



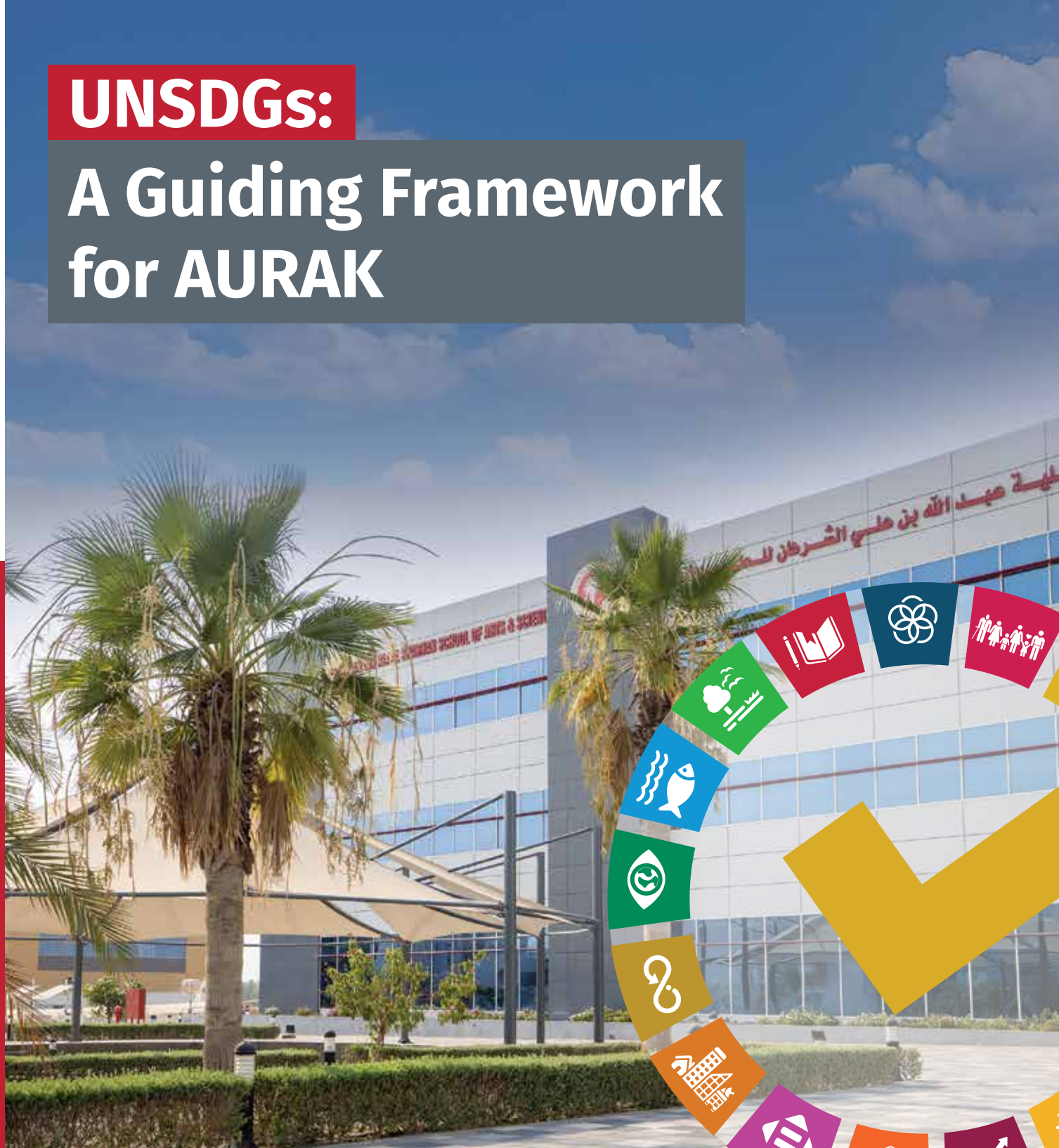
AURAK

الجامعة الأمريكية في رأس الخيمة
AMERICAN UNIVERSITY OF RAS AL KHAIMAH



UNSDGs:

A Guiding Framework for AURAK





**“There are no passengers on
spaceship earth. We are all crew.”**

- Marshall McLuhan

President's Message

As the President of the American University of Ras Al Khaimah (AURAK), I want to address an issue of profound importance that transcends our roles and unites us in a shared responsibility-Sustainability



Environmental Impact

Our planet is facing unprecedented challenges, and as a leading institution of higher learning, we must respond with urgency and purpose. Climate change is one of the most significant threats to our world today. Its impacts are far-reaching, affecting ecosystems, economies, and communities globally. We must create solutions that will safeguard our planet for future generations.

Clean energy is one of the most critical areas where we can make a difference. Our university is committed to reducing its carbon footprint by investing in renewable energy sources, enhancing energy efficiency, and fostering innovation in sustainable technologies. We have already begun transitioning our campus energy systems to more sustainable alternatives, but more work must be done. I encourage everyone in our community to consider how we can collectively contribute to this vital goal.

Waste management is another crucial component of our sustainability strategy. We can minimize our waste's environmental impact by reducing, reusing, and recycling. Our university is implementing more comprehensive waste reduction programs, expanding recycling efforts, and partnering with local organizations to manage our waste responsibly.

Water is a precious resource and conserving it must be a priority. Our campus is exploring innovative water conservation techniques, including reducing the consumption of our buildings.

Social Impact

I am deeply committed to our institution's role in fostering social impact. Our dedication to creating a more just and equitable society is woven into everything

we do. We strive to create an inclusive environment where all students, faculty, and staff feel valued and respected. We actively partner with industries and organizations to create meaningful employment opportunities to provide our students and alums with the skills and connections they need to thrive in an ever-changing job market.

