



جامعة الإمام عبد الرحمن بن فيصل
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY



SDG 7.2.2

Upgrade buildings to
Higher Energy
Efficiency

2022-2023

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1. IAU Strategic Plan 2018-2025

The given webpage link shows the **Strategic plan of IAU 2018-2025**. This plan explained its alignment between **KSA Vision 2030** and **IAU strategic goal V-Sustain IAU campus environment**.

Under IAU Strategic Goal V, refer page no. 100, 101, 144, and 147, which describes about the **energy efficiency**:

- Initiative 5.1.1.5,
- KPI 5.1.1.5,
- Initiative 2.4.1,
- Initiative 3.2.1,
- Initiative 3.2.4,
- Initiative 3.2.5



https://www.iau.edu.sa/sites/default/files/iau_straplan_en_20jun2019.pdf

2. IAU Initiatives to achieve higher Energy Efficiency

The given PDF link explains the initiatives taken by IAU to achieve higher energy efficiency.



Photo solar systems installation initiative to reduce monthly electricity bill payments:

SHUTTLE OPTION 1

Marsheel Electric Transit Buddy 15 Passenger LE Hard Door Shuttle

- 15 Passenger Capacity
- 100% Electric Powertrain
- 100% Energy Efficient
- 100% Zero Emission
- 100% Quiet Operation
- 100% Low Maintenance
- 100% Long Life Span
- 100% Safe Operation
- 100% Easy to Operate
- 100% Easy to Maintain
- 100% Easy to Drive
- 100% Easy to Park
- 100% Easy to Load/Unload
- 100% Easy to Clean
- 100% Easy to Store
- 100% Easy to Transport
- 100% Easy to Ship
- 100% Easy to Install
- 100% Easy to Use
- 100% Easy to Operate
- 100% Easy to Maintain
- 100% Easy to Drive
- 100% Easy to Park
- 100% Easy to Load/Unload
- 100% Easy to Clean
- 100% Easy to Store
- 100% Easy to Transport
- 100% Easy to Ship
- 100% Easy to Install
- 100% Easy to Use



SHUTTLE OPTION 2

Marsheel ON-30C Series 15-Seater Enclosed Electric Resort Car

Features:

- 15 Seater Capacity
- 100% Electric Powertrain
- 100% Energy Efficient
- 100% Zero Emission
- 100% Quiet Operation
- 100% Low Maintenance
- 100% Long Life Span
- 100% Safe Operation
- 100% Easy to Operate
- 100% Easy to Maintain
- 100% Easy to Drive
- 100% Easy to Park
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- 100% Easy to Transport
- 100% Easy to Ship
- 100% Easy to Install
- 100% Easy to Use



Electric and affordable shuttle buses for the student and faculty

https://www.iau.edu.sa/sites/default/files/resources/reduce_overall_energy_consumption_2022.pdf

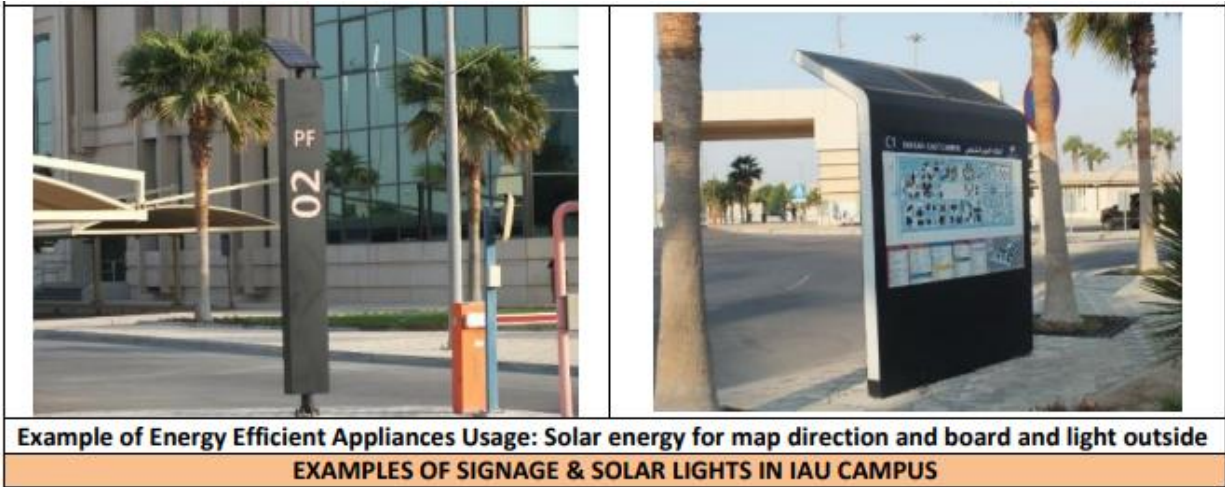
3. Energy Efficient Building Practice at IAU

