



جامعة الإمام عبد الرحمن بن فيصل  
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY



SDG 7.2.1

Energy-efficient  
renovation and  
building

2024-2025



## Table of Contents

1. IAU Hosts International Webinar on Higher Education and Sustainability.....	4
2. IAU Strategic Plan 2018-2025.....	5
3. Consulting Center of IAU towards Sustainable Built Environment..	6
4. IAU Consulting Center for Buildings Energy.....	7
5. College of Engineering of IAU participated in the Solar Energy and Storage Exhibition.....	8
6. Awareness lecture on "The Impact of Smart City Applications in Combating Desertification" by IAU.....	9
7. Participation of College of Engineering Students of IAU in developing the High Concentrated Photovoltaic (HCPV) system.....	10
.....	10
8. Participation of College of Engineering Students of IAU in the events of the third Renewable Energy Symposium and Exhibition.....	11
9. Participation of College of Engineering of IAU in Energy Debate	12
10. Participation of College of Engineering of IAU in Energithon Event at King Fahd University of Petroleum and Minerals.....	13
11. Energy Efficient Building Practice at IAU.....	14
12. Research groups on Energy at IAU.....	17
13. Approval for the Establishment of Saudi Building Code Academy by IAU	18



Imam Abdulrahman Bin Faisal University (IAU) promotes energy efficiency and participated/hosted various energy efficiency related events within and outside the campus.

Find below some of our energy efficiency related events.

## 1. IAU Hosts International Webinar on Higher Education and Sustainability

Dammam – Imam Abdulrahman Bin Faisal University (IAU), represented by the Deanship of Academic Development, hosted an international webinar titled "University Education for Sustainability: Building Skills for Lifelong Impact" on Tuesday, November 26, 2024. The event was attended by Dr. Abdullah Al-Muhaidib, Vice President for Academic Affairs, who emphasized the university's commitment to sustainability through education and its role in empowering faculty members.

The webinar aimed to advance the integration of sustainability in higher education and enable faculty members to adopt practices that align with the Sustainable Development Goals. The event drew 245 participants, including faculty members and national and international experts.



<https://www.iau.edu.sa/en/news/iau-hosts-international-webinar-on-higher-education-and-sustainability>

## 2. 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](https://www.iau.edu.sa/sites/default/files/iau_straplan_en_20jun2019.pdf)



---

### 3. Consulting Center of IAU towards Sustainable Built Environment

The given webpage link (refer 2<sup>nd</sup> 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>



## 4. 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.

The screenshot shows the website for the Consulting Center for Buildings Energy at Imam Abdulrahman Bin Faisal University. The page layout includes a top navigation bar with various service links, a search bar, and a secondary navigation bar with categories like 'About Us', 'Study with Us', etc. The main content area is titled 'Consulting Center for Buildings Energy' and features a sidebar menu on the left with links to 'About', 'Dean's Message', 'Organizational Structure', 'Services', 'Experience Houses', 'Publications', 'Gallery', 'Our Partners', and 'Contact Us'. The main text area contains the following sections:

- 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>

## 5. College of Engineering of IAU participated in the Solar Energy and Storage Exhibition

Dean of College of Engineering of IAU, Prof. Dr. Fahd Al-Omari, and Head of the Mechanical and Energy Engineering Department, Dr. Mosaid Al-Zahrani, participated in the Solar Energy and Storage Exhibition, and presented two scientific papers that enhance the college's research and industrial role in sustainable energy in support of the Kingdom's Vision 2030.



[https://x.com/CE\\_IAU\\_SA/status/1983180226118201404](https://x.com/CE_IAU_SA/status/1983180226118201404)

## 6. Awareness lecture on "The Impact of Smart City Applications in Combating Desertification" by IAU

In conjunction with the launch of the [#Green\\_Homeland\\_Sustainable\\_Tomorrow](#) [#Our\\_Environment\\_is\\_a\\_Treasure](#) event, I was delighted today to represent @IAU\_Arch at the kind invitation of @IAU\_DCP and in collaboration with @ncvcksa, where IAU delivered an awareness lecture titled: [The Impact of Smart City Applications in Combating Desertification](#).



<https://x.com/Aboodkoa/status/1920386053124296992>

## 7. Participation of College of Engineering Students of IAU in developing the High Concentrated Photovoltaic (HCPV) system

Supported by #ImamAbdulrahmanBinFaisalUniversity, #Engineering College participated in developing the High Concentrated Photovoltaic (HCPV) system in collaboration with King Abdullah City for Atomic and Renewable Energy and the American company "Arzon Solar," achieving highly efficient results under harsh desert conditions and high temperatures.

