

Earth Sustainability... Our Responsibility

KHALIFA UNIVERSITY  
**SUSTAINABLE  
DEVELOPMENT GOALS  
REPORT 2025**



## PRESIDENT'S MESSAGE



At Khalifa University of Science and Technology, sustainability is a shared responsibility embedded across our academic, research, and operational ecosystem. This **2025 Sustainability Report**, structured around the **United Nations Sustainable Development Goals (SDGs)**, reflects how the SDGs have been **cascaded across the entire University community**, enabling every student, faculty member, researcher, and staff member to contribute meaningfully to our collective impact.

Following **COP30**, the global sustainability agenda has entered a phase defined by implementation and accountability. In 2025, Khalifa University is accelerating research and innovation in clean energy, water security, climate resilience, artificial intelligence, space technologies, and sustainable cities—translating knowledge into solutions that support the UAE's **Net Zero 2050** vision.

Through strong partnerships with government, industry, and leading academic institutions worldwide, and in the spirit of **SDG 17: Partnerships for the Goals**, we continue to amplify the reach and relevance of our work. Our progress is driven by collaboration, shared ownership, and a culture where sustainability is embedded in everyday decisions.

Khalifa University, in collaboration with its partners, remains committed to shaping a sustainable, resilient, and innovation-driven future.

H.E. Prof. Ebrahim Al Hajri,  
Chair, Sustainability Taskforce  
President, Khalifa University

## SUSTAINABILITY TASKFORCE -VICE CHAIR'S MESSAGE



The 2025 Sustainability Report demonstrates Khalifa University's structured approach to sustainability as an institutional priority, governed through policy, planning, and performance oversight. Sustainability efforts are focused on long-term resilience, responsible resource stewardship, and informed decision-making.

Alignment with the **United Nations Sustainable Development Goals (SDGs)** ensures that sustainability considerations are embedded across University operations and planning processes. This approach supports accountability, strengthens risk management, and enables consistent oversight of environmental, social, and economic impacts.

In the **post-COP30 period**, the University's focus has been on translating commitments into action through robust systems, reliable data, and transparent reporting. This report outlines how sustainability performance is monitored, reviewed, and continuously improved.

Khalifa University remains committed to supporting national priorities and advancing sustainable development through strong governance, responsible leadership, and practical collaboration.

Dr. Fatima Al Faqeeh  
Vice - Chair, Sustainability Taskforce  
Manager, Environment Health and Safety

# SUSTAINABILITY TASKFORCE

Through strategies that span every area of university life, Khalifa University is committed to reducing its greenhouse gas emissions, offering the most innovative teaching and research on climate change, and providing resources to establish a culture of climate awareness and stewardship that will help drive sustainable growth within the university, Abu Dhabi, the UAE, and the MENA region.

The objective of the Sustainability Taskforce is to focus on the Sustainability Pillars (Environmental, Economical & Social aspects) to ensure that KU operations are in line with the Sustainable Development Goals by reducing KU's carbon footprint. The taskforce comprises of Sustainability stewards from each of department across campus.

Name	Department	Role
H.E. Dr. Ebrahim Al Hajri		President
Dr. Fatima Al Faqeeh	FM	Vice President
Abdullah Ahmed Abdullah Al-Jaberi	President of the Sustainability Club	Member
Hamid Albastaki	Vice President of Sustainability Club	Member
Raja Al Maamari	HR	Member
Khaled Alamoodi	Procurement	Member
Amna Mohamed Alsuwaidi	FM, Admin and EHS	Member
Shahul Sithik	FM, Admin and EHS	Guest
Salem Obaid Mohammed AlEfari	FM, Admin and EHS	Guest
Samir Shukri Mohhamed	Digital Services	Member
Abdussabur Muhammad	Student Success	Member
Nasser Almemari	Student Life	Member
Dr. Mahmoud Al-Qutayri	Provost	Member
Dr. Peter Rodgers	Research Lab	Member
Dr. Ayesha Al Khoori	Post Doc	Member
Dr. Samuel Sheng Mao	Research Centers	Member
Sayed Al Hashmi	Marketing & Communication	Member
Noaman Saleem Ul Hasan	Business Excellence	Member
Rachel Thomas	PMO & Advisory	Secretary

# OUR SUSTAINABILITY JOURNEY



# VISION AND STRATEGY

## KU'S SUSTAINABILITY MISSION

Vision Statement To be a global leader in sustainability- driven education, research, and innovation, creating positive impact for society and future generations.

Mission Statement To advance sustainable development through cutting-edge research, transformative education, and innovative solutions that address global challenges while serving the UAE's strategic priorities.

## CORE VALUES



Excellence in Sustainable Practices



Innovation for Social Impact



Environmental Stewardship



Collaborative Partnerships



Inclusive Development



Ethical Leadership

# STRATEGIC PILLARS

## SUSTAINABLE EDUCATION

- Embedding sustainability across curricula
- Developing future sustainability leaders
- Promoting lifelong learning for sustainable development
- Fostering interdisciplinary approaches

## IMPACTFUL RESEARCH

- Advancing sustainability science
- Developing innovative solutions
- Promoting knowledge transfer
- Supporting evidence-based policymaking

## OPERATIONAL EXCELLENCE

- Implementing sustainable campus operations
- Reducing environmental footprint
- Promoting resource efficiency
- Demonstrating best practices

## COMMUNITY LEADERSHIP

- Engaging stakeholders
- Building partnerships
- Sharing knowledge
- Creating social impact

# ALIGNMENT WITH UAE NATIONAL PRIORITIES





## ■ UAE VISION 2071

- Contributing to UAE's centennial goals
- Supporting knowledge economy development
- Advancing technological innovation
- Promoting sustainable practices

## ■ UAE NET ZERO 2050

- Contributing to UAE's centennial goals
- Supporting knowledge economy development
- Advancing technological innovation
- Promoting sustainable practices

## ■ UAE WATER SECURITY STRATEGY 2036

- Advancing water technology research
- Developing sustainable solutions
- Supporting water conservation
- Promoting efficient usage

## UAE ENERGY STRATEGY 2050

- Supporting clean energy research
- Developing innovative solutions
- Promoting energy efficiency
- Advancing smart grid technology

## UAE INNOVATION STRATEGY

- Driving technological advancement
- Supporting entrepreneurship
- Promoting innovation culture
- Developing future capabilities



# IMPLEMENTATION FRAMEWORKS

01

## Governance Structure

- Sustainability Steering Committee
- SDG Working Groups
- Faculty Champions
- Student Ambassadors

02

## Management Systems

- Environmental Management System (ISO 14001)
- Energy Management System (ISO 50001)
- Quality Management System (ISO 9001)
- Sustainability reporting frameworks

03

## Performance Monitoring

- Key Performance Indicators (KPIs)
- Sustainability metrics
- Impact assessment

04

## Regular Reporting Mechanisms

- Stakeholder Engagement
- Internal communication
- External partnerships
- Community feedback
- Collaborative platforms

# 2025 SDG Cascading



# University Objectives

2025

VISION



A globally leading university, stimulating positive change and shaping the future

MISSION



Catalyze growth in the rapidly evolving knowledge-based economy of Abu Dhabi and the UAE, being a destination of choice for world-class education, research, innovation and enterprise to the benefit of society locally and globally

VALUES



Excellence

Integrity

Collaboration

People-centricity

Pace and Agility

Khalifa University Goals

1  
OUTSTANDING  
STUDENT  
EXPERIENCE

2  
IMPACTFUL  
RESEARCH

3  
CATALYST FOR  
ECONOMIC  
DEVELOPMENT

4  
COMMUNITY,  
PARTNER AND  
STAKEHOLDER  
ENGAGEMENT  
EXPERIENCE

5  
OPERATIONAL  
EXCELLENCE

Primary SDG Alignment

Secondary SDG Alignment

# 2025 High level Sustainability Roadmap



# SUSTAINABILITY ACTIVATION ROADMAP 2025

Baseline Assessment,  
Benchmarking and Roll out of 90+  
initiatives across university.



Activation of Primary  
SDG's mapping and cascading  
into University strategic KPIs.

Publication of 2024  
Sustainability Report

Publication of Climate  
Action Plan



Publication of CO2  
Emission Calculation  
(GHG Standard)



Launch of  
Green Grands Program

Sustainability Partnership  
& Center Activations



# Net Zero Roadmap Brief



## Net Zero Roadmap

In 2025, Khalifa University launched its **Net Zero Roadmap** for the first time, marking a significant institutional milestone in its sustainability journey. The roadmap establishes a clear, long-term pathway to reduce greenhouse gas emissions across campus operations, research activities, and infrastructure, aligned with the **UAE Net Zero 2050** ambition.

The Net Zero Roadmap establishes a structured framework that integrates **emissions measurement, reduction targets, and implementation actions** across key areas including energy, water, buildings, mobility, and resource management. It adopts a phased approach—prioritizing energy efficiency, renewable energy integration, smart campus technologies, and behavioral change supported by transparency, accountability, and continuous performance monitoring.

Through the launch of this roadmap, Khalifa University strengthens its commitment to climate action by embedding net-zero principles into governance and operational decision-making, positioning the University as a leading contributor to national and global decarbonization efforts.

[VIEW LINK](#)

# GHG Report Brief



## 2025 GHG Report

In 2025, for the 1st time Khalifa University completed its first comprehensive **greenhouse gas (GHG) emissions inventory** in line with the **GHG Protocol Corporate Standard**, covering Scope 1 and Scope 2 emissions across academic buildings, research laboratories, student housing, administrative facilities, and campus operations.

Total emissions for the year were **approximately 20,003 tCO<sub>2</sub>e**, representing a **5.6% reduction compared to 2024**. Scope 2 emissions from purchased electricity and cooling accounted for the majority of total emissions, while Scope 1 emissions were primarily associated with refrigeration systems, generators, and fleet fuel consumption.

This observed reduction reflects ongoing improvements in **energy efficiency, HVAC optimization, and smart campus management**, demonstrating measurable progress toward Khalifa University's long-term emissions reduction objectives and continued alignment with the UAE's **Net Zero 2050** ambitions.

