

FAST Forward to a Sustainable Future

SUSTAINABILITY REPORT | 2025





PRESIDENT MESSAGE

As we struggle with a planet in constant change and an ever-increasing population with over 8 billion people pushing global resources further every year, technological advances offer the potential to serve nations in a more equitable way, which KFUPM pushes at the boundaries in advanced research and science. However, is it collectively enough? Our dominance and desire for growth have impacted ecological systems, the atmosphere, the sea, and our way of life, which is now a critical factor in the changes we are experiencing on Earth.

As we strive to fulfill our ambitious Vision 2030 goals, Saudi Arabia, along with various other countries and governments worldwide, has adopted the United Nations (UN) 17 Sustainability Development Goals (SDGs) for a Sustainable Earth.

Universities are undoubtedly at the forefront of this change through advances in research or teaching the next generation of future innovators. Our collective role at KFUPM is to create opportunities for the next generation to live in a more sustainable world. To secure a future for the next generation, we must create sustainable growth and development through knowledge sharing, community engagement, and understanding of our roles in this shared vision while keeping our nation's vision of the future.

However, the task of achieving these goals is incredible, and we will only solve global problems with global partners alongside us, if the whole world — governments, institutions, and industry all make an effort together as one.

At KFUPM, we are in a unique position to help society solve specific problems, and we must maximize our role to aid others in working towards the same plan. Working with partners outside the university is a natural routine that teachers, researchers, and KFUPM students are familiar with since this is part of our global mindset. We have nurtured the best talents to build sustainable energy resources and develop technologies that will impact our daily lives. In doing so, KFUPM is seen as a vital player impacting global issues.

I would like us all to consider the individual role that we can play in this crucial plan whether as faculty or as a student, we all must scrutinize our actions and the importance of building a new future, not only in terms of the direction KFUPM should take, but as global citizens in charge of designing a better world. In addition to KFUPM's ongoing sustainability initiatives which align with the United Nations' 17 SDGs, I welcome more input on how we can build this future together.

Sincerely,

Muhammad M. Al-Saggaf

Previous Ranking Data IN 2025



RANKING PROGRESS

2024
81



2025
25





NO POVERTY

KFUPM is dedicated to taking active steps to end poverty regionally and globally. Through our actions, we aim to have a campus free of poverty while we continually pull our weight to achieve a society with no poverty.

All students at KFUPM are on [full scholarship or assistantship](#), whether the undergraduate level or the post-graduate level, including all foreigners. The scholarship includes free tuition, free books, free luxurious accommodation in dorms, annual tickets to travel to and from home country to the university, medical care, and a generous stipend. About 18% of KFUPM's students are from developing or underdeveloped countries. These students are provided with a full scholarship and financial support. In some cases, student support extends beyond the students themselves- For example, students from modest backgrounds and poor families have the option of seeking interest-free loans from Student Affairs. This is generally used to sustain their relatives back home. In addition to this, the university set up a fund (open to donors) to support those students who are from families with limited income. Additionally, institutional structures such as the [Center of Excellence in Development of Non-Profit Organizations](#) highlight a research and training focus on poverty alleviation

University Anti-Poverty Programs

[Al Fozan Academy](#) was established in KFUPM to develop the capabilities of leaders and managers of non-profit institutions as a cooperation between King Fahd University of Petroleum & Minerals and the Al Fozan Social Foundation. In partnership with KFUPM, Alfozan Academy has initiated the [RAED](#)-a program to qualify youth leaders to manage community initiatives professionally, based on scientific methodologies, and international practices in volunteer management. This program trains our students to be leaders in nonprofit and volunteer organizations to achieve a community where poverty is practically nonexistent.

Community anti-Poverty Programs

The university holds an annual scientific camp for orphans, in collaboration with the Bena Charity Association for Orphans, the largest in the country. It teaches those students important skills that would give them an edge in admission to the university and encourages them to do so.

 35  325  1.36

Data for the years (2020 - 2025)





Zero Hunger

KFUPM believes that hunger is one of the greatest risks facing humanity. A large portion of the planet comprises of impoverished countries. Our measures against hunger can be summarized in the following paragraphs:

Affordable Meals for Students & Staff

All affiliates under KFUPM, have access to affordable and healthy food. The food services department ensures that the food produced within the university is of the highest quality and at reasonable prices. Prices are lowered for students to ensure that they can have access to affordable and healthy meals. In addition, KFUPM dining halls offer a variety of choices for people following different diets (vegetarian, vegan etc.).

National Hunger

[Global Hunger Index \(GHI\)](#) is a tool designed to measure and track hunger in different countries, at regional and global levels. GHI is calculated from data measuring undernourishment levels, child stunting, and child mortality data collected from each country. GHI values below 9.9 are low and desirable, while values above 50 are extremely alarming. A GHI score of 5.9 in 2025, Saudi Arabia ranked number 30 out of 123 countries. Despite this remarkable GHI score, KFUPM continues to stay committed to reducing the hunger index to zero in Saudi Arabia.

At the local level, the university participated in establishing the Volunteer Feeding Unit from Saudi Food Bank (ITAAM), which promotes social sustainability by creating an environment that motivates all members of the society to volunteer with the association, in all available programs and projects in the field of food, and to provide safe food to the beneficiaries. In partnership with Alber charity, KFUPM volunteers helped to distribute food for families in need. In addition, KFUPM organized its [16th Volunteer Day Festival](#), the largest annual volunteer event in Saudi Arabia, uniting over **1,000 students** from various majors under the theme “Together Towards One Million Volunteers.” The event featured **50 diverse** programs in community, environmental, and professional fields, including tree planting, patient visits, and beach rehabilitation. Aligned with Saudi Vision 2030, the festival promoted a culture of giving and collaboration, resulting in over **112,000 volunteer hours, 14,000 volunteers, and 110,000 beneficiaries**, reinforcing KFUPM’s commitment to social development and sustainable impact.

118 PUBLICATIONS
+1K CITATIONS
FWCI 2.01
Data for the years (2020 – 2025)





Good Health & Well-being

KFUPM places strong emphasis on the physical and mental health of its community, including students, faculty, staff, and their families. Promoting healthy lifestyles and well-being is seen as essential to academic and personal success.