Our commitment to knowledge exchange extends beyond the classroom. We are dedicated to sharing our expertise with the broader community, fostering collaborations that drive innovation and address societal challenges.

Education remains our cornerstone in integrating sustainability into our curricula, research, and daily practices. We are committed to providing a world-class education that prepares our students for professional success and instills a sense of responsibility to contribute to the greater good. Through curriculum development, community programs, and lifelong learning opportunities, we aim to equip our students with the knowledge and skills to impact the world positively. By equipping our students with the knowledge and skills to address these challenges, we empower the next generation of leaders to make a lasting impact.

In conclusion, sustainability is not just a goal but a commitment to our planet, communities, and future. Together, we can make the American University of Ras Al Khaimah an example of environmental stewardship, contribute to the UN Sustainable Development Goals, and play our role in creating a more sustainable world.

Dr. David A. Schmidt

President, American University of Ras Al Khaimah

Sustainability Initiatives Committee

Establishing the sustainability committee at AURAK demonstrates our commitment to environmental and social sustainability. This committee, which boasts diverse representation from all departments, including senior leadership at AURAK, plays a crucial role in our comprehensive approach to sustainability.



“We have no backup plan because there’s no backup planet.”

Dr. Tahseen Anwer Arshi

Associate Provost for Research and Sustainability
Chair, Sustainability Committee,
American University of Ras Al Khaimah

Committee Members

Dr. Tahseen Anwer Arshi - Associate Provost for Research and Community Service (Chair)

Dr. Uday Kumar Nutakki - Chief Sustainability Officer/Associate Professor in Chemical Engineering

Dr. David A. Schmidt - President

Prof. Stephen Wilhite - Senior Vice President for Academic Affairs and Student Success / Provost

Mr. Basheer Daoud - Vice President - Operational Excellence and Financial Management

Dr. Imad Hoballah - Vice President for Institutional Advancement & External Relations

Mr. Mohamad A. Abdulqader - Director of Strategy and Institutional Research

Dr. Kevin Scott Konecny - Associate Provost for Student Affairs

Mr. Rajesh Prema - Associate Provost for Enrollment Management/ Director, Marketing & Communications

Ms. Rania Ali - Registrar, Office of Registrar

Mr. Mohamed Darwish - Director, Saqr Library

Ms. Karla Fraser - Manager, Student Life Department

Mr. Yousef Al Nuaimi - Admissions Manager

Mr. Omair Mushtaq Memon - Finance Director, Office of Finance

Mr. Abba Tahir - Manager, Office of Human Resources

Mr. Mohamed Mr. Sharul - Manager, Office of Information Technology

Ms. Khadija Alshehhi - Manager, Office of Procurement and Auxiliary Services

Engr. Muzaffar Razzaq - Acting Manager, Office of Facilities Management

Ms. Haifa Awad - Assistant Manager, Office of the Provost

Ms. Wennie Bandico - Manager, Office of the President



Executive Summary

The American University of Ras Al Khaimah (AURAK) is dedicated to promoting academic excellence and societal progress by aligning its initiatives with the United Nations Sustainable Development Goals (UNSDGs). These 17 goals address critical global challenges such as environmental sustainability, economic equity, and social inclusion. AURAK incorporates the UNSDGs into its educational programs, research, and community engagement, demonstrating its commitment to nurturing future leaders. The AURAK Sustainable Development Goals (SDG) report highlights five key areas: educational programs, academic courses, research initiatives, community service, and consumption footprint assessment, all contributing to the SDGs.

Introduction to the SDG Report

At the American University of Ras Al Khaimah (AURAK), sustainability is both a goal and a guiding principle that informs our vision for a more promising future. As a prominent higher education institution in the UAE and the region, we are dedicated to advancing the United Nations Sustainable Development Goals (SDGs), measuring and managing impact through our academic curriculum, research initiatives, and community engagement activities. This SDG report encapsulates our commitment to facilitating positive change locally and globally. It offers a thorough overview of how AURAK incorporates sustainability into various dimensions of university life, from integrating sustainability concepts into our academic offerings to pioneering research that addresses urgent environmental, social, and economic issues. This report summarizes our accomplishments and serves as a call to action. At AURAK, we take pride in setting an example and encouraging our students, faculty, and partners to actively participate in realizing the SDGs.