[VIEW LINK](#)

# 2025 HIGHLIGHTS



## KEY ACHIEVEMENTS



Khalifa University Scientist Highlights UAE's Expanding Polar Research Role at World's Largest Arctic Circle Assembly in Iceland



Khalifa University and Global Alliance of Universities for Climate lead higher education dialogue at COP30 in Brazil



World's first Zero-Emission Polar Research Facility, Princess Elisabeth Antarctica Station, showcased at KU



Khalifa University Researchers Represent UAE in Bulgarian Antarctic Research Expedition



Sustainable Research Innovations at WFES 2025



YFEL Outreach Program Marks 16 Years of Impact



Khalifa University Recognized in 13<sup>th</sup> Sharjah Sustainability Awards



Innovations and Startups at Make it in the Emirates 2025



Sustainable and Smart Technologies Presented at Al Ain Emirates Agriculture Conference & Exhibition 2025



Khalifa University Launches TouchRipe - UAE's 1st Fruit Ripeness Device



Khalifa University Faculty Outlines Pathway to Sustainable and Compact AI Systems at IntegrateX Summit 2025

# SDG CONTRIBUTIONS AND ACHIEVEMENTS



# 1



## SDG 1: NO POVERTY

Khalifa University of Science and Technology contributes to **SDG 1: No Poverty** by expanding equitable access to high-quality education, supporting socio-economic mobility, and advancing research and innovation that address structural drivers of poverty and inequality. As a national research university, KU's impact is delivered through education, financial support mechanisms, capacity building, and community engagement.

### Key Contributions in 2025

#### 1. Equitable Access to Education

In 2025, Khalifa University continued to ensure that financial barriers do not limit access to education. The University provided **need-based and merit-based scholarships**, tuition support, and stipends that enable students from diverse socio-economic backgrounds to pursue higher education and research opportunities.



NO  
POVERTY

1



NO  
POVERTY

## 2. Student Financial Support & Well-Being

KU strengthened student support systems through financial aid programs, emergency assistance, housing support, and access to on-campus services. These initiatives contribute to student retention, academic success, and long-term employability, supporting pathways out of economic vulnerability.

Financial aid programs – The total amount of 314,776 AED for 16 students in 2025.

## 3. Research Addressing Poverty and Economic Resilience

Through interdisciplinary research in **energy affordability, water security, digital inclusion, healthcare technologies, and sustainable infrastructure**, KU contributes knowledge and solutions that address poverty-related challenges. Research outcomes support policy development, economic resilience, and inclusive growth in the UAE and beyond.

## 4. Capacity Building & Workforce Readiness

Khalifa University plays a critical role in developing a **highly skilled workforce**, equipping graduates with future-ready skills in engineering, science, and technology. Industry partnerships, internships, and applied research programs enhance employability and contribute to long-term economic stability.

## 5. Community Engagement & Outreach

In 2025, KU continued outreach initiatives supporting schools, youth programs, and underserved communities through STEM education, mentorship, and skills development activities. These efforts help build capacity, promote social inclusion, and expand access to opportunity. **Over 250 distinct community service related opportunities was rolled out through the year**

2



## SDG 2: ZERO HUNGER

Khalifa University of Science and Technology contributes to **SDG 2: Zero Hunger** by advancing research, innovation, and campus practices that support food security, sustainable agriculture, and responsible food systems. Through interdisciplinary research and operational initiatives, KU addresses challenges related to nutrition, resource efficiency, and resilience in arid and food-import-dependent regions.

### Key Contributions in 2025

#### 1. Research Supporting Food Security

In 2025, Khalifa University advanced research in areas that underpin food security, including **water-efficient food production, desalination technologies, controlled-environment agriculture, and food-energy-water nexus systems**. These research efforts contribute knowledge and technologies relevant to arid environments and climate-vulnerable regions.

#### 2. Responsible Food Practices on Campus

The University continued to promote **responsible food consumption and waste reduction** across campus dining facilities. Initiatives include improved food management practices, awareness campaigns, and collaboration with service providers to minimize food waste and support sustainable procurement.

ZERO  
HUNGER

2



ZERO  
HUNGER

#### Food Waste Statistics (2025)

Total campus food waste: 6780 kg

Main Campus: 2260 kg

SAN Campus: 4520 kg

Campus population: 63945

#### 4. Education & Capacity Building

Through academic programs, research training, and student projects, KU builds capacity in fields related to food systems, sustainability, and resource management. These efforts help prepare graduates to contribute to food security solutions through research, policy, and industry engagement.

#### 5. Collaboration & Knowledge Sharing

In 2025, Khalifa University strengthened collaboration with national and international partners in research, policy support, and knowledge exchange related to food security, nutrition, and sustainable agriculture.

#### Useful links:

- [Sustainable food outlets on campus](#)
- [Staff hunger intervention](#)
- [Sustainable food purchases](#)

# 3



GOOD HEALTH  
AND WELL-BEING

## SDG 3: GOOD HEALTH AND WELL-BEING

Khalifa University of Science and Technology advances SDG 3: **Good Health and Well-Being** by fostering a safe, inclusive, and supportive environment for its community, while delivering high-impact research and innovation that contribute to improved healthcare outcomes, public health, and well-being.

### Key Contributions in 2025

#### 1. Health, Safety, and Well-Being on Campus

In 2025, Khalifa University continued to prioritize the physical and mental well-being of students, faculty, and staff. Comprehensive health services, wellness programs, mental-health support, and occupational health and safety measures contribute to a healthy campus environment and a strong culture of care.

#### 2. Research and Innovation in Health Sciences

KU advanced research in **biomedical engineering, healthcare technologies, medical imaging, robotics, artificial intelligence, and digital health**. These efforts support improved diagnostics, treatment, and healthcare delivery, contributing to better health outcomes at national and global levels.

#### 3. Safe Research and Laboratory Practices

The University maintained rigorous **health, safety, and environmental (HSE)** standards across laboratories, workshops, and research facilities. Continuous training, audits, and risk management practices ensure safe working environments and responsible research conduct.

# 3



## GOOD HEALTH AND WELL-BEING

### 4. Education and Capacity Building

Through academic programs, graduate research, and professional training, KU contributes to the development of skilled professionals in health-related fields. Students engage in research and applied projects that address real-world health challenges and strengthen the healthcare innovation ecosystem.

### 5. Partnerships Supporting Health and Well-Being

In 2025, Khalifa University strengthened collaboration with healthcare providers, research institutions, and industry partners to support joint research, knowledge exchange, and innovation in medical and health-related fields.

#### Healthcare Collaborations

Khalifa University maintains partnerships with leading healthcare providers, including:

SEHA, Department of Health – Abu Dhabi, Cleveland Clinic Abu Dhabi, Sheikh Shakhbout Medical City, Burjeel Medical City, Mediclinic, Mubadala Health, Capital Health Screening Center, NMC Health, PureHealth, National Multiple Sclerosis Society, Khalifa Center for Genetic Engineering & Biotechnology, KeelXbio. The University collaborates with the Global Institute for Disease Elimination (GLIDE) to deliver the International Disease Elimination and Eradication Course (IDEEC), contributing to knowledge exchange and global public health capacity building.

These collaborations expand students' access to clinical environments, research networks, and public health initiatives.

# 3



## Community Health Efforts

Through the BALSAM Community Health Program, medical students engage directly with local communities – visiting senior citizens’ homes and promoting holistic well-being and preventive care.

## Campus Wellness

Khalifa University maintains a smoke-free environment, provides sports facilities, mental health services for students and staff, and supports healthy lifestyle adoption across campus.

- Mental Health Day 2025 Celebration: Making mental health and well-being a priority for everyone
- Mental health support for both staff and students ([link](#))– The Counseling Unit provided 1104 sessions for students in 2025. 31 workshops were delivered to promote the overall well-being of KU students.
- Establishment of mental health framework.
- Week of 14th – 18th April KU celebrated Employee Health week
- Rolled out 18 Workplace Wellness Program through SEHA.



GOOD HEALTH  
AND WELL-BEING

3



## Community Health

Public health education

Pause & Breathe – A Mental Wellness Corner

### HEALTHCARE PARTNERSHIPS



GOOD HEALTH  
AND WELL-BEING

# 4



## SDG 4: QUALITY EDUCATION

Khalifa University of Science and Technology advances SDG 4: Quality Education by providing inclusive, high-quality, and research-driven education that equips students with the knowledge, skills, and values needed to contribute to sustainable development and a knowledge-based economy.

First-Generation Students (Starting Degrees) - Out of 446 survey responses, 65 students (15%) identified as first-generation students (neither parent has a university/college degree), while 381 students (85%) reported that at least one parent has a degree.

### Educational Development & Training

Khalifa University offers hands-on learning and upskilling through:

- [EktashifCamp — Robotics Track](#)
- [Center for Teaching and Learning](#)
- Beyond Education

These programs strengthen digital skills, academic readiness, and career preparedness.