Health Professions

Known as Saudi Arabia's leading engineering and technology institution, KFUPM expanded into health-related fields in 2020 by launching Bioengineering Bachelor's programs. This move applies more than 60 years of engineering expertise to life sciences, advancing healthcare innovation for the benefit of society.

Medical Services & Collaboration

The [university medical center](#) delivers free, high-quality services with international standards. It collaborates with national agencies and participates in the [Ministry of Health referral program](#), ensuring smooth patient transfers and reliable data systems. Students also benefit from reproductive healthcare through the [Obstetrics and Gynecology Clinic](#), while [mental health awareness](#) and free counseling are continuously provided. Annual events, such as the 2025 [Breast Cancer Awareness Campaign](#), further encourage preventive care and healthy practices.

Well-being Initiatives

The university hosts wellness events and mental health campaigns to promote a supportive environment. A major resource is [Irshad Platform](#) that offers free, confidential, and accessible academic, psychological, financial, medical, and social support. With seamless integration into students' schedules, Irshad ensures services are always available without disrupting studies. KFUPM remains dedicated to combining academic excellence with well-being for the holistic development of its community. In addition, [KFUPM Medical Center](#) organized a Breast Cancer Awareness and Early Detection Campaign in collaboration with the Zahra Association and Al Khobar Health Network. The campaign offered free mammography screening for women through a mobile mammography unit located at the university's medical center.

728
PUBLICATIONS



+17K
CITATIONS

FWCI

1.93

Data for the years (2020 – 2025)





Quality Education

KFUPM has always been and continues to maintain its position as the prestigious university of the Kingdom of Saudi Arabia. It is recognized both nationally and internationally as a leading academic and research institution. In the last five years, the university concentrated on further improving the quality of its academic programs and offerings as a primary objective of its transformation. To align with the Saudi Vision 2030, KFUPM has ensured that all its programs are linked to the [United Nations Sustainable Development Goals \(SDGs\)](#), demonstrating its commitment to sustainable development and global impact. As a result, it achieved several milestones that propelled it to international recognition. KFUPM jumped from number 180 to 67 in QS world university rankings in two year. To continue this progression, KFUPM is continuously taking measures to boost its quality of education, as discussed below.

New Programs and New Ways of Teaching/Learning

Launching 43 new undergraduate concentrations: [Undergraduate concentrations \(CX\)](#) represent an innovative and critically important component of KFUPM's strategy to benefit the Kingdom. By adding a component of specialization to its undergraduate programs, concentrations prepare the students to hit the ground running (as soon as they graduate) and be able to integrate effectively, robustly, and quickly into the workforce of any organization. Through this program, students learn not only the basics of their discipline but also a certain area of specialization on which they focus to gain a concentration in that topic. For example, a student would graduate with a degree in Computer Science and a concentration in Cybersecurity. Students would have learned enough in Computer Science and satisfied all the requirements of that major. Additionally, students would also have specialized knowledge in the area of Cybersecurity, thus they can integrate much faster into cybersecurity work environments. This program has become very successful and has been very well received by the industry, as evident from several sponsorships to the program. This program represents a hallmark of new innovative thinking with a characteristic that distinguishes KFUPM from the top ten global institutions.

Lifelong Learning Measure

[KFUPM Institute for Knowledge Exchange \(KIKX\)](#) highlights public events such as seminars, general lectures, workshops, and conferences that take place at KFUPM either physically or virtually. KIKX also gives access to non-technical articles and opinion pieces written by KFUPM's faculty on cutting-edge topics in Science and Technology. The goal of KIKX is to inform, inspire, and ultimately contribute to the transformation of society into a knowledge-driven one that can play the role it deserves in the ongoing fourth industrial revolution and beyond.





Gender Equality

One of the primary objectives of the transformation of KFUPM is the empowerment of women, and creating equal opportunities for them. Over the past two years at KFUPM has made substantial strides in equalizing opportunities for males and females, both as students and in the workplace.

The Proportion of Graduates with Teaching Qualifications

In 2018, KFUPM's Board approved the admission of local female students to its graduate programs to strengthen their participation in research, innovation, and leadership. In the 2019/2020 academic year, about 100 female students were admitted from over 600 applicants to pursue postgraduate studies in various disciplines. Supporting Saudi Arabia's Vision 2030, KFUPM expanded this step by opening undergraduate admission to women in the 2021/2022 academic year for the first time. The university admitted 600 female students, representing 40% of total new enrollments, with numbers continuing to rise. H.R.H. Prince Abdulaziz Bin Salman Al Saud, Chairman of the Board of Trustees, stated that this milestone allows female students to benefit from a prestigious national institution recognized internationally for its excellence in science and engineering. ([Source: Saudi Gazette](#))

The Proportion of Senior Female Academics

KFUPM actively promotes women's participation in leadership and academic roles. The number of female employees has grown steadily in recent years, with over 90 new hires last year alone. The university also expands opportunities for female faculty members, reinforcing inclusion across teaching and administrative functions.

Women's Progress Measures

In all of its workspaces, KFUPM removed all restrictions on female employment and [ostracizes any type of discrimination against women](#). Any form of reported discrimination would result in permanent dismissal and a transfer of the case to the appropriate official(s) or authorities. Women are constantly encouraged by the institution to report any form of prejudice in order to create a welcoming and equal environment for everyone. Female workers are entitled to [full-term maternity leave for a period of ten weeks](#).