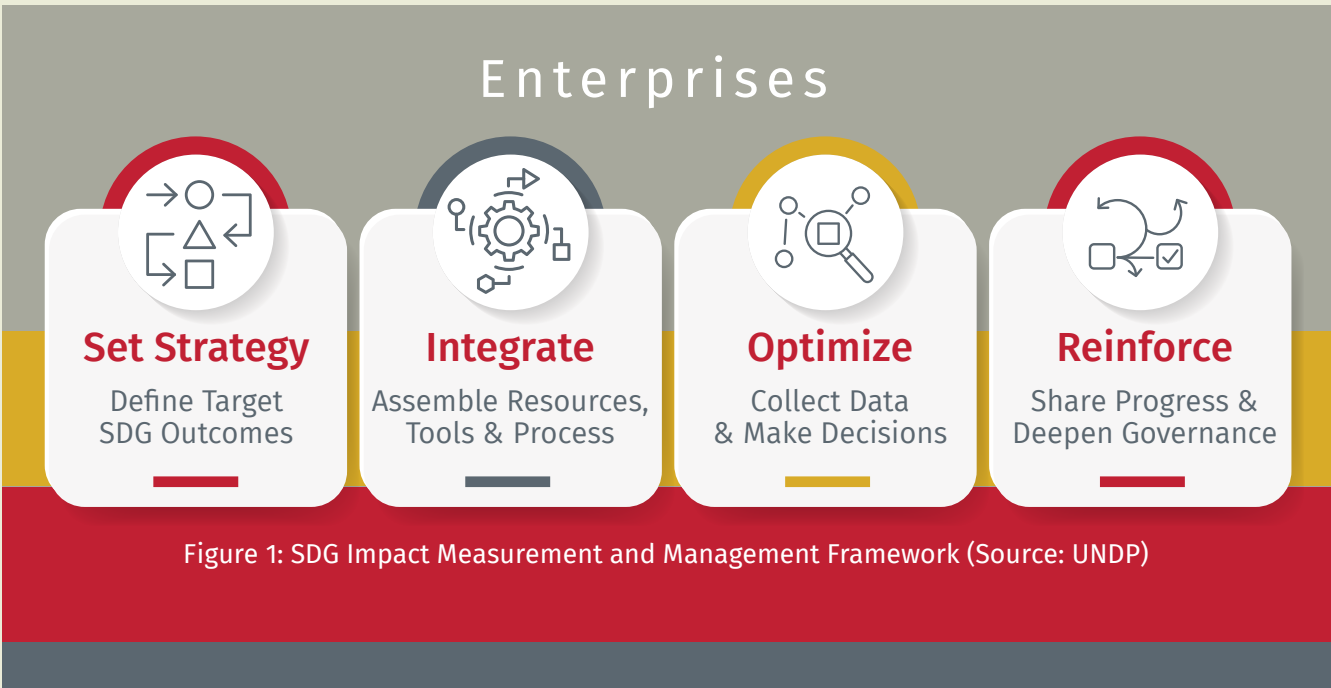


Methodology and Acknowledgement

The course and research mappings were conducted utilizing the European Commission's Modelling Inventory and Knowledge Management System (MIDAS), which is currently operated and maintained by the Joint Research Centre (JRC-EC). Experts established the connections between the models and the Sustainable Development Goals (SDGs) through a textual analysis of the model descriptions available in MIDAS, which the model developers subsequently validated.

The AURAK SDG Report for 2024-2025 leveraged the MIDAS system to systematically map 1,128 courses offered at AURAK based on their course descriptions and learning outcomes. Additionally, the report identified and extracted 1,239 AURAK research papers indexed in Scopus over the past five years. It utilized MIDAS to precisely map 167 research papers for 2023-2024, focusing solely on their abstracts. AURAK's consumption footprint was assessed by analyzing unit-specific and departmental consumption metrics, benchmarked against the most significant consumption footprints observed in EU households. These calculations were performed using the European Commission's Consumer Footprint Calculator.

Furthermore, the measurement and management of AURAK's SDG impact will be grounded in developing a robust strategic framework, as illustrated in the following diagram.





AURAK Vision:

AURAK is committed to becoming an institution that embraces academic excellence, life-long learning, research, and sustainability and prepares graduates for careers to shape a better world.

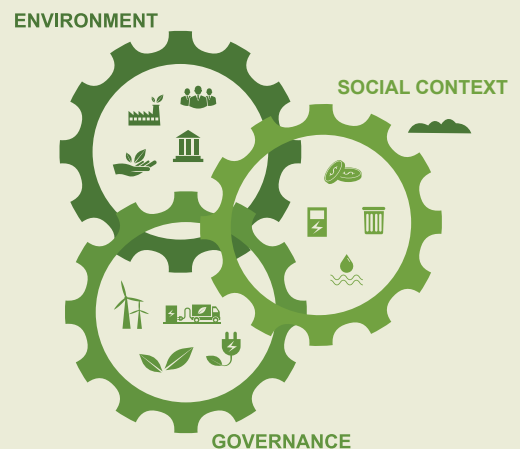
AURAK Strategic Goal 5: Sustainability

5.3 Embed social and environmental sustainability principles in all university curricula.

Initiative 1: Review the curriculum for each of the programs offered at AURAK as part of the annual program review and embed sustainability principles within each program.

AURAK SDG Impact Thesis

If we continue pursuing educational excellence through quality education, impactful research, and meaningful community engagement and produce leaders who can shape a better world, we can improve the environmental impact of our services and contribute positively to sustainable development goals.



Education: A Catalyst for Achieving the Sustainable Development Goals

The educational strategies and objectives at AURAK form a cornerstone for achieving the United Nations Sustainable Development Goals, functioning as both a driver and enabler of sustainable development. Education empowers students to make informed decisions and undertake meaningful actions toward establishing a more sustainable and equitable world by equipping individuals with the necessary knowledge, skills, and values.

Promoting Awareness and Learning: Many courses at AURAK aim to enhance awareness of global challenges, such as climate change, poverty, water and energy crisis, inequality, and health disparities. With SDG concepts integrated into curricula, learners comprehensively understand these issues and the interconnectedness of social, economic, and environmental systems.

A comprehensive analysis of the AURAK courses indicates that approximately 30% of the offerings directly contribute to most of the Sustainable Development Goals (SDGs), with the most significant positive impact observed on SDGs 7, 8, and 4. Notably, SDG 5 (Gender Equality) and SDG 14 (Life Below Water) are exceptions in this assessment. Furthermore, AURAK courses demonstrate a markedly higher contribution to the targets and indicators associated with the SDGs, as illustrated in Figures 2a-2b.