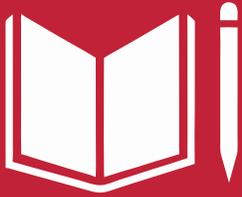
### Lifelong Learning Access

The University provides:

- [Public events and open lectures](#)
- Vocational training
- Education resources accessible beyond enrolled students
- [Policies supporting continued learning for diverse age groups](#)
- [Coursera KU](#)
- [Khanza](#)

QUALITY  
EDUCATION

# 4



## QUALITY EDUCATION

### EDUCATIONAL EXCELLENCE ACADEMIC PROGRAMS

- Khalifa University (KU) contributes significantly to SDG 4: Quality Education by delivering high-quality academic programs, advancing impactful research, and engaging actively with the wider community.
- Academic Programs: KU offers undergraduate (<https://www.ku.ac.ae/academics/undergraduate-programs#programs>) and postgraduate (<https://www.ku.ac.ae/academics/graduate-programs#programs>) programs across STEM disciplines, including natural sciences, engineering, computing, mathematics, and health sciences, providing students with high-quality education aligned with their interests and career goals. All programs are open to students regardless of gender, nationality, race, or religion.
- Accreditation and Quality Assurance: All KU programs are accredited by the UAE Commission for Academic Accreditation, with most undergraduate programs also holding relevant international accreditations (e.g., ABET for engineering). Rigorous quality assurance processes ensure high standards in program content and delivery.
- Research and Innovation in Education: KU faculty conduct evidence-based research on pedagogy, digital learning, assessment, and AI in education to improve learning outcomes, supported by grants from the Center for Teaching and Learning.
- Impactful Research: Through its research initiatives, KU advances SDG 4 by integrating education with knowledge creation. Students engage in cutting-edge research across energy, sustainability, health, materials, manufacturing, and the digital future, building advanced competencies while contributing to global scientific knowledge and sustainable development.
- Community Engagement and Outreach: KU collaborates with schools, government, and industry to promote STEM education, support teacher development, and inspire youth through outreach, competitions, and internships, while scholarships and partnerships enhance equitable access for diverse learners.
- Lifelong Learning and Continuing Education: KU supports working adult learners through professional graduate degrees, training, executive education, and reskilling programs, enabling lifelong learning and career growth.

# 4



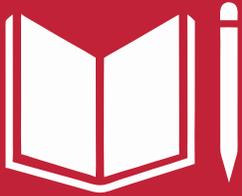
## EDUCATIONAL EXCELLENCE

### Teaching innovations

1. Infusion of AI into Core Courses, mandatory for all programs where possible (a minimum of two courses per program)
2. AI-Powered Tutoring Solutions on Blackboard, including video-based learning and personalized learning paths for students
3. AI-Based Advising Tools, providing students with personalized academic and career support
4. Implementing AI-driven Analytics, tracking performance and strengthening student assessment
5. Expanded Adaptive Learning, leveraging AI and scaling tools across courses
6. Innovative Teaching Practices, such as flipped learning and experiential learning
7. Active Learning Strategies, such as CBL, PBL, MIT CDIO
8. AI-Integrated Technical Electives
9. Lecture Recording and other innovative classroom technologies and data analytics
10. Expansion of Experiential Learning

QUALITY  
EDUCATION

# 4



## QUALITY EDUCATION

### EDUCATIONAL EXCELLENCE

#### Scholarship programs

- Khalifa University’s comprehensive scholarship programs (<https://www.ku.ac.ae/scholarships>) advance SDG 4 by expanding access to high-quality education for UAE national and international students. Merit-based undergraduate and postgraduate scholarships cover full or partial tuition and, in some cases, stipends, textbooks, accommodation, and medical insurance, reducing financial barriers and promoting equity. Assessed during admissions, these awards enable talented students from diverse backgrounds to pursue their studies, supporting inclusive and lifelong learning in line with SDG 4.

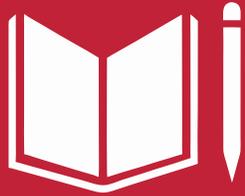
#### Inclusive education

- Khalifa University supports inclusive education in line with SDG 4 by ensuring equitable access, appropriate support, and high-quality learning opportunities for a diverse student body. The university implements anti-discrimination policies and provides disability support services, including academic accommodations and accessible campus facilities, to enable students of determination to fully participate in university life. Through inclusive admissions practices, student support services, and outreach initiatives, Khalifa University welcomes learners from varied socioeconomic and cultural backgrounds. Its interdisciplinary curricula and co-curricular programs also promote awareness, participation, and equal opportunity, helping to create a supportive learning environment where all students can succeed and contribute meaningfully to society.

#### Distance learning

- To expand access to higher education, Khalifa University offers a fully online Master of Engineering in Health, Safety and Environment Engineering. The program meets growing industry demand and enables working professionals to enroll remotely and advance their careers (<https://www.ku.ac.ae/academics/graduate-programs/m-eng-in-health-safety-and-environment-engineering>).

# 4

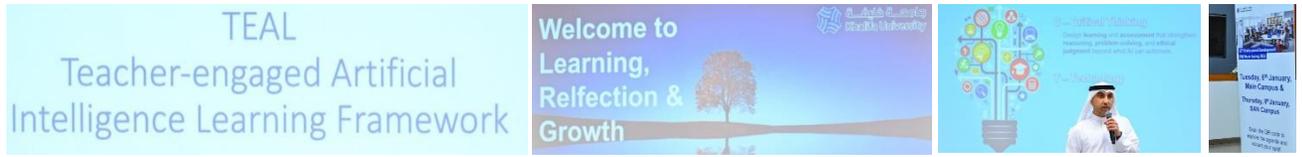


## EDUCATIONAL EXCELLENCE

### Lifelong Learning

#### Professional Development

1. Structured Mentoring Program: Formal mentoring framework pairing early-career faculty and researchers with senior mentors, focusing on academic standards, effective teaching and research practices, publication strategies, graduate supervision, professional recognition, and meaningful engagement with the university community.
2. Faculty & Researcher Development: Effective teaching and course design (active learning, syllabus development, assessment strategies); Research grant writing and funding acquisition; Leadership development and essential professional skills; Innovation, entrepreneurship, intellectual property, and research commercialization
3. International Exposure & Academic Mobility: Opportunities for participation in and organization of international conferences and workshops, as well as sabbatical and research leave programs enabling extended research stays at leading global institutions.
4. Industry Engagement & Continuing Education: Opportunities for faculty and researchers to design and deliver continuing education and professional training programs for industry and government professionals, strengthening real-world impact, industry partnerships, and practice-oriented expertise.



QUALITY EDUCATION

4



## EDUCATIONAL EXCELLENCE

### Lifelong Learning

#### Community Education

Khalifa University emphasizes community education and collaborations to promote lifelong learning. Some examples include:

1. Workshop on Cybersecurity and Resilience in the Financial Sector
2. Basic Disaster and Emergency Response Course
3. CERN International Master Classes on Particle Physics
4. CMHS Undergraduate Research Conference
5. 2nd MedBio Hackathon
6. Cyber week
7. Teaching and Learning in the Age of AI
8. Quantum Winter School
9. KU SDG Ambassadors Program
10. Green Campus Competition 2025
11. EE Solar Conference

QUALITY  
EDUCATION

# 4



## Cybersecurity & Resilience in Financial Sector

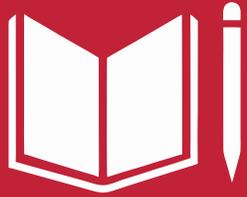
In June 2025, Khalifa University hosted a workshop bringing together senior representatives from the UAE and Italian central banks, academia, and cybersecurity institutions to examine emerging cyber threats to financial stability.

The discussions focused on regulatory and supervisory approaches under frameworks such as DORA, the role of public-private cooperation, and the use of AI-driven analytics in fraud detection and cyber defense.

Key sessions highlighted Threat-Led Penetration Testing (TLPT) as a tool for strengthening operational resilience, drawing on European and Italian experience.



4



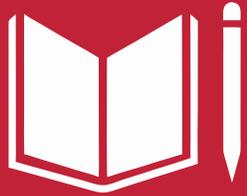
## Basic Disaster & Emergency Response Course

The Basic Disaster and Emergency Response Course is offered as part of Khalifa University's student development curriculum, equipping students with practical, certified skills in emergency response, including injury management, bleeding control, CPR, and choking response.



QUALITY  
EDUCATION

# 4



## Discovering the Big Bang

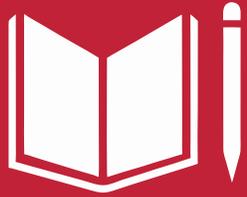
Khalifa University participated for the first time in the [CERN International Masterclasses: Hands-on Particle Physics](#),

- Hosting more than 350 high school students from over 40 schools across Abu Dhabi.
- During the program, students conducted measurements using real experimental data from CERN
- Gaining first-hand exposure to particle physics research methods.
- The initiative strengthened links between academic research and pre-university education
- Developing students' critical thinking, problem-solving skills, and understanding of international scientific collaboration.



QUALITY  
EDUCATION

# 4



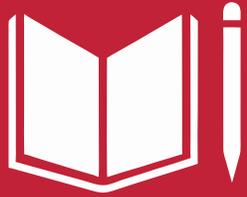
## CMHS Undergraduate Research Conference

The conference provided undergraduate students from the College of Medicine and Health Sciences (CMHS) with a platform to present their research and projects.

Additionally, students with prototypes, products, or software showcased their work through posters, presentations, & demonstrations.



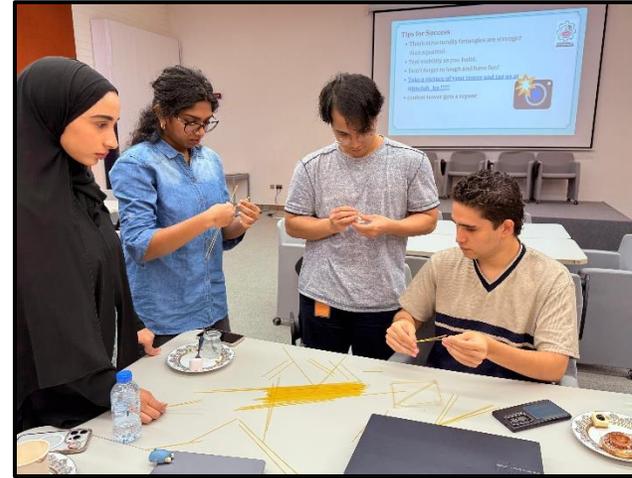
# 4



## MedBio Hackathon

Khalifa University's second edition of the MedBio Hackathon supported student teams across the full innovation journey, from initial ideation to prototype development and market readiness. Participants engaged in intensive development programmes and received guidance on translating ideas into viable solutions, including exposure to venture capital pathways.

Throughout the event, students collaborated with peers and mentors to brainstorm, code, design, and prototype their projects. Winning teams received cash prizes and continued mentorship from academic advisors to further refine and develop their solutions.