19
PUBLICATIONS



97
CITATIONS



1.27

Data for the years (2020 – 2025)





Clean Water & Sanitation

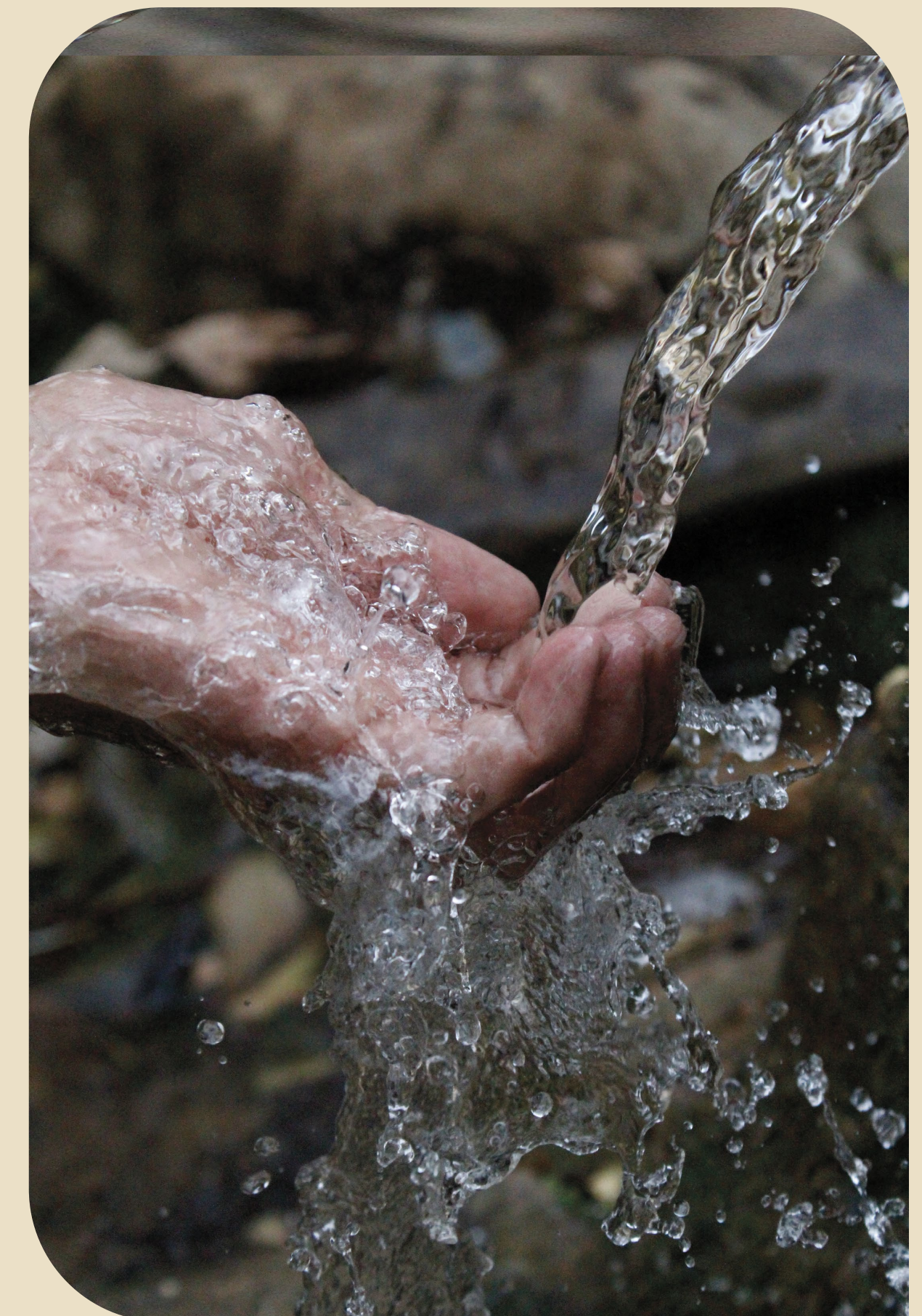
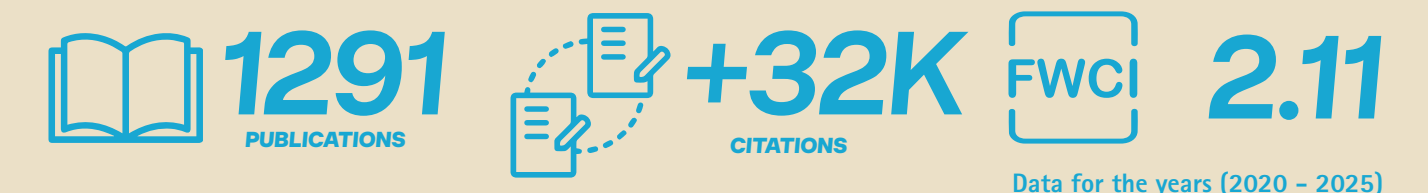
At KFUPM, we highly regard WATER as a vital resource. In this sense, the institution has developed an Environmental Sustainability Strategy that comprehends research, actions, processes, and policies to address consumption, usage, care, and community engagement to mitigate environmental risk in the framework of environmental compliance and due diligence. It is KFUPM's commitment to actively preserve this precious resource and to make it available for the benefit of future generations. [Environmental Sustainability Strategy: Water](#)

Water consumption on campus

KFUPM provides inhabitants on campus with clean, safe water for drinking and household use. The water supply system serves four residential zones on campus, including faculty housing, student dormitories, and academic buildings. Drinking fountains can be found in all buildings (except in labs and workshops). The annual volume of water used is measured, and the Water Consumption Report 2025 states that the annual water use per capita at KFUPM was 109 m³, considering a total campus population of 18,412 and a total volume of water used of 2,007,500 m³.

Water Usage and Care

At KFUPM, the sewage system is linked to Dhahran's public network, which directs wastewater to a treatment plant for safe reuse or disposal. This process is regulated through KFUPM's subscription with the operating company. The university implements several measures to prevent water pollution, including specialized pipe, well, and pump designs, along with clear guidelines and awareness efforts. All campus construction adheres to the [Saudi Building Code \(SBC\)](#) and the Saudi Green Building Code, emphasizing water-efficient fixtures as outlined in Section 7. KFUPM also complies with the [Ministry of Environment, Water, and Agriculture \(MEWA\)](#) regulations. To enhance water reuse, the university applies Reverse Osmosis (RO) technology, collects greywater for recycling, and reuses rejected water for irrigation and sustainable landscaping. Through the Institute for Knowledge Exchange (KIKX), KFUPM organizes public [workshops on Water Security](#) and promotes simple conservation habits, such as turning off taps, while also collaborating with industry partners and agencies in Environmental Impact Assessment (EIA) projects and national water security initiatives.