الملخص التنفيذي اقتصاد متسارع النمو مجتمع متمكن وجهة حيوية رائدة رؤية مستدامة عام مليء بالتحديات

### تطوير نظام الطاقة الكهروضوئية المركزة (HCPV)

#### استكمال ونجاح للمشروع

بشراكة بين مدينة الملك عبد الله للطاقة الذرية والمتجددة، وجامعة الإمام عبد الرحمن بن فيصل، والشركة الأمريكية "أرزون سولار"

#### ما هي مميزاته؟

- قفزة نوعية مصممة لتحمل الظروف الصحراوية القاسية ودرجات الحرارة المرتفعة
- تقنية متطورة بعدسات عالية الكفاءة لتتركز ضوء الشمس على خلايا شمسية متعددة الطبقات
- 40% هي كفاءة التحويل



#### إطلاق مشروع المسح الجغرافي لمشروعات الطاقة المتجددة

1,200 محطة لرصد الطاقة الشمسية وطاقة الرياح في مختلف مناطق المملكة

أسندت عقود تنفيذ المشروع إلى شركات وطنية

323

٢٥٨/٢٢٢

[https://x.com/CE\\_IAU\\_SA/status/1916507044275798342](https://x.com/CE_IAU_SA/status/1916507044275798342)

## 8. Participation of College of Engineering Students of IAU in the events of the third Renewable Energy Symposium and Exhibition

The #College\_of\_Engineering of IAU concluded the events of the third Renewable Energy Symposium and Exhibition, after days filled with scientific contributions and fruitful workshops, thanking all participants and supporters for their contributions to the success of this event.



[https://x.com/CE\\_IAU\\_SA/status/1912930146014703621](https://x.com/CE_IAU_SA/status/1912930146014703621)

## 9. Participation of College of Engineering of IAU in Energy Debate

#College\_of\_Engineering of IAU proudly participates with its teams in the Energy Debate at King Fahd University of Petroleum and Minerals, where the college team secured second place 🏆 among the universities of the Eastern Region.



[https://x.com/CE\\_IAU\\_SA/status/1884486325786604026](https://x.com/CE_IAU_SA/status/1884486325786604026)

## 10. Participation of College of Engineering of IAU in Energithon Event at King Fahd University of Petroleum and Minerals

As #College\_of\_Engineering of IAU proudly shares, its team participated in the "Energithon" event at King Fahd University of Petroleum and Minerals as the only team from outside the university, achieving second place 🏆.



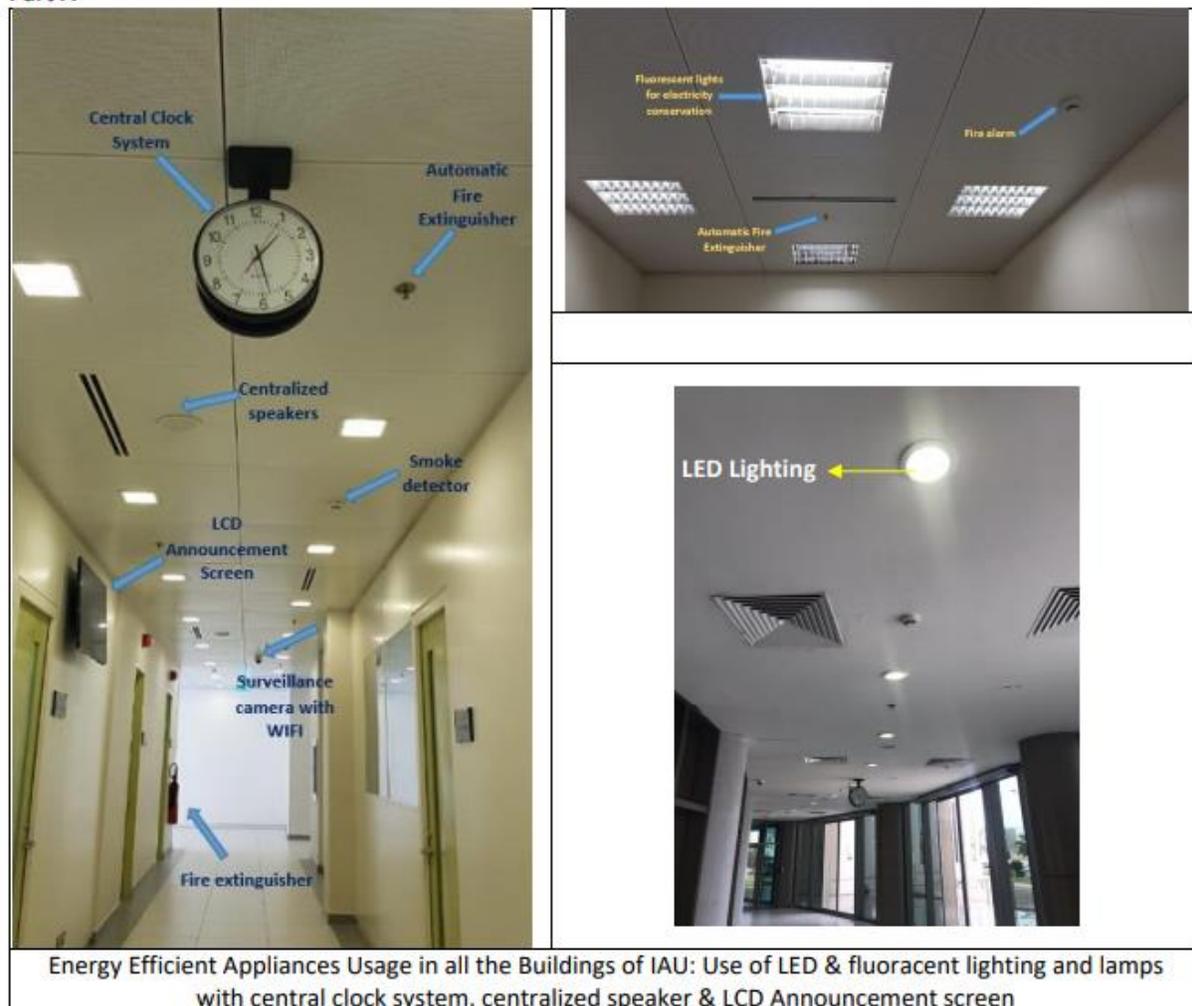
[https://x.com/CE\\_IAU\\_SA/status/1884528765310517480](https://x.com/CE_IAU_SA/status/1884528765310517480)