# 4



## Cyber Week 2025

Cyber Week 2025 was a four-day student-focused initiative held from June 16–19, 2025, marking the launch of the Google.org Cybersecurity Seminars Program.

Organized with CyberE71, Khalifa University, and industry partners, it featured a flagship workshop with the Central Bank of the UAE and Italy.

The program included parallel courses in Digital Forensics and AI in Cybersecurity.

Students earned program hours through course attendance, the workshop, and industry sessions.



QUALITY  
EDUCATION

4



## Teaching & Learning in the Age of AI

Khalifa University hosted a fireside chat with Dr. Patrice Prusko of Harvard University, focusing on the effective and responsible integration of AI in higher education teaching and learning practices.

Khalifa University's Center for Teaching & Learning is delighted to invite you to an upcoming **Fireside Chat on 'Teaching and Learning in the Age of AI: Trends, Opportunities, and Challenges in Leveraging Generative AI in Higher Education'**.

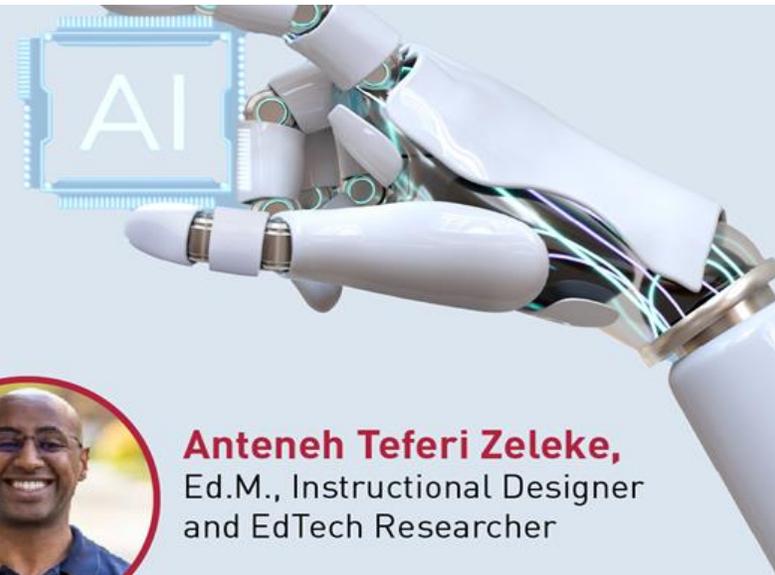
This timely session (virtual) will feature two distinguished international guest speakers:



**Dr. Patrice Torcivia Prusko,**  
Director of Learning Design,  
Technology & Media,  
Harvard University



**Anteneh Teferi Zeleke,**  
Ed.M., Instructional Designer  
and EdTech Researcher



QUALITY  
EDUCATION

4



## 11th Professional Development Week

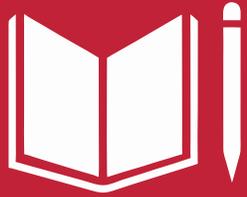
Khalifa University's Center for Teaching and Learning hosted a bi-annual Professional Development week to enhance teaching quality, relevance, career growth, collaboration, and problem-solving skills. The program:

- Enhances instructional effectiveness and student outcomes.
- Keeps faculty informed about educational trends and technologies.
- Supports advancement and professional growth.
- Encourages collaboration and sharing of best practices.
- Provides strategies for overcoming challenges.



QUALITY  
EDUCATION

# 4



## Quantum Winter School

- The event brought together students, researchers, and faculty, creating opportunities for networking and cross-institutional interaction.
- The Quantum Winter School featured invited talks by leading international researchers, covering key topics in quantum science.
- Dedicated poster sessions provided participants with a platform to present their work
- Participants engaged directly with experts through discussions and Q&A sessions, fostering active learning and knowledge exchange.



QUALITY  
EDUCATION

# 4



## KU SDG Ambassadors Program

The KU SDG Ambassadors Program is a student leadership initiative designed to equip undergraduates with a practical understanding of the UN SDGs.

Through a series of interactive workshops, students develop the skills to design community-focused sustainability volunteering initiatives.

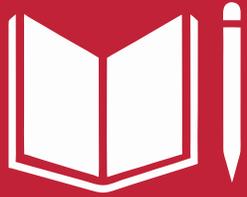
The program emphasizes leadership, collaboration, and measurable community impact.

Graduates complete the program as certified SDG Ambassadors with a fully developed initiative proposal.



QUALITY  
EDUCATION

# 4



## Green Campus Competition 2025

The third edition of the annual Green Campus Competition welcomed undergraduate students across the UAE, empowering them to develop innovative and practical solutions that enhance sustainability within university campuses.

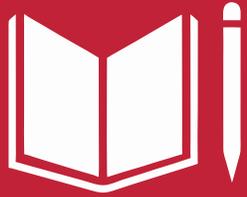
The competition focused on high-impact SDGs that include Sustainable Cities and Communities, Responsible Consumption and Production, and Affordable and Clean Energy.

Aligned with the UN SDGs, the competition promoted environmental awareness and responsible practices, culminating in a live 'Pitch Day' where finalists presented their ideas to a judging panel.



QUALITY  
EDUCATION

# 4



## SOLAR CAR RACE

The Solar Car Race aimed to inspire undergraduate students to engage with renewable energy technologies, particularly solar energy, while promoting teamwork, engineering skills, and sustainability.



QUALITY  
EDUCATION

# 4



## Solar Conference

The conference highlighted cutting-edge research conducted by the Electrical Engineering Department at Khalifa University.



QUALITY  
EDUCATION

4



## ACADEMIC EXCELLENCE

Khalifa University Sustainability Student Leaders Symposium

In 2025, Khalifa University successfully hosted the 3rd Sustainability Student Leaders Symposium, strengthening its role as a national hub for student-driven sustainability leadership.

The symposium convened sustainability leaders from universities across the UAE to share best practices, showcase SDG-focused initiatives, and engage in peer-to-peer learning through student-led presentations.

QUALITY  
EDUCATION

5



## SDG 5: GENDER EQUALITY

Khalifa University of Science and Technology advances **SDG 5: Gender Equality** by fostering an inclusive academic and professional environment that promotes equal opportunity, participation, and leadership for all members of the University community. Gender equity is embedded within Khalifa University's governance, policies, education, and research ecosystem.

### Key Contributions in 2025

#### 1. Inclusive Policies and Governance

In 2025, Khalifa University continued to uphold institutional policies that promote **non-discrimination, equal opportunity, and fair recruitment and advancement** across academic and professional roles. Governance frameworks support transparency, accountability, and equity at all levels of the University.

#### 2. Women in STEM

Khalifa University actively supports the participation and advancement of women in **science, engineering, and technology** through targeted initiatives, mentorship programs, research opportunities, and leadership development pathways. These efforts contribute to building a diverse and resilient STEM workforce.

#### 3. Education and Talent Development

The University provides equitable access to education through scholarships, academic support, and student development programs. Female students are encouraged to engage in research, innovation, and entrepreneurship, strengthening their future career prospects.

GENDER  
EQUALITY

5



#### 4. Research and Innovation Supporting Gender Equity

Through research in social systems, healthcare technologies, education, and inclusive innovation, Khalifa University contributes knowledge that supports gender equity and broader social inclusion outcomes.

#### 5. Safe, Supportive, and Inclusive Campus Environment

In 2025, Khalifa University continued to promote a respectful and supportive campus culture through awareness programs, well-being initiatives, and mechanisms that ensure safety, dignity, and inclusion for all members of the community.

Useful Links:

- [Childcare facilities for staff, faculties and students](#)
- [Policy protecting those who report discrimination](#)



5



GENDER  
EQUALITY

# SDG 5: GENDER EQUALITY

## YEAR 2025 STATISTICS

### WOMEN'S EMPOWERMENT

FACULTY

18%

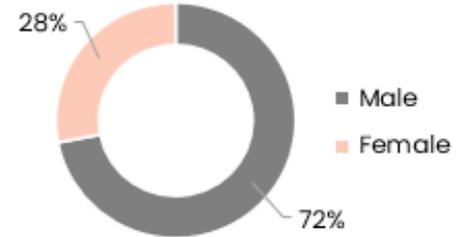
STAFF

56%

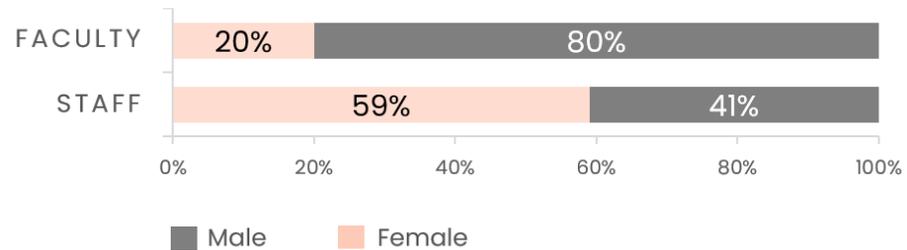
RESEARCH

31%

## WOMEN IN LEADERSHIP



## 2025 Promotions



## 2025 Cyclical Salary Adjustment



6



CLEAN WATER AND SANITATION

# SDG 6: CLEAN WATER AND SANITATION

Khalifa University of Science and Technology advances **SDG 6: Clean Water and Sanitation** by strengthening water security through cutting-edge research, sustainable campus water management, and capacity building. As a university based in an arid region, KU plays a critical role in addressing water scarcity and resilience challenges.

## Key Contributions in 2025

### 1. Research and Innovation in Water Security

In 2025, Khalifa University continued to lead research in **desalination technologies, advanced membranes, water treatment, brine management, and water-energy nexus systems**. These research efforts support more efficient, affordable, and sustainable water solutions relevant to arid and water-stressed regions.

### 2. Sustainable Water Management on Campus

KU implemented measures to optimize water use across campus facilities, including **smart water metering, leak detection, efficient irrigation systems, and the use of non-potable water for landscaping**. These initiatives contribute to reduced water intensity and improved operational efficiency.