Affordable & Clean Energy

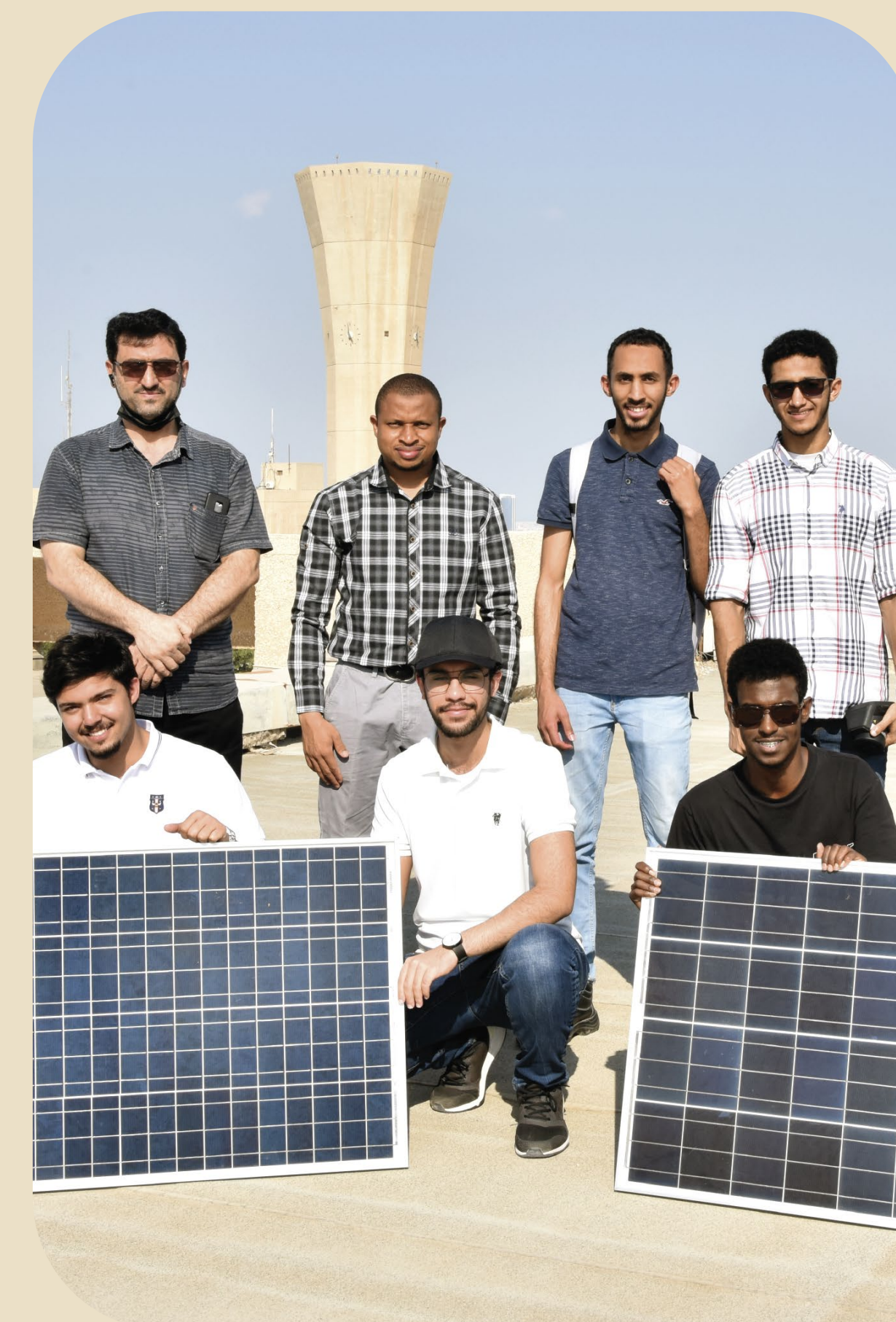
KFUPM recognizes that conserving energy and adopting modern, low-impact technologies are essential to protecting our planet. Balancing clean and affordable energy remains a significant challenge, yet the university continues to integrate sustainability into its academic, research, and operational activities. The [Environmental Sustainability Strategy: Energy \(ESSE\)](#) was developed to address this challenge through comprehensive actions, processes, and policies that promote energy efficiency, minimize waste, advance clean energy technologies, reduce carbon emissions, and engage the community under a framework of environmental compliance and responsibility.

Measures Toward Affordable and Clean Energy

KFUPM's Energy Policy reflects its commitment to the [United Nations Sustainable Development Goals \(SDGs\)](#). It applies to all university operations—covering new constructions, renovations, and upgrades—and requires that all buildings meet energy efficiency standards, enhance conservation, reduce overall consumption, and incorporate renewable energy sources. Compliance with the [Saudi Building Code \(SBC\)](#) ensures that sustainability is embedded in every stage of design and construction. A dedicated presidential committee actively promotes energy-saving initiatives across campus. The ESSE outlines specific goals and practical measures to reduce costs and environmental impact, while the [Climate Action Plan](#) encourages broader participation in sustainability efforts. The [Center of Excellence in Energy Efficiency \(CEEE\)](#) conducts detailed energy audits to analyze consumption patterns and identify areas for improvement.

Energy and the Community

KFUPM's [Energy Consumption Report](#) aims for full campus sustainability by 2060, achieving 100% renewable energy. Beyond campus, the Interdisciplinary [Research Center for Sustainable Energy Systems \(IRC-SES\)](#) provides training, outreach, and consultancy for institutions worldwide. Faculty members contribute to national environmental reports under the [UNFCCC](#), and the university supports start-ups and innovation in renewable and low-carbon technologies through the [Renewable Energy Technical Incubator \(RETI\)](#).





Decent Work & Economic Growth

Life at KFUPM is defined by a safe, stable, and outstanding work environment that promotes personal growth. The university upholds these principles through its [Labor Relations and Workers' Rights Policy](#) and [Code of Conduct](#), ensuring all employment practices, from paying at least the [minimum wage](#) to merit based compensation, are founded on fairness, respect, and diversity. KFUPM strictly prohibits discrimination, forced labor, and child labor, in full alignment with [Saudi Labor Law](#), and actively promotes gender equality in line with national visions.