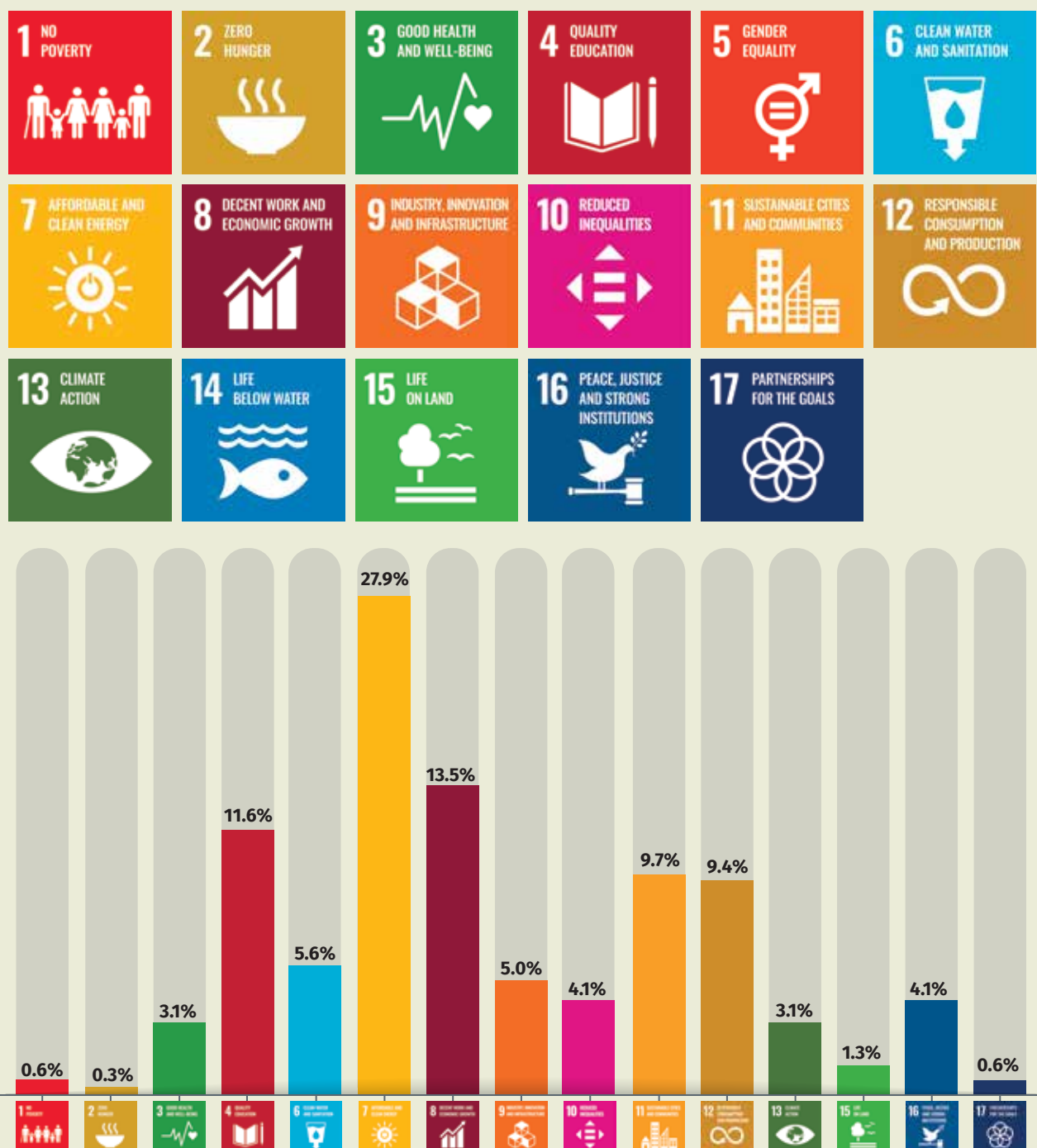


Figure 2a: AURAK courses contributing to the UNSD Goals

Figures 2a and 2b show that the AURAK course maps significantly to SDG 7 (Clean and Affordable Energy), showing AURAK's leadership and expertise in this domain. The next most significant contribution of AURAK courses is SDG 8 (Decent Work and Economic Growth), followed by SDG 4 (Quality Education). The least contribution of AURAK courses is to SDG 2 (Zero hunger), considering the lack of academic programs related to this SDG. The other significant contributions are to Goal 11: Sustainable Cities and Communities, and Goal 12 (Responsible Consumption and Production), followed by Goal 9 (Industry Innovation and Infrastructure), Goal 10 (Reduced Inequalities) and Goal 3 (Good Health and Well-being).