### 3. [Responsible Water Use](#) in Laboratories

The University promoted responsible water consumption in laboratories and research facilities through best-practice guidelines, monitoring, and equipment optimization, ensuring efficient use without compromising research excellence.

# 6



## SDG 6: CLEAN WATER AND SANITATION

### Water Research

#### Strategic Commitment to Water Sustainability

Khalifa University places water sustainability at the core of its sustainability mission, aligning research, innovation, and partnerships with SDG 6 (Clean Water and Sanitation) and national priorities, including the UAE Water Security Strategy 2036. Water research is positioned as a key pillar under KU's Impactful Research and Innovation for Social Impact agendas.

#### Leadership in Water Research and Innovation

Through the Center for Membranes and Advanced Water Technology (CMAT), Khalifa University leads advanced research in:

- Sustainable desalination and water reuse
- Advanced membrane technologies
- Emerging contaminant removal (e.g., PFAS, microplastics, antibiotics)
- Resource recovery from wastewater and brine
- AI-enabled water systems, sensing, and modeling

These efforts contribute directly to improving water efficiency, reducing environmental footprints, and enabling climate-resilient water infrastructure.



6



## SDG 6: CLEAN WATER AND SANITATION

### Water Research

#### Research Outputs and Global Impact

- CMAT delivered 100+ Q1 high-impact journal publications in water and environmental technologies, reinforcing KU's global research leadership.
- The university generated significant intellectual property (15+) and advanced multiple technologies toward commercialization, including the launch of 3 water-focused spin-off companies.
- Research outcomes support evidence-based policymaking and technology deployment in arid and water-stressed regions.

#### Capacity Building and Knowledge Transfer

Khalifa University integrates sustainability into education and research training by:

- Supervising 30+ MSc and PhD students in water and environmental engineering
- Supporting interdisciplinary and AI-driven research approaches
- Hosting 4 international conferences, workshops, and hackathons focused on water security and sustainability. Examples include Industry-Academia Water Security & Hydrology Workshop, 5th WaterEnergyNEXUS 2025 International Conference, First Global Hackathon for Sustainable Water Desalination and Reuse, and Khalifa University-Saudi Water Authority-WATIRA Workshop

These activities strengthen national capacity and develop future leaders in sustainable water systems.



6



# SDG 6: CLEAN WATER AND SANITATION

## Water Research

### Partnerships and Stakeholder Engagement

The university actively collaborates with:

- UAE government entities (e.g., DoE, MOFA, water authorities)
- Industry partners in desalination, energy, and water infrastructure
- International academic institutions and multilateral organizations (e.g. VITO)

These partnerships enhance the translation of research into real-world water solutions and reinforce KU's role in regional and global water governance.

### Contribution to Climate Action and Resilience

Water research at KU supports broader sustainability and climate goals by:

- Reducing energy intensity of desalination and treatment processes
- Improving wastewater reuse and circular water systems
- Addressing coastal resilience, brine management, and environmental protection

### Overall Sustainability Impact

Khalifa University's water research activities demonstrate a holistic sustainability approach, integrating advanced science, innovation, policy engagement, and education to deliver clean water solutions with long-term environmental, economic, and social benefits, both nationally and globally.



6



CLEAN WATER  
AND SANITATION

### Campus Water Management

- 412,051 m3 inbound
- 62.66 m3 per person

### Community Solutions

- Water access projects
- Sanitation initiatives
- Public awareness

### Campus Water Management

- Water conservation
- Landscape renovation for SAN and Manin campus

### Infrastructure improvements

- Replacement of leaking grp paneled water tank, existing building, main campus

7



AFFORDABLE AND  
CLEAN ENERGY

## SDG 7: AFFORDABLE AND CLEAN ENERGY

Khalifa University of Science and Technology advances SDG 7: Affordable and Clean Energy by leading research and innovation in renewable energy, energy systems, and decarbonization, while continuously improving energy efficiency across campus operations. KU plays a strategic role in supporting the UAE's clean energy transition and Net Zero 2050 ambition.

### Key Contributions in 2025

#### 1. Clean Energy Research and Innovation

In 2025, Khalifa University continued to advance high-impact research in solar energy, hydrogen technologies, energy storage, power systems, and grid optimization. These research activities support the development of reliable, scalable, and affordable clean energy solutions.

#### 2. Energy Efficiency and Smart Campus Operations

KU implemented energy efficiency measures across campus, including HVAC optimization, LED lighting upgrades, building automation systems, and data-driven energy monitoring. These initiatives contribute to reduced energy intensity and improved operational performance.

#### 3. Renewable Energy Integration

The University expanded the integration of renewable energy technologies and explored low-carbon energy solutions within campus operations, supporting emissions reduction and energy resilience.

7



AFFORDABLE AND  
CLEAN ENERGY

#### 4. Education and Talent Development

Through academic programs, graduate research, and applied learning, KU develops expertise in clean energy and power systems. Students actively participate in research projects addressing real-world energy challenges.

#### 5. Partnerships Supporting Energy Transition

In 2025, Khalifa University strengthened partnerships with government entities, industry leaders, and international research institutions to advance clean energy deployment, policy support, and technology transfer.

Useful links:

- [Environment Sustainable policy](#)
- [Sustainability plan](#)
- [Local community outreach for energy efficiency](#)
- [Assistance to low carbon innovation](#)

7



# SDG 7: AFFORDABLE AND CLEAN ENERGY

## Energy Research

In 2025, Khalifa University continued to strengthen its contribution to SDG 7 through a portfolio of research projects focused on clean and renewable energy, power systems optimization and managed energy transition.

These projects span advanced power systems modelling, hydrogen and CO<sub>2</sub> utilization, and integrated renewable energy solutions, supporting a more efficient and reliable energy mix for the UAE and beyond.

61

Active Awarded Research  
Projects in 2025

29 M

Projects' Research  
Budget (AED) in 2025

### Main research themes:

Clean and  
Renewable Energy

Energy: Fuels and  
Energy: Power

Managed Energy  
Transition

AFFORDABLE AND  
CLEAN ENERGY

7



AFFORDABLE AND  
CLEAN ENERGY

## SDG 7 Research Publications in 2025

### Energy Research Publications Summary

In 2025, Khalifa University demonstrated strong and sustained research output aligned with SDG 7: Affordable and Clean Energy, producing **442 publications** mapped to this goal (as of 16 January 2026, Scopus data).

Between 2022 and 2025, KU's SDG 7 publication output grew at an average **annual rate of approximately 19%**, reflecting sustained expansion and consolidation of research activity in clean and sustainable energy.

The 2025 SDG 7 publications achieved a **Field-Weighted Citation Impact (FWCI) of 2.32**, indicating citation rates more than twice the global average.

In addition, **74.9%** of these publications involved **international co-authorship**, underscoring the strength of KU's global research collaboration network.

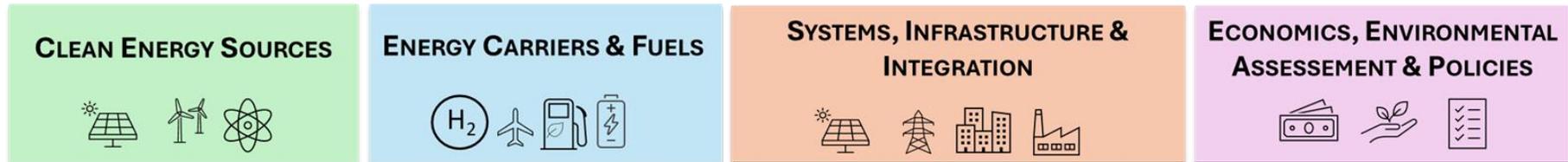
7



# SDG 7: AFFORDABLE AND CLEAN ENERGY

## Energy Research

Research at KU covers the whole value change of energy production, transmission and utilization, including their environmental impact



Research and Innovation Centers and areas of focus within the Energy sector at Khalifa University

Advanced Power Energy Center (APEC)

Emirates Nuclear Technology Center (ENTC)

Research and Innovation Center on CO2 and Hydrogen (RICH)



Research. Innovation, Commercialization in the energy sector

AFFORDABLE AND CLEAN ENERGY

# 7



## SDG 7: AFFORDABLE AND CLEAN ENERGY

- Energy partnerships/ Technology transfer
- Supply & Installation of VPNR system
- Supply and Installation of LED Strip Lights for Link Bridge in Main Campus (between E & G building 1st floor)

### Strategic partners in energy with active projects



### Support to the UAE government



AFFORDABLE AND CLEAN ENERGY

7



# SDG 7: AFFORDABLE AND CLEAN ENERGY

Students' engagement:

Debate: "CO<sub>2</sub> Capture vs. Hydrogen: The Best Path to a Net-Zero Future?" (YFEL program).



Dear YFEL Members,

We are excited to invite you to our Fifth technical session, hosted by the Chemical & Petroleum Engineering Department under the Research and Innovation Center on CO<sub>2</sub> and Hydrogen (RICH).

**Debate Title:** CO<sub>2</sub> Capture vs. Hydrogen: The Best Path to a Net-Zero Future?

**Main Objective of the Debate**

The primary goal of this debate is to explore cutting-edge research and technological advancements in CO<sub>2</sub> capture, utilization, and storage (CCUS) and hydrogen production for climate mitigation and adaptation.

Field	Details
Instructor(s)	Dr. Seba Zakaria Al Areegi Dr. Priyanka Kumari and Eng. Sarah Waleed Hamdan
Date	25 <sup>th</sup> of June - 25
Time	4:30 PM - 6:00 PM
Location	KIC
Workshop Format	Hybrid • UAE Based Students - In Person • International Students - Virtual
Judges	Dr. Maryam Khaleel Dr. Khalid AlAli Dr. Ahmad Mayyas



AFFORDABLE AND  
CLEAN ENERGY

8



DECENT WORK AND  
ECONOMIC GROWTH

## SDG 8: DECENT WORK AND ECONOMIC GROWTH

Khalifa University of Science and Technology contributes to SDG 8: Decent Work and Economic Growth by developing future-ready talent, supporting innovation-driven economic growth, and ensuring fair, safe, and inclusive working conditions. As a national research university, KU plays a key role in strengthening human capital and supporting the UAE's transition to a knowledge-based economy.