This commitment to decent work extends beyond campus to drive regional economic growth and job creation through Dhahran Techno Valley (DTV). [KFUPM and DTV collaborate](#) to build an integrated innovation ecosystem designed to convert scientific research into sustainable, market ready ventures. [DTV oversees a \\$133 million Deep Tech Fund](#) and runs flagship programs such as the Deep Tech Venture Building Program and the Visionary Program in partnership with [ROSHNEXT](#). These initiatives provide comprehensive support, including funding of up to \$50,000 per venture, structured mentorship, and incubation services to transform research based concepts into investable startups.

The impact is a growing pipeline of new technology companies in critical sectors like energy, artificial intelligence, and property technology. This venture creation process directly generates high value jobs, stimulates private investment in innovation, and contributes to the [economic vitality of the Eastern Province](#), which boasts a GDP per capita of \$52,293. Programs like the bootcamp, which selects and accelerates shortlisted projects, ensure teams develop investor ready pitches and business models. Furthermore, industry collaboration with major partners such as Saudi Aramco and SABIC provides real world testing and employment pipelines for graduates.

By anchoring a dynamic ecosystem that supports entrepreneurs, startups, and industry partners, KFUPM and DTV effectively position [Dhahran as a central hub for knowledge based employment and venture creation](#). This strategic focus on technology commercialization and entrepreneurship directly advances the strategic goals of both SDG 8 and Saudi Vision 2030, fostering a diversified and resilient knowledge economy.

424
PUBLICATIONS



+8K
CITATIONS

FWCI

2.06

Data for the years (2020 – 2025)





Industry, Innovation & Infrastructure

KFUPM has always been recognized for its leadership in innovation, patenting, and creativity. In 2024, it ranked 5th worldwide among universities granted U.S. utility patents by the [USPTO](#). Most importantly, KFUPM believes that the primary aim of research and innovation is to improve the human condition. Therefore, it has recently re-structured all its research programs to support this goal. A corollary of this aim is to promote the research market. In other words, research can be translated into products that benefit humanity rather than just re-search-for-papers, which primarily benefit the researchers' careers.

As a result of this new emphasis, several new startups were created. KFUPM Entrepreneurship Institute (KFUPM EI) supports students and local creators. KFUPM EI provides mentoring and assistance to creators to establish their startups. The university believes in revitalizing the role of entrepreneurship in the research system by rejuvenating the spirit of entrepreneurship and developing enablers for inventors, who could be faculty, students, or even outsiders. This includes the DTV (Dhahran Techno-Valley) Startup Challenge, which attracted 166 ideas in the year 2020. The program has four phases:

- Campaign.
- Boot camp to educate entrepreneurs on how to set up their startup companies.
- Incubation period with access to funding, mentoring, and services.
- Going to the market.

The objective is to increase the number of startups in DTV, thereby invariably enhancing the transition of the Kingdom's economy. Some examples of these startup ideas are in key areas such as IR4.0, chemicals, manufacturing, oil and gas, and FinTech. [Entrepreneurship Ecosystem | KFUPM](#).



Company	Collaboration Scope
 Hydrex	Atmospheric water generation devices focused on sustainable solutions for water scarcity
	AI Model for Predictive Maintenance of Pump Failures
 neovolt	Lithium-Ion Battery
 varea energy	AI tool to quantify and identify geological hydrogen reserves
 NUNAFAB	Ultra-High-Performance Concrete using local materials for precast housing units
 MUC ALMUTLAQ UNITED	Enhancing industrial safety helmets enhancing safety, power efficiency, and outdoor use, and app communication
 ABBON	Enhancing multiphase flow measurement improve its performance



Reduced Inequalities

KFUPM is committed to fairness, inclusivity, and equal opportunity for all. The university's admission process, faculty hiring, and staff recruitment are transparent and non-discriminatory, with no bias toward gender, race, religion, disability, or nationality. In addition, KFUPM actively addresses income disparities by revising workforce agreements to ensure fair wages for all contracted personnel, from faculty assistants to janitorial staff. This initiative has improved worker retention and productivity.

Fair and Inclusive Admissions

Admission decisions are based solely on [academic merit](#). The Regular Track uses a weighted score: 50% from the General Aptitude Test (Qudurat), 40% from the Achievement Test (Tahisili), and 10% from high school GPA. Alternative tracks such as the SAT and Olympiad Tracks provide additional pathways for qualified students. KFUPM has significantly broadened entry opportunities to build a truly inclusive student body. For example, the university began [admitting female undergraduates](#). Moreover, KFUPM reports attracting students from "[over 75 countries](#)" on campus. These measures reflect the institution's proactive commitment to widening access, ensuring that admission is based on competence, merit and opportunity rather than being restricted by gender or nationality.

Support and Non-Discrimination

A dedicated committee oversees scholarships for low-income students, verifying financial need to ensure proper support. KFUPM also prioritizes the recruitment of female faculty and staff. Strong anti-discrimination policies are embedded in the [Code of Conduct](#) (Paragraph 7.3, page 9), which emphasizes respect, dignity, and a harassment-free environment.

Accessibility for All

KFUPM provides extensive support for people with disabilities. Facilities include mobility-friendly routes, automatic doors, toilet aids, audio maps, and special tracks for the visually impaired. Academic services, such as note-taking assistance and [advisory support](#) through the special needs unit, ensure an inclusive learning environment for every student.



56
PUBLICATIONS



736
CITATIONS



1.40

Data for the years (2020 - 2025)





Sustainable Cities & Communities

KFUPM plays an active role in supporting sustainable urban development. Through education, research, and collaboration with local communities, KFUPM works to create inclusive and smart cities that are socially, environmentally, and economically balanced while respecting human rights.

Sustainable Practices on Campus

KFUPM encourages sustainable commuting by providing on-campus buses, supporting a [cycling club](#), and offering essential services close to housing such as restaurants, a mall, and sports facilities. Awareness is regularly promoted through email campaigns, events, and competitions. Remote work is also available for employees in line with HRSD regulations ([article 9, page 9](#)). The university provides affordable housing for employees at about 4,000 US dollars annually, which includes furniture, maintenance, and utilities. This cost is much lower than renting nearby housing, which can reach 20,000 US dollars per year ([faculty handbook, pages 135 & 146](#)). Students also benefit from shared furnished housing that costs only 600 SAR per semester, and it is free during summer. Renting in nearby areas would cost up to 1,500 SAR per month ([student handbook, pages 35 & 36](#)).