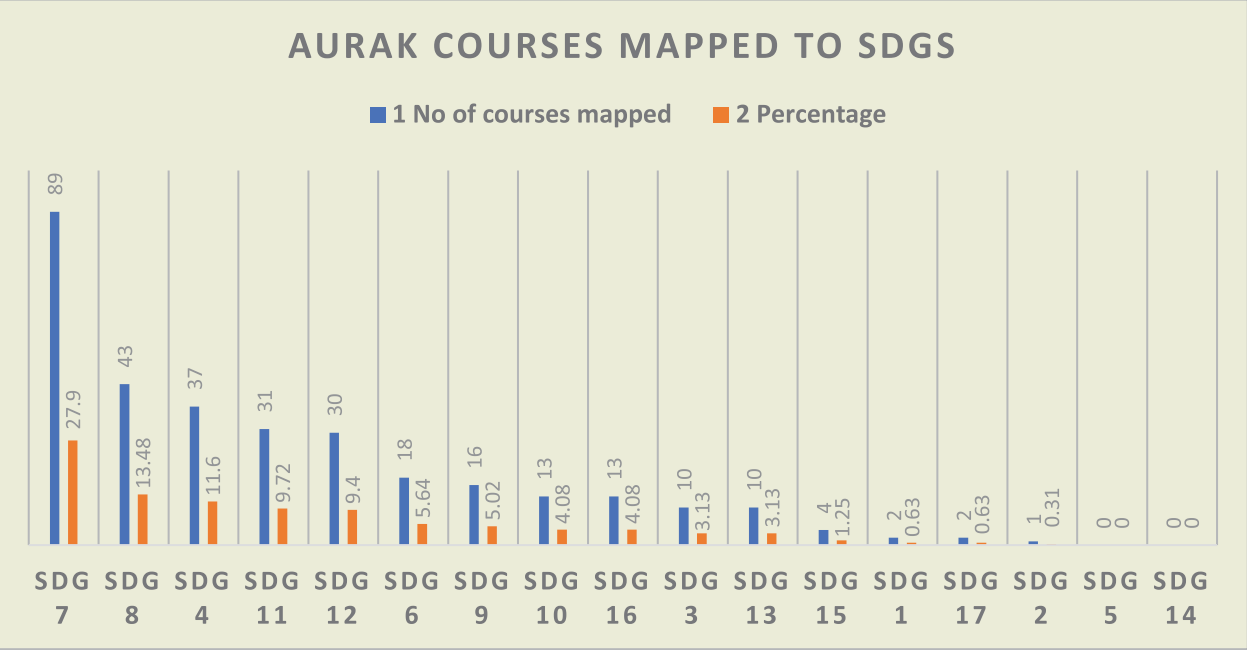


Figure 2b: Number and Percentage of AURAK courses mapped to the 15 out of 17 SDGs



SDG Goals and Impact on Student learning

AURAK's curriculum is designed to give students the tools to devise innovative solutions to complex global challenges through critical thinking, creativity, and research. For example, an emphasis on STEM education advances clean energy, sustainable infrastructure, and environmental conservation. Sustainability principles in AURAK education aim to create awareness and impact among students and are a foundational element for achieving all other goals, cultivating a generation equipped to effectuate lasting and transformative change.

SDG 4 Quality Education:

AURAK's courses are designed to provide students with a high-quality education that emphasizes critical thinking, entrepreneurial mindset, innovation, and practical skills. The university ensures that its programs are inclusive and accessible, fostering lifelong learning opportunities for students from diverse backgrounds. By prioritizing educational excellence, AURAK contributes significantly to SDG 4. Education directly supports SDG 1 (No Poverty) by promoting economic mobility. Through project-based learning, internships, and capstone projects, AURAK students address real-world challenges related to the SDGs. By fostering critical and entrepreneurial thinking, innovation, and ethical decision-making, AURAK equips graduates with the tools to build a better future.



SDG 7 Affordable and Clean Energy:



Integrating SDG 7 concepts into AURAK courses helps students understand the significance of renewable energy, energy efficiency, and their role in combating climate change. Interdisciplinary courses and capstone projects on energy systems and sustainability equip students with the tools to analyze and develop clean energy solutions. AURAK's emphasis on clean and affordable energy reflects its commitment to addressing one of the most pressing issues of our time: sustainable energy solutions. The university offers courses that explore renewable energy technologies, energy efficiency, and sustainable energy systems.

SDG 8 Decent Work and Economic Growth:

The university's curriculum incorporates elements of entrepreneurship, innovation, and sustainable economic practices, ensuring students are prepared for the evolving demands of the global workforce. Business administration, engineering, and economics courses emphasize ethical practices and sustainable growth. Moreover, AURAK collaborates with industry partners to provide students with hands-on learning opportunities, fostering the development of a skilled and future-ready workforce.

AURAK's focus on entrepreneurial education and employability pathways facilitates access to decent work and economic opportunities, aligning with SDG 8 (Decent Work and Economic Growth).



SDG 9: Industry Innovation and Infrastructure:

AURAK's focus on innovation and infrastructure development is reflected in its engineering, AI, and technology programs. Engineering technology and business courses focus on developing cutting-edge ideas that align with sustainable and inclusive practices. Research and capstone projects are geared toward advancing industrial processes, smart infrastructure, and innovative solutions that address real-world challenges. Students are exposed to problem-solving frameworks and tools that inspire them to create innovative solutions for industries and infrastructure systems. These efforts not only foster technological progress but also align with the goal of building resilient infrastructure and promoting inclusive and sustainable industrialization.



Goal 11 Sustainable Cities and Communities:

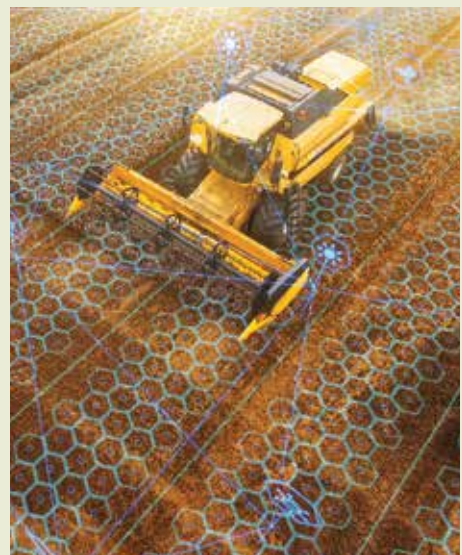


AURAK empowers students to address urbanization challenges and promote sustainable lifestyles. Courses in civil engineering, architecture, and urban design focus on sustainable infrastructure and smart city solutions. Students learn to create liveable, resilient cities prioritizing environmental stewardship and social inclusivity. AURAK programs emphasize sustainable transportation systems, reducing congestion and carbon emissions and improving urban connectivity.

Goal 12 Responsible Consumption and Production:

AURAK courses teach students about efficient resource utilization, waste reduction, and circular economy models that minimize environmental impact. Business and management programs incorporate sustainability into their frameworks, encouraging students to adopt responsible production and marketing strategies. Interdisciplinary courses in General Education inspire students to design initiatives that promote sustainable consumption and educate communities about reducing ecological footprints.

Encouraging Ethical and Inclusive Values: The American-style education and values cultivated at AURAK promote equality, diversity, and social justice, aligning with goals such as reduced inequalities (SDG 10). These values underpin our efforts to foster inclusive and resilient communities.





AURAK Courses and SDG Targets and Indicators

The Sustainable Development Goals (SDGs) encompass a framework of targets and indicators that facilitate the monitoring and measuring of progress toward achieving sustainable development. Each SDG is associated with specific objectives that offer a structured and quantifiable approach to realizing these goals. This framework serves as a roadmap for action, translating overarching aspirations into actionable steps.