## 11. 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





<p>(Precast Concrete insulated panels and Curtain wall) Administration Building- IAU</p>	<p>IAU implement and abide by Saudi Building Code in its all Construction and Electricity plan</p>

PART B

<p><b>GATEWAY SIGNS</b></p> <p><b>DIRECTIONAL SIGNS</b></p> <p><b>CAMPUS MAPS</b></p> <p><b>BUILDING IDENTIFIERS</b></p>	
<p align="center"><b>OUTDOOR SIGNAGE IN C1-EAST CAMPUS</b></p>	



Example of Energy Efficient Appliances Usage: Solar energy for map direction and board and light outside

EXAMPLES OF SIGNAGE & SOLAR LIGHTS IN IAU CAMPUS

[https://www.iau.edu.sa/sites/default/files/resources/energy\\_efficient\\_building.pdf](https://www.iau.edu.sa/sites/default/files/resources/energy_efficient_building.pdf)



## 12. Research groups on Energy at IAU

The screenshot shows the website interface for Imam Abdulrahman Bin Faisal University. At the top, there is a search bar and a navigation menu with items like 'About Us', 'Study with Us', 'Colleges', 'Research', 'Community Service', 'Campuses', 'Sustainability', 'Administration', 'University Hospitals', and 'Open Data'. Below the navigation, a breadcrumb trail reads: 'Home / Colleges / College of Engineering / Departments / Mechanical and Energy Engineering Department / Research Groups'. The main content area is titled 'Research Groups' and features a list of five research groups, each with a plus icon to its right:

- Solar Energy Group
- Wind Energy Group
- Robotics and Control Group
- Air Conditioning and Energy Storage
- Material, Management, and Policy

On the left side of the page, there is a vertical sidebar menu with the following items: 'College of Engineering', 'About', 'Dean's Message', 'Vice Deanships', 'Departments', 'Biomedical Engineering Department', 'Civil & Construction Engineering Department', 'Environmental Engineering Department', and 'Department of Basic Engineering Sciences'.

<https://www.iau.edu.sa/en/colleges/college-of-engineering/departments/mechanical-and-energy-engineering-department/research-groups>



### 13. Approval for the Establishment of Saudi Building Code Academy by IAU

The happiness of the Dean of #College\_of\_Engineering, Dr. Murad Al-Thubaity, appreciates the Cabinet's approval for the establishment of the **Saudi Building Code Academy**, which will mark a qualitative leap in the development of engineering education, and enhance the academic and technical efficiency of students and engineers in the civil engineering sector.



[https://x.com/CE\\_IUA\\_SA/status/1899946964969476345](https://x.com/CE_IUA_SA/status/1899946964969476345)