Academic Programs and Research

KFUPM offers graduate degrees in Smart and Sustainable Cities and Intelligent Transportation. A new undergraduate program in Smart Cities explores solutions such as sustainable transportation, renewable energy, 15-minute cities, vertical farming, and resilient housing.

Community Engagement

The campus is open to the public with access to the medical center, [library](#), sports complex, and green spaces. Events such as [Career Day](#), which has been organized for more than thirty years, support students in starting their careers. [The Sustainability Club](#) also promotes Vision 2030 through [seminars](#), the Saudi Green Initiative, competitions, and recycling projects. KFUPM fosters a culture of sustainability and well-being through initiatives that encourage active and responsible lifestyles. [The annual 5K Run](#), which united nearly 2,000 participants from the university and the wider community, reflects this commitment by promoting engagement, healthy living, and environmentally conscious practices across campus life.



571
PUBLICATIONS



+8K
CITATIONS



1.87

Data for the years (2020 - 2025)





Responsible Consumption & Production

KFUPM is dedicated to advancing responsible consumption and production practices within the university and the surrounding community.

Operational Measures

The Environment Health & Safety (EHS) department oversees strict procedures for municipal and hazardous [chemical waste disposal](#). The medical center follows a [Medical Waste Management Policy](#) addressing infectious, chemical, pharmaceutical, and sharp waste. For radioactive sources, KFUPM operates a specialized [Radioactive Waste Room](#) to ensure safe handling and storage.

Recycling and Waste Management

A campus-wide recycling initiative focuses on reducing, reusing, and recycling. Action points include “Plastic Waste Reduction” under [Environment, Health and Safety - Recycling & Waste Management](#). Color-coded recycling stations have been installed across campus, while the use of reusable water bottles, free tap water outlets, and biodegradable paper bags is encouraged. EHS also promotes paper reduction practices ([Kindly visit EHS recycling & waste management](#)). Waste levels are monitored by the Housing & Office Services department. These measures reflect KFUPM’s commitment to sustainable operations guided by ethical standards and integrity.

Sustainability Reporting

KFUPM publishes an annual sustainability report showcasing progress toward the UN Sustainable Development Goals. Covered areas include health and well-being, education, gender equality, clean water and energy, sustainable cities, climate action, responsible consumption, biodiversity, peace and justice, and global partnerships. More details are available at: <https://sustainability.kfupm.edu.sa>





Climate Action

As the global population rises and greenhouse gas emissions increase, KFUPM is actively addressing climate change through education, research, and innovation, both nationally and internationally.

Education and Research Initiatives

KFUPM hosts specialized centers focused on reducing climate change impacts, conducting research in renewable energy, power systems, hydrogen, and energy storage. A dedicated academic concentration on [climate change adaptation](#) has also been launched. Key projects include converting carbon dioxide into hydrocarbon products and advancing Carbon Capture and Sequestration (CCS). King Abdulaziz City for Science and Technology (KACST) established a national Technical Innovation Center (TIC) for CCS at KFUPM. Achievements include 3 US patents, over 23 ISI-indexed research papers, and 11 publications in international conferences.