Targets are specific objectives delineated under each SDG, outlining the intended outcomes and the necessary actions to attain the broader goals. Collectively, there are 169 targets distributed across the 17 SDGs, addressing critical areas such as poverty alleviation, education, clean energy, and global partnerships.

Indicators are the measurable metrics utilized to track and assess the progress of each target. A total of 232 distinct indicators have been devised to yield data-driven insights and demonstrate advances or existing shortcomings. These indicators empower stakeholders to evaluate the efficacy of their initiatives, identify challenges, and adjust strategies to ensure that the established targets are met effectively.

The programs and courses AURAK offer align with a comprehensive set of SDG targets and indicators, as illustrated in Figure 3. These courses substantially contribute to the targets and indicators pertaining to SDG 7 (Clean and Affordable Energy), SDG 4 (Quality Education), SDG 11 (Sustainable Cities and Communities), and SDG 9 (Industry, Innovation, and Infrastructure).

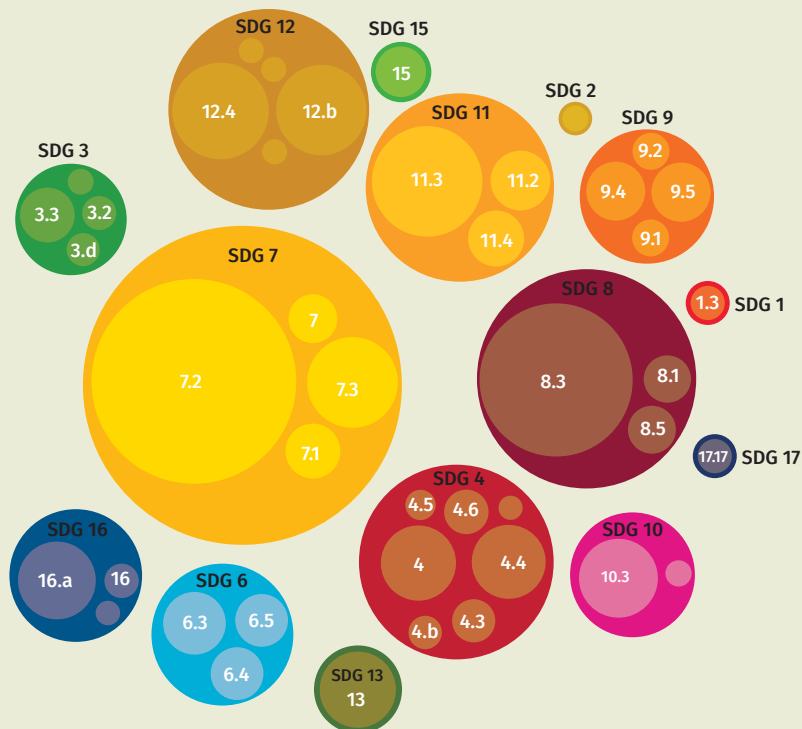


Figure 3: AURAK Courses aligned with SDG Targets

The bigger circles in Figure 3 represent SDG goals mapped to AURAK's courses, while the smaller circles within the goals represent the SDG targets mapped to the AURAK courses.



AURAK Strategic Goal 5:

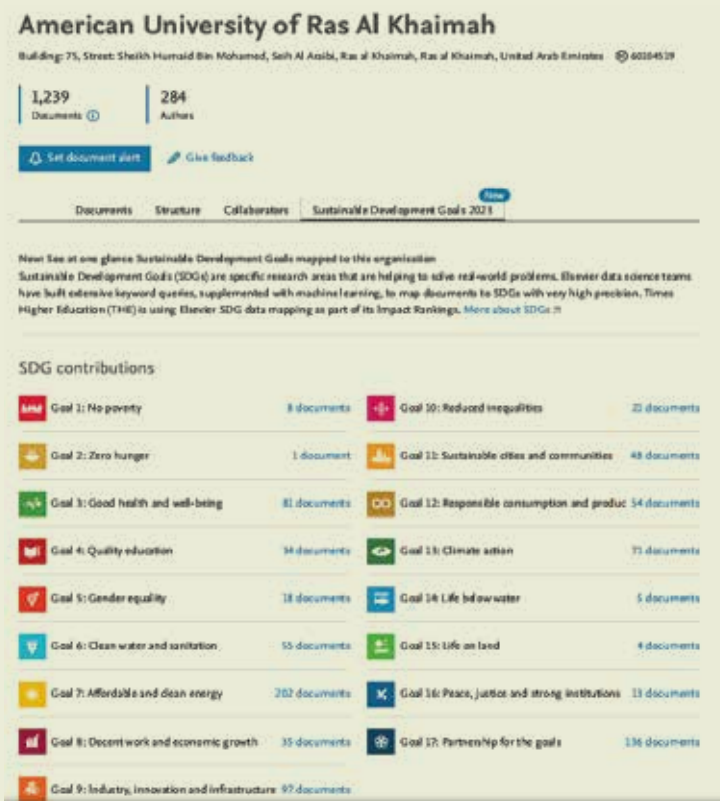
Reduce the University’s carbon footprint in accordance with UAE goals related to the environment.

Environmental Impact

Research is critical in addressing the multifaceted and interconnected challenges outlined in the United Nations Sustainable Development Goals. At the American University of Ras Al Khaimah (AURAK), research constitutes a foundational element of our commitment to sustainability, fostering innovation, knowledge creation, and actionable solutions contributing to global progress.

AURAK Research and SDGs (last five years)

AURAK's cutting-edge research significantly impacts UN Sustainable Development Goals (SDGs). A total of 1239 research papers have contributed considerably to the 17 SDGs over last 5 years. Maximum contributions are evident on SDG7 (Clean Energy), SDG 17 (Partnerships for Goals), SDG 9 (Industry Innovation and Infrastructure), SDG 3 (Good Health), and SDG 13 (Climate Action) as illustrated in Figure 4.