The given PDF link describes energy efficient usage in IAU in the following Parts:

- PART A: Sustainable system for Outdoor Signage
- PART B: Optimized Eco-friendly Buildings

Part A





https://www.iau.edu.sa/sites/default/files/resources/energy_efficient_building.pdf

4. Signed a memorandum of understanding with the Gulf Laboratory Company for Electrical Equipment Inspection.

His Excellency the President of IAU Prof. Dr. Abdullah Al-Rubaish, signed a memorandum of understanding with the **Gulf Laboratory Company for Electrical Equipment Inspection**. The company was represented by CEO Eng. Saleh Al-Omari, in the presence of the Dean of the College of Engineering, Dr. Murad Al-Thubaiti.



3:21 PM - Oct 24, 2022

https://twitter.com/IAU_KSA/status/1584520569055490048

5. IAU Active Participation in Global Event to the rationalization of Energy Consumption

The given IAU Webpage link (refer to 1st paragraph) shows the participation of IAU in Earth Hour, a **global event by turning off external and unnecessary lights** of the university campuses buildings for one hour. This attempt contributes to the rationalization of energy consumption to confront global warming.



<https://www.iau.edu.sa/en/news/iau-participates-in-earth-hour-by-turning-off-buildings-lights>



6. Consulting Center of IAU towards Sustainable Built Environment

The given webpage link (refer 2nd paragraph first 4 lines) describes about a consultancy center established by College of Architecture and Planning of IAU. This center aims to take a leading role in directing the community towards a more sustainable built environment. It organizes a number of short training courses and offers professional services to both the public and private sectors.

<https://www.iau.edu.sa/en/colleges/college-of-architecture-and-planning/deans-message>

7. IAU Consulting Center for Buildings Energy

The given webpage link (refer to About section and Scope of work section) describes about the “**consulting center for buildings energy**”, a body accredited by IAU Institute of Consulting Studies to deliver training and consulting services in field of engineering related rationalization of energy consumption. Its scope of work includes training, education and workshops in the areas of sustainability, green buildings and energy conservation. It also includes energy efficiency studies and audits of existing buildings; consultations about the efficiency of air conditioning systems; and consultations about the solar energy.



Home / Administration / Centers / Institute of Consulting Studies / Services / Experience Houses / Consulting Center for Buildings Energy

Consulting Center for Buildings Energy

About

It is a body accredited by IAU Institute of Consulting Studies to deliver training and consulting services in field of engineering related rationalization of energy consumption.

Vision

Toward a specialized hub for consulting services and training in field of buildings energy.