### Key Contributions in 2025

#### 1. Talent Development and Employability

In 2025, Khalifa University continued to equip students with **high-value skills** aligned with national and global labour market needs. Industry-linked curricula, internships, research placements, and career development programs enhance graduate employability and long-term economic opportunity.

#### 2. Decent Work and Safe Working Conditions

KU upholds strong policies and practices that promote **fair employment, health and safety, and employee well-being**. Comprehensive occupational health and safety systems, professional development opportunities, and inclusive workplace practices contribute to a productive and supportive work environment.

#### 3. Research and Innovation Driving Economic Growth

Through research excellence in **clean energy, advanced manufacturing, artificial intelligence, space technologies, healthcare, and smart systems**, KU contributes directly to innovation-led economic growth. Research outcomes support industrial competitiveness, productivity, and diversification.

8



#### 4. Entrepreneurship and Knowledge Transfer

Khalifa University supports entrepreneurship, start-ups, and technology commercialization through innovation programs, industry collaboration, and spin-out support. These activities help translate research into economic value and job creation.

#### 5. Partnerships Supporting Economic Development

In 2025, KU strengthened collaboration with government, industry, and global partners to support workforce development, applied research, and economic resilience initiatives aligned with national priorities.



DECENT WORK AND  
ECONOMIC GROWTH

9



## SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Khalifa University of Science and Technology advances SDG 9: Industry, Innovation and Infrastructure by delivering world-class research, fostering innovation ecosystems, and supporting the development of resilient, sustainable, and technology-enabled infrastructure. As a national research university, KU plays a critical role in strengthening industrial competitiveness and innovation capacity.

INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



9



## Key Contributions

### 1. Research Excellence and Technological Innovation

In 2025, Khalifa University continued to lead high-impact research in **advanced materials, robotics, artificial intelligence, aerospace, clean energy, biomedical engineering, and smart systems**. These research activities contribute to technological advancement and industrial innovation.

### 2. Innovation Ecosystem and Technology Transfer

KU strengthened its innovation ecosystem through **patents, start-ups, spin-offs, and industry collaboration**, enabling the translation of research outcomes into commercial and societal value. Support for entrepreneurship and commercialization enhances innovation-driven economic growth.

### 3. Smart and Resilient Infrastructure

The University continued to invest in **state-of-the-art research infrastructure, laboratories, digital platforms, and smart campus technologies**, supporting efficient operations, research excellence, and resilience.

### 4. Industry Collaboration and Applied Research

In 2025, KU expanded applied research and joint development projects with **national and international industry partners**, addressing real-world challenges in energy, mobility, manufacturing, healthcare, and digital infrastructure.

### 5. Education and Skills for Innovation

Through research-integrated education, graduate training, and hands-on learning, KU develops highly skilled graduates capable of contributing to innovation, industrial development, and infrastructure advancement.

INDUSTRY, INNOVATION  
AND INFRASTRUCTURE

9



## SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

### Industry & Innovation Research

In 2025, Khalifa University strengthened its contribution to SDG 9: Industry, Innovation and Infrastructure through a focused portfolio of research projects advancing sustainable industrial processes, resilient infrastructure, and enabling digital technologies.

Collectively, these initiatives leverage robotics, artificial intelligence, digital platforms, and advanced materials to enhance industrial efficiency, infrastructure resilience, and technology-driven innovation, supporting national and global industrial transformation agendas.

54

Active Awarded Research  
Projects in 2025

26M

Projects' Research Budget  
(AED) in 2025

### Main research themes:

Robotics

AI and Digital  
Platforms

Advanced  
Materials

INDUSTRY, INNOVATION  
AND INFRASTRUCTURE

9



## SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

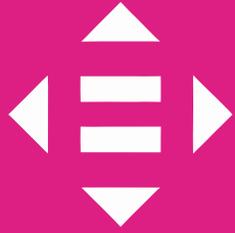
### Industry & Innovation Research

- **MSAP: Multi-Robot Platform for Smart Cities:**  
Enables fleets of robots to cooperate in next-generation city services and infrastructure
- **LLM-Based Mobile Robot for Warehouses:**  
Uses large language models to automate warehouse logistics and material handling
- **Smart AgriTech Drone for Precision Farming:**  
Maps crop health and yield using AI-powered drones to boost agricultural productivity
- **Smartphone-Based Biosensor for Water Quality:**  
Detects pharmaceutical contaminants in water using a portable phone-based sensor
- **Multifunctional Ceramics for Extreme Environments:**  
Develops advanced ceramic materials to protect critical infrastructure in harsh conditions

INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



10



REDUCED  
INEQUALITIES

## SDG 10: REDUCED INEQUALITIES

Khalifa University of Science and Technology advances SDG 10: **Reduced Inequalities** by fostering an inclusive academic and professional environment that ensures equal opportunity, accessibility, and participation for all members of the University community. Equity and inclusion are embedded within KU's governance, policies, and institutional culture.

### Key Contributions in 2025

#### 1. Access and Support for Diverse Student Populations

KU provides targeted support mechanisms, including **scholarships, financial assistance, academic advising, and student services**, ensuring that [students from diverse socio-economic and cultural backgrounds](#) can succeed.

#### 2. Accessibility and Inclusive Campus Design

The University continued to [enhance physical and digital accessibility](#) across campus facilities and learning platforms, supporting inclusive participation for students, staff, and visitors with diverse needs.

#### 3. Research and Innovation Addressing Inequality

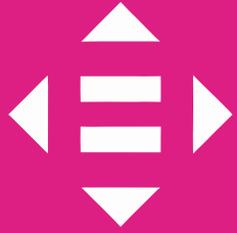
Through interdisciplinary research in areas such as **inclusive technologies, healthcare access, digital inclusion, education systems, and social resilience**, KU contributes knowledge that helps reduce inequalities at local, national, and global levels.

#### 4. Community Engagement and Outreach

In 2025, Khalifa University strengthened outreach initiatives that promote inclusion through **STEM education, mentoring, and capacity-building programs** for underrepresented groups and communities.

#### 5. [Established Diversity, Equity and Inclusion framework.](#)

10



# SDG 10: REDUCED INEQUALITIES

## Campus Inclusion

DIVERSITY INITIATIVES

27



CULTURAL INITIATIVES

08



DISTINCT NATIONALITIES

88



REDUCED  
INEQUALITIES

11



SUSTAINABLE CITIES  
AND COMMUNITIES

# SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Khalifa University of Science and Technology advances SDG 11: Sustainable Cities and Communities by delivering research, innovation, and education that support resilient urban development, sustainable infrastructure, and inclusive communities. Through its location in Abu Dhabi and close engagement with Masdar City and national partners, KU plays a strategic role in shaping future-ready cities.

## Key Contributions in 2025

### 1. Research for Sustainable and Smart Cities

In 2025, Khalifa University advanced interdisciplinary research in **smart cities, sustainable buildings, urban energy systems, intelligent mobility, climate-resilient infrastructure, and digital urban solutions**. These research efforts support evidence-based planning and the development of low-carbon, efficient, and resilient urban environments.

### 2. Campus as a Living Laboratory

KU's campuses function as **living laboratories for urban sustainability**, integrating smart building technologies, energy-efficient systems, water management solutions, and digital monitoring platforms. These initiatives demonstrate practical applications of sustainable urban concepts in real-world settings.

### 3. Sustainable Mobility and Infrastructure

The University contributes to sustainable urban mobility through research and pilot initiatives related to **electric vehicles, intelligent transport systems, and emissions reduction**. Campus infrastructure planning prioritizes accessibility, safety, and environmental performance.

11



SUSTAINABLE CITIES  
AND COMMUNITIES

#### 4. Community Engagement and Outreach

In 2025, Khalifa University strengthened engagement with schools, communities, and public-sector stakeholders through sustainability awareness programs, educational outreach, and student-led initiatives. These efforts promote environmental responsibility and inclusive participation beyond the campus.

#### 5. Partnerships for Urban Sustainability

KU collaborates closely with **government entities, municipalities, industry partners, and international research institutions** to co-develop solutions addressing urban sustainability challenges, reinforcing the role of partnerships in achieving SDG 11 outcomes.

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## SDG 12: Responsible Consumption and Production

Khalifa University of Science and Technology advances SDG 12: **Responsible Consumption and Production** by embedding sustainability into campus operations, procurement, research practices, and community engagement. Through a combination of policy-driven action and behavioral change, KU promotes efficient resource use, waste reduction, and a culture of sustainability across the University.

### Campus Operations

- Green procurement
- Waste management
- Resource efficiency

### Community Education

- Sustainability awareness with total participation of 955 .
- A series of online quizzes
- Clean up campaign
- Earth hour
- Earth day

RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION

12



## SDG 12: Responsible Consumption and Production

### Waste Management: Solvent Recovery Facility

In Fall 2025, the Chemistry Department established a dedicated solvent recovery facility, funded by Research Laboratories, to support Khalifa University's sustainability goals. The facility has successfully evaluated a broad spectrum of aromatic, aliphatic, alicyclic, and halogenated solvents, and is capable of efficiently separating non-azeotropic mixtures with boiling point differences of less than 25 °C.

### Sustainability Impact and Achievements (2025)

The solvent recovery facility delivers clear sustainability benefits:

- Reduced solvent waste, increased reuse, lower material and disposal costs
- Improved environmental performance
- Enhanced safety and compliance.

It marks a key step toward recycling chemical use in research.

### Proposed Improvements and Plan for 2026

Starting in Spring 2026, instructional lab solvents will be recycled through the facility, providing students with hands-on experience in sustainable laboratory practices. The facility's separation processes will also be optimized through equipment upgrades, including the addition of a heat chiller and pressure controller, to improve process efficiency and enable the handling of a wider range of solvents.



RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION

13



## SDG 13: CLIMATE ACTION

Khalifa University of Science and Technology advances SDG 13: Climate Action by integrating climate mitigation, adaptation, and resilience across research, campus operations, governance, and community engagement. In 2025, climate action was strengthened through data-driven decision-making, institutional accountability, and long-term strategic planning aligned with the UAE's climate ambitions.