AURAK Research Contribution to SDGs

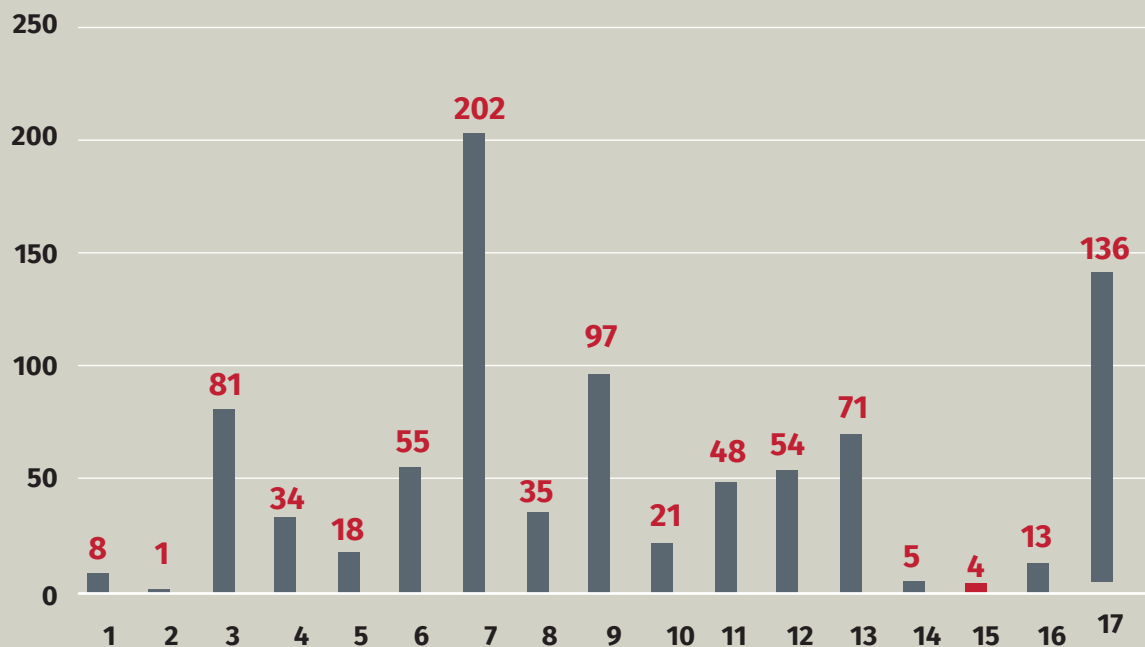
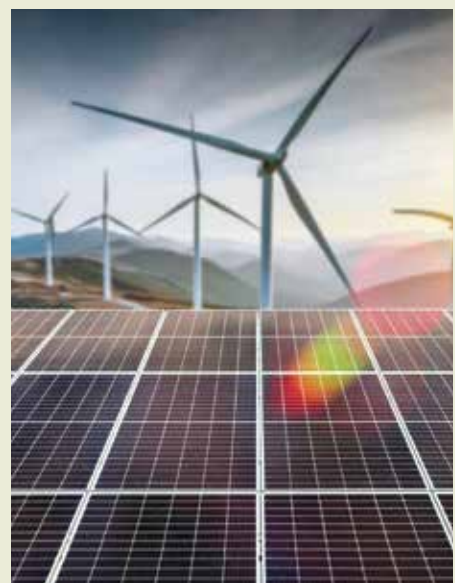


Figure 4: AURAK Research Impacting all SDG over last five years

Goal 7 Affordable and Clean Energy:

The research conducted at AURAK focuses on advancements in solar, wind, and other renewable energy technologies aimed at developing sustainable and efficient energy systems while diminishing the reliance on fossil fuels. The studies undertaken at AURAK emphasize optimizing energy consumption in buildings, transportation, and industrial sectors to foster cost-effective and environmentally responsible practices. Additionally, research addressing energy policies and economic models is essential in ensuring equitable access to clean energy on a global scale. AURAK's engineering, renewable energy, and environmental science research align with SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action). Research projects focused on solar energy, water conservation, and sustainable infrastructure strive to minimize environmental impact and enhance resource efficiency.



SDG 17 Partnerships for the Goals:



AURAK recognizes that attaining the United Nations Sustainable Development Goals (SDGs), with particular emphasis on SDG 17 (Partnerships for the Goals), necessitates collaboration and a collective commitment to global advancement. AURAK strongly emphasizes building partnerships that advance sustainable development. Through collaborations with governmental bodies, local and international organizations, and academic institutions, the university promotes knowledge exchange and joint research projects that address global challenges. These partnerships enhance the institution's impact and reinforce its commitment to SDG 17. Through innovative research initiatives, AURAK actively cultivates partnerships that enhance impact, bridge knowledge gaps, and promote sustainable development.

Addressing Health and Well-Being: Life sciences and healthcare research efforts correspond to SDG 3 (Good Health and Well-Being). Faculty members and students are actively engaged in studies that address public health challenges, including medical and forensic biotechnology, disease prevention, nutrition, diagnosis, and mental health, to improve the quality of life in the region and beyond.

Promoting Economic Growth and Innovation: AURAK's research contributes to SDG 9 (Industry, Innovation, and Infrastructure) and SDG 8 (Decent Work and Economic Growth) through interdisciplinary research in AI, computer science, engineering disciplines and business, and social sciences. By investigating sustainable business models, entrepreneurship, and digital transformation, AURAK nurtures innovation and economic resilience.