Mission

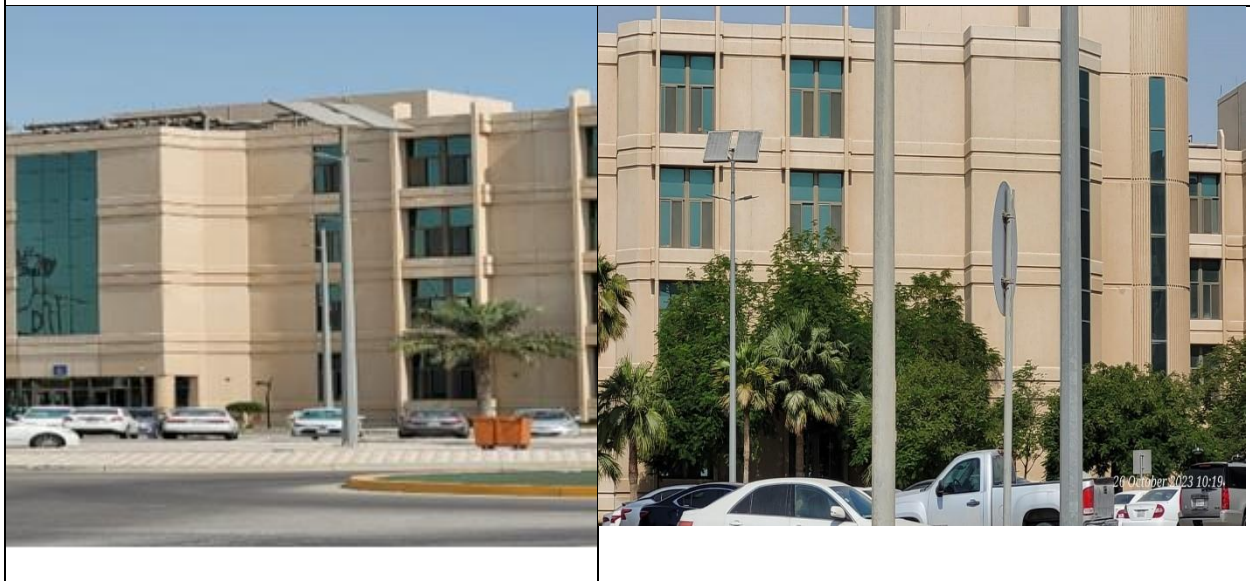
High quality services of innovative methods for achieving development socially, economically, and environmentally.

Objectives

- To invest the capabilities available at the university in terms of laboratories, simulation software,

<https://www.iau.edu.sa/en/administration/centers/institute-of-consulting-studies/services/experience-houses/consulting-center-for-buildings-energy>