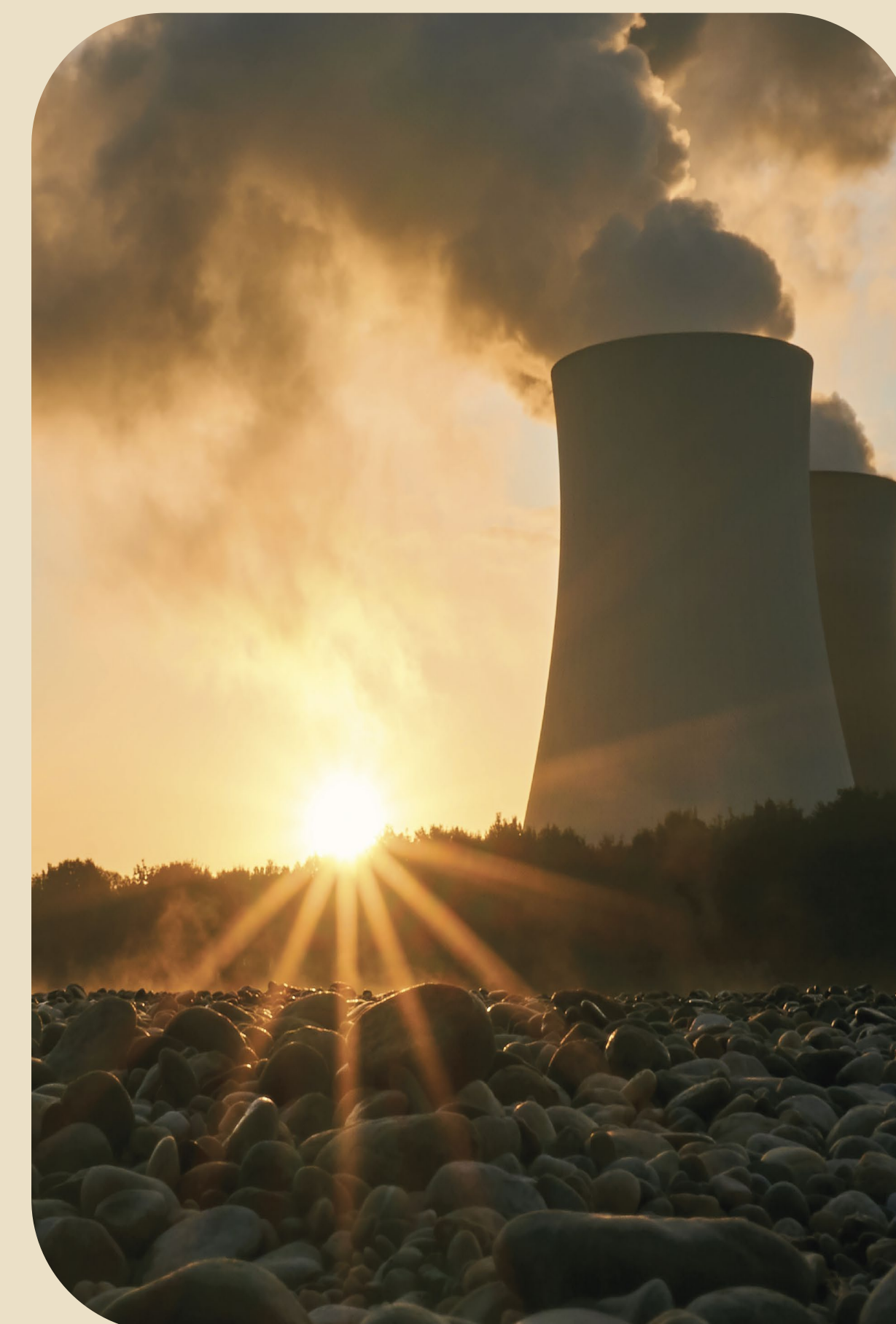
Public Engagement and Knowledge Sharing

Through the Institute for Knowledge Exchange (KIKX), KFUPM organizes seminars, panels, and lectures. Topics include [technological breakthroughs in research](#), [hydrogen's role in clean energy](#), and the transition to a decarbonized, [circular economy in the polymer and plastic industry](#). Other seminars cover regulatory frameworks for renewable energy projects in Saudi Arabia, small-scale solar PV systems, self-consumption energy regulations, and advancements in hydrogen production from water splitting, waste recycling, and material synthesis. KFUPM also hosted the [2nd Green Sustainable Future Conference \(GiKS 2025\)](#) which gathered experts, policymakers, and youth from 13 countries to discuss climate resilience, sustainable technologies, and environmental stewardship. The conference strengthened international collaboration and highlighted KFUPM's leadership in advancing research and awareness aligned with global climate action and SDG 13 objectives.

Through these initiatives, KFUPM demonstrates its commitment to climate action by combining cutting-edge research with community engagement to reduce environmental impact and promote sustainable solutions.



Data for the years (2020 - 2025)





Life Below Water

KFUPM supports aquatic ecosystems through education, innovation, and sustainable practices. Recognizing the importance of SDG-driven learning, the university offers continuous programs for students and the community. The [MEWA Fishing Methods Project](#), organized by the Applied Research Center for Environment and Marine Studies (ARC-EMS), trained Eastern Province fishermen (Dec 25–26, 2023) on Turtle Exclusion Devices (TEDs) in trawl nets—promoting safer fishing and marine biodiversity protection. Similarly, the “[Awareness Program for Fishermen Communities](#)” addressed illegal fishing, overfishing, and pollution, encouraging eco-friendly techniques and habitat preservation. ARC-EMS also leads research and industry collaborations on coastal and marine ecosystem protection, including [Coral and Seagrass Monitoring in the Arabian Gulf](#) and initiatives preventing biodiversity loss from development.

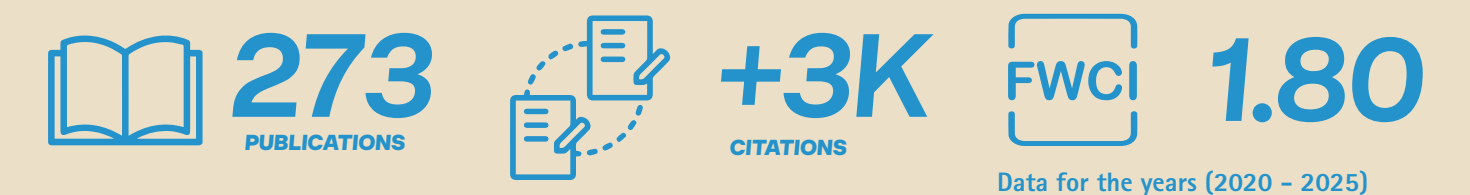
The center advances environmental education through [Co-op Training Programs](#) that began in 2023 with two specialized tracks—Marine Environmental Assessment and Environmental Chemistry—expanding in 2024 to four sustainability-focused tracks attracting students from across Saudi universities by 2025.

Water-Sensitive Waste Disposal

KFUPM’s EHS Department conducts regular [water quality assessments](#) to ensure compliance with national and international standards. On-campus recycling initiatives promote efficient, cost-effective waste management, emphasizing reduction, reuse, and recycling of plastics to prevent water pollution.

Maintaining Local Ecosystems

Marine and coastal ecosystems are central to Saudi Arabia’s environmental and economic growth. To counter pressures from industrialization and pollution, KFUPM actively monitors and restores marine habitats, aligning with the Kingdom’s “blue economy” vision. Projects like the Plastic Pollution Assessment: Arabian Gulf track litter, microplastics, and fishing debris, identifying pollution hotspots such as Jana Island and highlighting the need for continued stewardship to sustain marine biodiversity for future generations.





Life on Land

KFUPM is committed to protecting ecosystems on campus and across the Kingdom through education, research, and action.

Education and Research

The university integrates land ecosystem topics into its undergraduate curriculum ([Undergraduate Bulletin](#)). Courses cover land use, urban and regional planning, infrastructure systems, ecology, sustainability, biodiversity, soil, renewable energy, and environmental challenges. Many include field trips to provide hands-on learning.

At the graduate level, the Department of Geosciences, in collaboration with Chemistry, offers master's programs in Geosciences and Environmental Sciences. Fully sponsored by KFUPM, these [graduate programs](#) are open to local and international students. They emphasize concepts such as community resource sharing, terrestrial environments, and human impacts on land and air pollution.

Action for Land Ecosystems

The Center for Environment and Marine Studies (CEMS) focuses on mitigating climate change while studying Saudi Arabia's biodiversity, ecology, and landforms ([CEMS terrestrial section](#)). Additionally, the Environment Health & Safety (EHS) Department conducts building and walkthrough inspections to identify issues and coordinate solutions ([EHS Office of Environmental Monitoring](#)).

Sustainable Waste Management

KFUPM implements policies on [waste disposal](#), [sewage, and recycling](#). The EHS department promotes source segregation, plastic and paper reduction, and efficient recycling. Innovative systems include desalination units that reclaim about 30% of salty water for reuse. Hazardous waste is managed through strict safety practices, including proper labeling, storage, and disposal to safeguard land ecosystems ([EHS-Chemical Waste Management](#)).





Peace , Justice & Strong Institutions

KFUPM is committed to fairness and equality, ensuring that all students and employees receive their rights under the law.

