	
	Using natural gas as a source of energy, a more cost-effective alternative to electricity.	
	According to student housing regulations, students are advised not to leave lights and air conditioning on when not in their rooms. This is	

SDG7: Affordable and Clean Energy

	enforced through daily checks by housing supervisors and by reducing lighting in corridors at night.	
2- Using energy-efficient devices instead of traditional devices.		
	Using LED lighting.	
	Utilizing centralized air conditioning systems with inverter technology.	
3- Renewable Energy Usage Policy		
	Installing two solar energy stations with a total capacity of 150 kW.	
	Attached is an image of the annual electricity consumption bills.	
4- Annual Electricity Consumption Rate		
	Annual electricity consumption amounts to 11.4 GWh based on annual consumption bills.	
5- Renewable Energy Production Percentage Relative to Total Annual Energy Usage		
	Attached are calculations of electricity generation from solar panels. Electricity production from solar panels constitutes 3.5% of the total annual energy usage.	