8. Renewable Energy Sources in IAU Campus

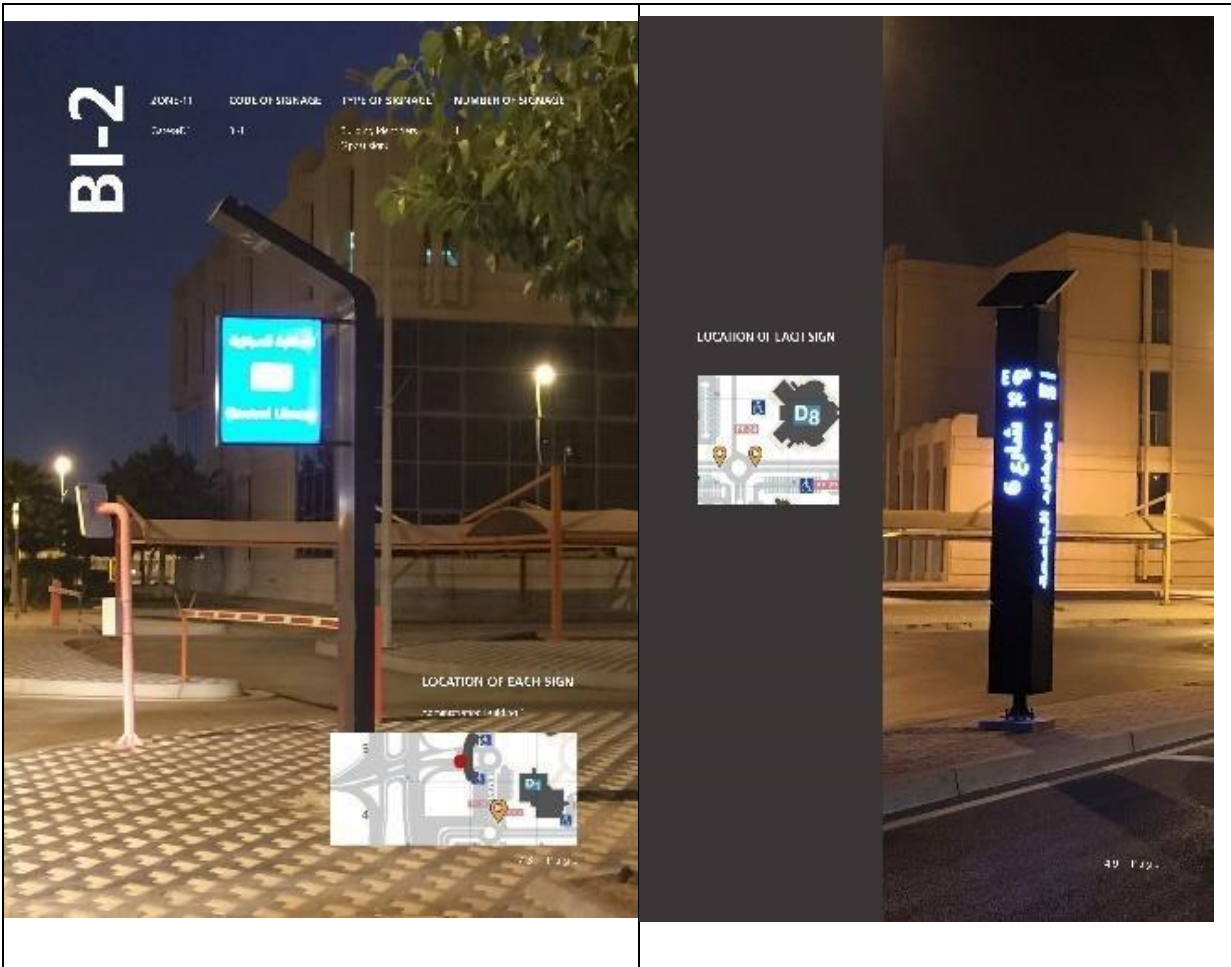




Solar Panels spread at IAU Campuses



Solar Panels installed all over the campus to provide energy for the purposes of lighting, heating, cooling, running university laboratories, etc.



**NIGHTVIEW OF SOLAR OUTDOOR SIGNAGE IN IAU
CAMPUS**



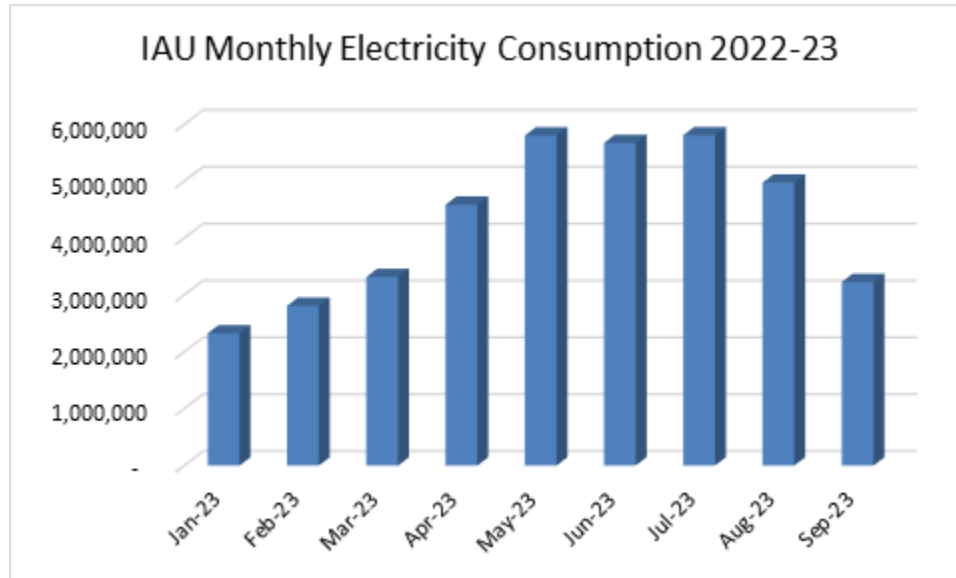
Description:

Currently, solar energy is used only for campus lights and signage in main campus.

The mega project is in pipeline to install solar panels in the university to have an alternate source of energy, which will help to be less dependent on electricity and reduced the electricity consumption.

Wind power plants are installed in IAU Campus as part of alternate sources of energy. Based on the initial observations and usage relevance to IAU campus many Wind power plants are going to be installed on the open spaces of IAU.

9. Electricity Usage per Year (in Kilowatt hour)



Description:

The **total electricity usage** of IAU all campuses in 2022-2023 was **38,546,236 kWh** and the monthly average usage is **4,282,915 kWh**.

On the main campus area of IAU University electricity is used for lighting, cooling, heating and laboratory appliances.