CLIMATE  
ACTION

13



## SDG 13: CLIMATE ACTION

Climate Action Research

In 2025, Khalifa University advanced its contribution to SDG 13: Climate Action through a robust portfolio of research projects addressing both climate mitigation and adaptation.

These projects integrate environmental and planetary sciences with low-carbon energy technologies and climate risk and impact analysis, supporting evidence-based climate solutions relevant to the UAE and the wider region.

88

Active Awarded Research  
Projects in 2025

45 M

Projects' Research Budget  
(AED) in 2025

Main research themes:

Climate Resilience

Emissions Reduction  
Strategies

Informed Policy and  
Infrastructure  
Planning

CLIMATE  
ACTION

13



CLIMATE  
ACTION

## SDG 13 Research Publications in 2025

### Climate Action Research Publications Summary

Within SDG 13: Climate Action, Khalifa University produced 552 publications over the 2022–2025 period, according to Elsevier SciVal SDG 2025 mapping (Scopus data as of 16 January 2026).

Between 2022 and 2025, SDG 13 publication output grew at an average annual rate of approximately 17%, reflecting sustained expansion of KU's climate-focused research portfolio.

Across the 2022–2025 period, SDG 13 publications achieved a Field-Weighted Citation Impact (FWCI) of 2.21, supported by 11,956 citations and 27,332 views, demonstrating strong scholarly impact and visibility.

International collaboration remains a key strength, with 415 publications (approximately 75.2%) involving international co-authors.

13



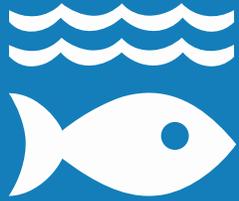
## SDG 13: CLIMATE ACTION

### Climate & Decarbonisation Research

- **FloodEye - Flood Prediction for Arid Regions:**  
Uses remote sensing to forecast floods in dry regions and protect vulnerable communities
- **Climate Risk Assessment for Dubai Airports:**  
Evaluates climate-change impacts on a major transport hub to guide resilience planning
- **CO<sub>2</sub> Sequestration in Abu Dhabi Carbonate Aquifers:**  
Optimises permanent underground storage of CO<sub>2</sub> in regional geological formations
- **Advanced MOFs and Zeolites for CO<sub>2</sub> Capture:**  
Designs next-generation materials to adsorb CO<sub>2</sub> more efficiently from gas streams
- **B-RISE – Rising Seawater Temperatures at Barakah NPP:**  
Assesses how warmer seas affect nuclear plant cooling and develops adaptation strategies

CLIMATE  
ACTION

14



## SDG 14: LIFE BELOW WATER

Khalifa University of Science and Technology contributes to SDG 14: Life Below Water by advancing research, innovation, and education that support marine conservation, water quality, and sustainable use of ocean and coastal resources. Through research excellence and community engagement, KU supports the protection of marine ecosystems that are vital to environmental resilience and economic sustainability.

### Community Engagement in Marine & Coastal Protection (2025)

#### Coastal Clean-Up Campaigns

- 3 community clean-ups conducted (January–February)
- Jubail Mangrove (January & February)
- Um Al Lulu Female Dorms (February)
- 60 KU volunteers participated
- Over 99 kg of waste collected

#### Plastic Pollution Awareness

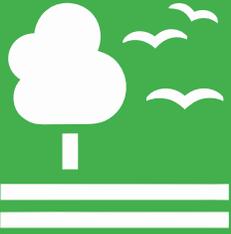
- World Environment Day 2025 (#BeatPlasticPollution) social media activation
- 9,766 total views
- 105 interactions
- Average 350 responses to story activities

#### Impact

Active community participation in coastal clean-ups and plastic pollution awareness strengthened KU's contribution to marine ecosystem protection and SDG 14 targets



15



## SDG 15: LIFE ON LAND

Khalifa University of Science and Technology contributes to SDG 15: Life on Land by advancing research, sustainable campus practices, and community engagement that support biodiversity conservation, ecosystem health, and sustainable land use. Operating in a sensitive arid environment, KU recognizes the importance of protecting terrestrial ecosystems and native biodiversity.

### Campus Environment

- Biodiversity protection
- Green spaces
- Native species

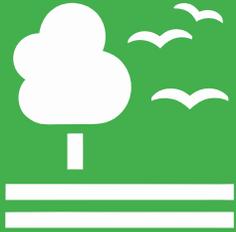
### Environmental Impact

- Conservation projects
- Education programs



LIFE ON LAND

15



LIFE  
ON LAND

## Community Engagement in Environmental Awareness & Sustainable Practices (2025) Environmental Education & Awareness

- Environment Day event:
- **2 educational presentations**
- **46 students attended**
- **7 external entities participated**
- Earth Day visit to Sheikh Mohammed bin Rashid Solar Park
- **22 KU community members attended**
- Tadweer Group Virtual Session
- **54 KU members participated**
- Tadweer Group Exhibition
- **225 KU visitors engaged**

## Campus & Community Engagement Campaigns

- Global Recycling Day quiz
- **59 responses**
- EnviroTrivia Series
- **4 editions released**
- **351 responses collected**
- Earth Hour initiative
- **742 kWh energy saved**
- **148.4 AED cost savings**
- **4,039 Instagram story views**

## Impact

Through structured awareness programs, educational partnerships, energy conservation actions, and strong community participation, KU advanced responsible environmental stewardship aligned with SDG 15 objectives

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PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS

## SDG 16 – Peace, Justice & Strong Institutions

Khalifa University of Science and Technology advances SDG 16: **Peace, Justice and Strong Institutions** by upholding strong governance, ethical conduct, transparency, and accountability across all academic, research, and operational activities. As a national institution, KU is committed to building trust, safeguarding integrity, and contributing to resilient and effective institutions.

### Key Contributions in 2025

#### 1. Governance, Ethics, and Accountability

In 2025, Khalifa University continued to strengthen governance frameworks that support **ethical leadership, compliance, and transparency**. Clear policies and code of ethics, defined governance structures, and regular reviews ensure responsible decision-making and institutional accountability.

#### 2. Academic Integrity and Research Ethics

KU upholds rigorous standards for **academic integrity and responsible research conduct**, supported by committees, review processes, and training programs. These measures enhance academic integrity, protect the credibility of research and ensure alignment with international best practices.

#### 3. Safe, Secure, and Inclusive Campus Environment

The University maintains a physically and environmentally safe and secure campus through effective **environment, health, safety, and security systems**, safeguarding the well-being of students, staff, and visitors. Inclusive policies and grievance mechanisms support fairness, respect, and access to justice within the institution.

#### 4. Digital Trust and Cybersecurity

KU contributes to institutional resilience through research and practice in **cybersecurity, data protection, and digital governance**, supporting secure information systems and responsible use of digital technologies.

#### 5. Capacity Building and Policy Engagement

In 2025, Khalifa University contributed expertise to policy dialogue, advisory roles, and capacity-building initiatives that support strong institutions, evidence-based decision-making, and public-sector resilience.



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# SDG 16 – Peace, Justice & Strong Institutions

## KU Contribution through KUBee (AI workmate)

KUBEE directly supports Khalifa University’s sustainability objectives by embedding digital-first, low-resource administrative and academic services across the institution. By reducing reliance on paper-based processes, physical service counters, and repetitive in-person interactions, KUBEE lowers material consumption, optimizes staff time, and minimizes the need for additional physical infrastructure.

**95,621**

Total Interactions  
14,331 unique users

**99.12%**

User Satisfaction  
Exceptional quality

**\$0.014**

Cost Efficiency  
Per interaction

Admission Screening Projected

**5,000+ hrs**

Per semester (10K applications × 30min)

Chatbot  
**70%**

Reduction in repetitive  
staff inquiries

Course Planning for UG

**100%**

Automated student course  
recommendations

### Reduced Physical Infrastructure

- ✓ Less need for in-person service counters
- ✓ Reduced office space for routine inquiries
- ✓ Lower energy consumption for physical facilities

### Digital-First Operations

- ✓ Eliminated paper-based information distribution
- ✓ Digital document processing (admission, course planning)
- ✓ Paperless committee management workflows

### Efficient Resource Utilization

- ✓ Optimized staff allocation to strategic work
- ✓ Predictive course planning reduces waste
- ✓ 24/7 service without proportional energy increase

**PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS**

# 17



## SDG 17 – Partnerships for the Goals

- Khalifa University and Sungrow Middle East sign MoU to tackle climate change <https://www.ku.ac.ae/khalifa-university-and-sungrow-middle-east-sign-mou-to-tackle-climate-change-promote-energy-diversification-and-advance-economic-pursuits>
- Abu Dhabi Department of Energy and Khalifa University sign MoU in water and energy sectors <https://www.ku.ac.ae/abu-dhabi-department-of-energy-and-khalifa-university-sign-mou-in-water-and-energy-sectors>
- MoU between Khalifa University and the Flemish Institute for Technological Research (VITO) <https://www.mofa.gov.ae/en/mediahub/news/2025/9/21/21-9-2025-uae-belgium>
- Khalifa University and NCM Sign MoU <https://emiratitimes.com/khalifa-university-and-ncm-to-boost-scientific-research/>
- Khalifa University and The Global Institute for Disease Elimination (GLIDE) Sign MoU to Advance Public Health [\[healthcare\] https://www.ku.ac.ae/khalifa-university-and-the-global-institute-for-disease-elimination-glide-sign-mou-to-advance-public-health](https://www.ku.ac.ae/khalifa-university-and-the-global-institute-for-disease-elimination-glide-sign-mou-to-advance-public-health)
- Khalifa University and China’s Guangzhou Baiyun Electric Sign MoU to Establish Joint Innovation Laboratory <https://www.ku.ac.ae/khalifa-university-and-chinas-guangzhou-baiyun-electric-sign-mou-to-establish-joint-innovation-laboratory>
- INTRATOMICS and UK’s Paragraf Sign MoU to Pioneer Next-Generation Graphene-Based Sensor Technologies <https://www.ku.ac.ae/intratomics-and-uks-paragraf-sign-mou-to-pioneer-next-generation-graphene-based-sensor-technologies>

**PARTNERSHIPS  
FOR THE GOALS**

# Externally Sponsored Environmental Research Projects

In addition to its core SDG-aligned research portfolios, Khalifa University hosted **externally sponsored environmental research projects active in 2025**, addressing critical sustainability challenges across energy, climate, water, materials, and environmental protection.