University Governance

The University is led by the President, who serves as the Chief Academic and Executive Officer, under the supervision of the Board of Trustees. The current Chairman is H.R.H. Prince Abdulaziz Salman, Energy Minister. KFUPM students actively participate in volunteer programs such as [the 16th Volunteering Day](#), serving patients, the elderly, children, and the environment to foster social responsibility. All internal and external stakeholders are identified and involved in decision-making and issue resolution. KFUPM emphasizes building strong connections with the public and stakeholders, strengthening relationships and boosting its reputation. Open communication ensures flexibility and avoids unnecessary barriers. The University strictly follows the Kingdom's laws on corruption and bribery, enforcing a zero-tolerance policy. Campus safety policies ensure a secure and peaceful environment. Violations of Sharia Law are taken seriously, with strong disciplinary measures. [KFUPM's Code of Conduct \(Section 2.2\)](#) supports academic freedom modeled after the U.S. system, while requiring all technical courses to be taught in English. This policy ensures global relevance and enhances graduates' ability to engage with industry leaders worldwide.

Working With Government

KFUPM researchers collaborate annually with government agencies and institutes, producing hundreds of reports and studies. Interdisciplinary centers focus on areas such as renewable energy, AI, smart mobility, hydrogen storage, advanced chemicals, water security, and digital economy, driving innovation and societal impact. KFUPM's Interdisciplinary Research Center for Biomedical and Systems Modeling (IRC-BSM), in collaboration with the Saudi Food and Drug Authority (SFDA) and the Bioengineering Department, co-organized the [Medical Devices Regulations Workshop](#). The event gathered students, researchers, and professionals to discuss key regulatory topics such as classification, clinical evaluation, and benefit-risk analysis. Through collaboration with a national regulatory body, the workshop promoted awareness of compliance and governance in biomedical research and strengthened institutional ties within the healthcare sector.



17 PARTNERSHIPS
FOR THE GOALS



Partnerships for the Goals

KFUPM collaborates with regional NGOs and government entities to identify challenges and develop solutions for diverse SDG-related topics. Notably, it signed three agreements with the Ministry of Labor and Social Development to promote volunteering and support the non-profit sector, ensuring these efforts have a systematic and sustainable impact aligned with the SDGs. [The Al Fozan Academy](#), established with the Al Fozan Social Foundation, trains future leaders to manage third-sector institutions and strengthen their community role.

KFUPM also engages in global dialogue through the [KFUPM Institute for Knowledge Exchange \(KIKX\)](#), which hosts seminars and forums uniting experts to discuss innovations that benefit humanity. This year's [2nd Conference and Exhibition on Green Sustainable Future in the Kingdom of Saudi Arabia \(GiKS\)](#) brought together leading experts, researchers, policymakers, and industry professionals to explore innovative solutions for environmental sustainability and climate resilience, supporting SDGs 7, 9, 13, and 17.

Additionally, the university launched the Sustainable Future Research Consortium to unite academia, industry, and government in tackling sustainability challenges. KFUPM faculty also contributed to National Communication (NC) reports under the [United Nations Framework Convention on Climate Change \(UNFCCC\)](#), supporting global climate reporting. Through its annual [Volunteer Day](#), KFUPM instills civic responsibility in students, engaging them in health, environmental, and social initiatives that benefit the wider community.

Education for the SDGs

KFUPM integrates sustainability across education through [Undergraduate Concentration \(CX\)](#) and [Master's \(MX\)](#) programs aligned with Vision 2030 and global SDG priorities. Graduate degrees such as the [Master of Engineering in Sustainable and Renewable Energy](#) and [Master of Smart and Sustainable Cities](#) provide specialized training for future sustainability leaders.

The university's [AI-X strategic initiative](#) embeds artificial intelligence education across all disciplines, ensuring every student gains the skills to apply technology in solving sustainability challenges. By cultivating future-ready competencies and innovation-driven learning, KFUPM advances quality education and contributes directly to achieving the UN Sustainable Development Goals.





Sustainability Club

Vision and Mission

The Sustainability Club envisions a campus where sustainable practices are seamlessly part of daily life and serve as a model for other institutions. Our mission is to promote sustainability and environmental awareness within the KFUPM community and beyond by educating, inspiring, and engaging people in meaningful action. Through events, collaborations, and innovative projects, we aim to create a lasting legacy of environmental stewardship.

Initiatives

The club's efforts focus on five main areas. Education and awareness include workshops, events, and competitions that highlight sustainable living. Collaboration builds partnerships with university departments and external organizations. Campus integration ensures sustainable practices become part of everyday routines. Community engagement brings people together to make sustainability a shared goal. Advocacy uses media and public relations to promote environmental responsibility. These combined initiatives drive our mission of building a sustainable culture.

This Academic Year

More than seventy students are participating across five committees: Public Relations, Competitions, Sustainable Projects, Media, and Performance and Documentation. Working together, they strengthen the club's impact and advance sustainability within the university.

Plans for Next Year

Upcoming initiatives include the Green Speaker Series, Sustainability in Action Workshops, Sustainable Minds Competition, Sustainable Design Challenge, a Tree Planting Initiative, a Sustainability Exhibition, and a Waste Management Program. These projects are designed to integrate sustainability into campus life and inspire students across disciplines to contribute to real environmental solutions.



Credits

CONTRIBUTORS

- College of Engineering and Physics
- College of Petroleum Engineering & Geosciences
- College of Chemicals and Materials
- College of Design and Built Environment
- College of KFUPM Business School
- KFUPM Institute of Knowledge Exchange (KIKX)
- IRC for Advanced Materials
- IRC for Membranes and Water Security
- IRC for Refining and Advanced Chemicals
- IRC for Sustainable Energy Systems
- IRC for Construction and Building Materials
- IRC for Communication Systems and Sensing
- IRC for Aviation and Space Exploration
- IRC for Bio Systems and Machines
- IRC for Hydrogen Technologies and Carbon Management
- JRC for Artificial Intelligence (SDAIA-KFUPM)
- ARC for Environment and Marine Studies
- Center for Integrated Petroleum Research (CIPR)
- Environmental Health and Safety

SPECIAL THANKS

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