These projects are primarily aligned with **SDG 7 (Affordable and Clean Energy)** and **SDG 13 (Climate Action)**, with several also contributing to **SDG 9 (Industry, Innovation and Infrastructure)**. Collectively, they demonstrate KU's role as a national and regional partner for applied, impact-driven environmental research.

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Active Awarded External  
Research Projects in 2025

72 M

Projects' Research  
Budget (AED) in 2025

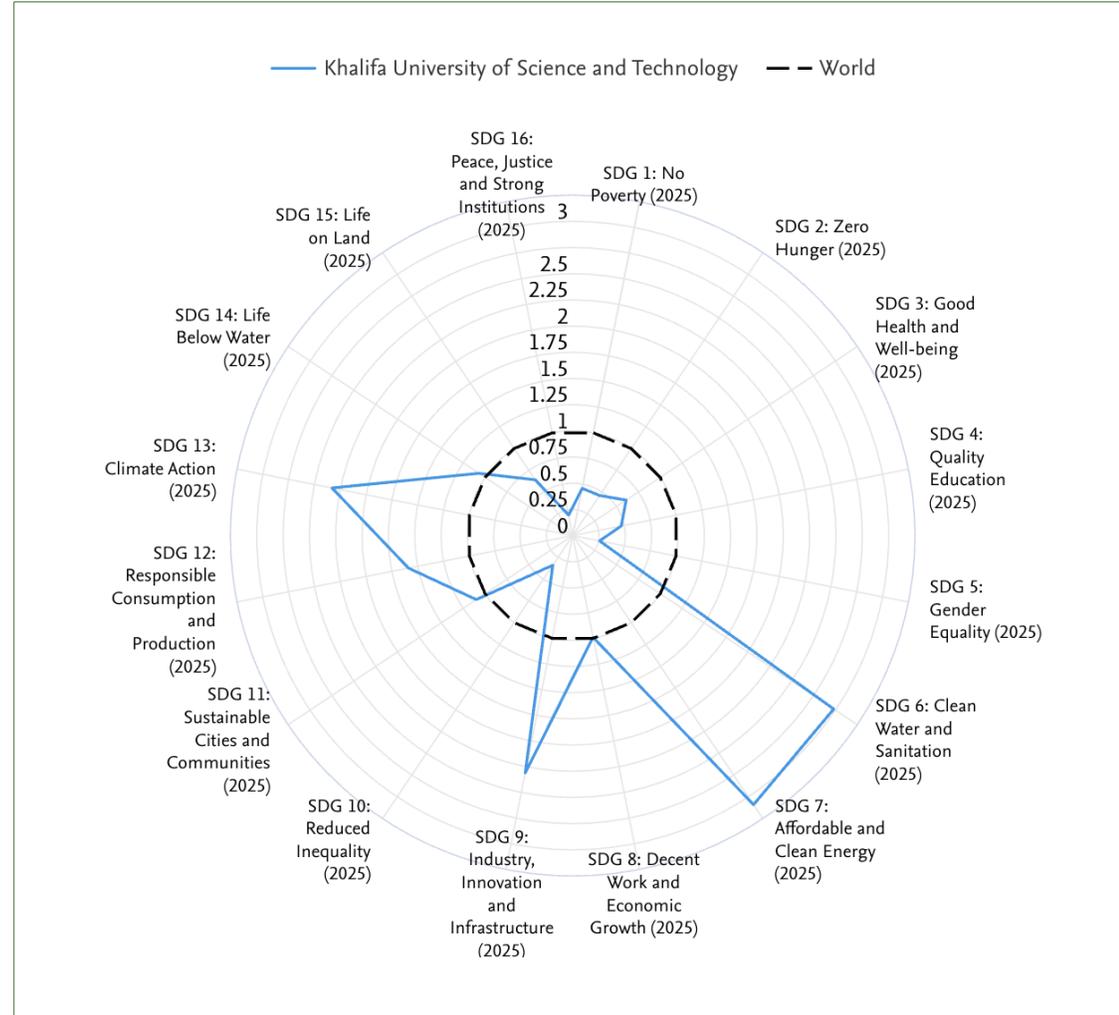
**These externally sponsored projects complement KU's internal and competitive research portfolios by translating sustainability research into applied solutions, policy support, and industry-ready innovations.**





# KU's Publications Supporting SDGs

- **Khalifa University demonstrates strong leadership in SDG 7 (Affordable and Clean Energy)**, significantly outperforming the global benchmark, reflecting sustained strategic investment in clean energy and energy transition research.
- **Research aligned with SDG 13 (Climate Action)** performs well above the world average, highlighting KU's growing contribution to climate mitigation, adaptation, and environmental sustainability.
- **SDG 9 (Industry, Innovation and Infrastructure)** also shows strong performance relative to global levels, underscoring KU's role in advancing innovation and resilient infrastructure.
- Overall, **KU's research impact is concentrated in sustainability- and technology-driven SDGs**, where it consistently exceeds global benchmarks and aligns closely with its institutional mission.



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



4 QUALITY EDUCATION



11 SUSTAINABLE CITIES AND COMMUNITIES



17 PARTNERSHIPS FOR THE GOALS



# Sustainability Club Activities

Khalifa University’s Sustainability Club plays a key role in embedding sustainability across the student experience and extending sustainability awareness beyond campus. In 2025, the Club delivered a diverse portfolio of activities that promoted responsible consumption and production (SDG 12), while also contributing to quality education (SDG 4), climate action (SDG 13), sustainable communities (SDG 11), and partnerships (SDG 17).

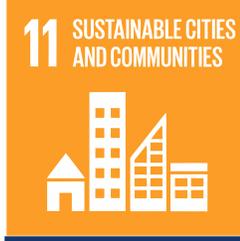
## Community Outreach and Education

As part of its commitment to community engagement, the Sustainability Club conducted an educational outreach session for primary school students, introducing sustainability concepts through interactive and age-appropriate activities. These included creative reuse exercises, recycling games, and environmental storytelling, aimed at fostering early environmental awareness and positive behavioral change. This initiative strengthened KU’s engagement with the wider community while promoting sustainability education beyond the University .

## Student Engagement and Capacity Building

Throughout 2025, the Club organized workshops and team-building sessions to strengthen internal collaboration, reflect on progress, and plan future sustainability initiatives. These activities helped build leadership, teamwork, and sustainability literacy among student members, supporting long-term engagement and continuity of impact





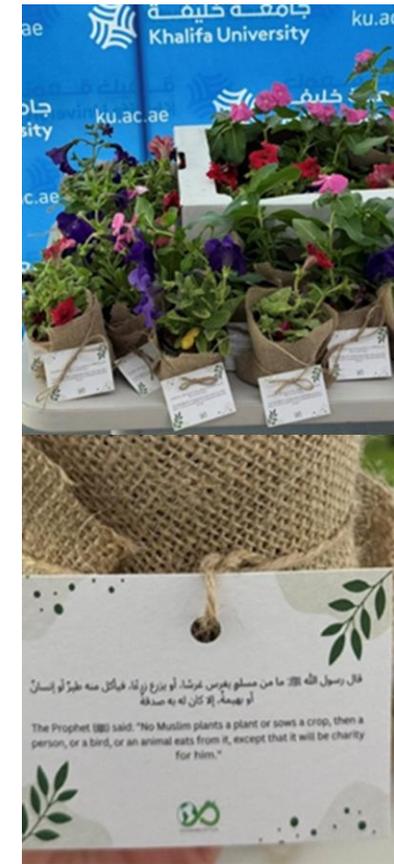
### Cultural and Social Sustainability Initiatives

The Sustainability Club integrated sustainability themes into culturally significant events, including Ramadan gatherings and giveaways. Activities such as reusable coffee cup decoration and sustainability-themed social events promoted waste reduction, responsible consumption, and inclusive community building in a relaxed and culturally sensitive setting

### Sustainability Club Activities

### Campus-Wide Awareness and Climate Action

A flagship Sustainability Day was organized to engage the wider student community through panel discussions, hands-on workshops, creative activities, and interactive games focused on climate action and sustainable living. The event encouraged students to make personal sustainability pledges and actively participate in climate-related dialogue, reinforcing student-led climate action and peer learning





### Experiential Learning and Partnerships

Educational field trips and collaborative events, including sustainability-themed exhibitions and marine conservation experiences, provided students with experiential learning opportunities linked to environmental stewardship. Partnerships with external organizations enhanced the reach and impact of these activities, demonstrating the value of collaboration in advancing sustainability awareness and action



# KU'S STOCKCOUNT

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**13** CLIMATE ACTION



**15** LIFE ON LAND



Impact Area	ITEM	2022	2023	2024	2025	%REDUCTION
Energy and Carbon	Electricity Consumption (KWH)	85,261,357	90,653,586	82,008,956	78,780,107	3.94% ↓
Paper	Paper Consumption (KG)	21,483	10,238	11,207	11,677	-4.19% (increase)
Travel and Transportation	Fuel (Liters)	468,038	451,826	458,243	489,254	-6.77% (increase)
Water	Water Consumption M3 (1000 liters)	497,022	520,960	447,444	386,019	13.73% ↓
Waste	Non-Hazardous Waste Generated (KG)	168,477	161,252	172,163	135,000	21.59% ↓
	Hazardous Waste Generated (KG)	4,787	3,764	6,935	7,240	-4.40% (increase)
	Total Recyclable non-hazardous Waste (KG)	41,682	14,253	17,722	16,472	7.05% ↓

**THANK  
YOU**