AURAK Research and SDGs (2023-2024)

The research productivity and focus of AURAK for the years 2024-2023 exhibit trends consistent with those observed in prior years. As illustrated in Figure 5, the highest volume of research contributions impact Sustainable Development Goal 7 (SDG 7), which pertains to Clean Energy. However, there has been a noteworthy emergence of research activity concerning Sustainable Development Goal 9 (SDG 9), which focuses on Industry, Innovation, and Infrastructure, as well as Sustainable Development Goal 12 (SDG 12), which addresses Responsible Production and Consumption, and Sustainable Development Goal 13 (SDG 13), which centers on Climate Action.

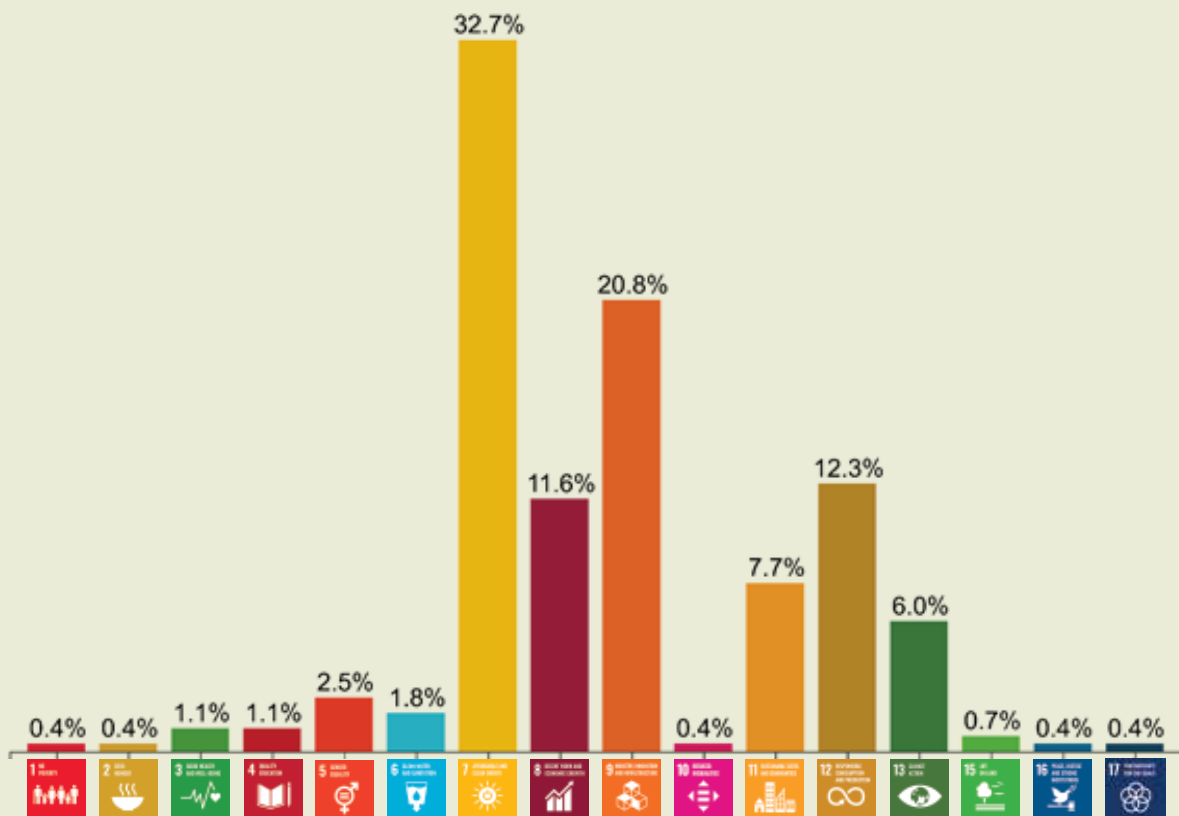


Figure 5: AURAK Research Impacting all SDG (2023-2024)

AURAK research contributing to SDG 7 (Clean and Affordable Energy)



AI-Driven Optimization for Sustainable Energy and Resource Recovery

This groundbreaking research by Dr. Uday Kumar presents an AI-optimized energy system that enhances resource efficiency and environmental sustainability. It produces electricity, cooling, freshwater, and hydrogen fuel by integrating gas turbines, heat recovery technologies, and advanced subsystems like proton exchange membrane electrolysis and reverse osmosis. Through AI-based multi-objective optimization, the system significantly improves energy efficiency, reduces operational costs, and mitigates carbon emissions. Compared to traditional systems, it demonstrates notable advancements in CO₂ emission reduction and resource recovery, showcasing the potential for sustainable energy and water management solutions.

Optimizing Photovoltaic Panel Cleaning in Arid Regions Using Artificial Intelligence

In arid regions, dust accumulates on solar panels, reducing efficiency and increasing maintenance costs. Dr. Mohamad Kharseh's project develops an AI-powered system to predict optimal cleaning times, ensuring efficient panel operation while conserving water and resources. The research uses sensors and machine learning at the American University of Ras Al Khaimah (AURAK) to enhance cleaning schedules, reduce water use, and improve energy production. This innovative approach supports sustainable development and offers more intelligent solutions for maintaining solar panels.



AURAK research contributing to SDG 9 (Industry, Innovation and Infrastructure)

Boosting Energy Efficiency in Wireless Sensor Networks Using Smart Optimization Techniques

In an era where energy sustainability is paramount, the research conducted by Prof. Mohammed Omari, Dr. Khoulood Salameh, and Dr. Ali Alnoman presents a groundbreaking advance in wireless sensor networks (WSNs). The challenge lies in sensors' limited battery life, which necessitates methods to prolong their functioning. The team introduced a novel approach that combines Grey Wolf Optimization (GWO) with an enhanced CSMA/CA protocol to optimize energy management. The new method significantly reduces energy consumption through minimized data collisions and practical switching, enabling more efficient data transmission, extending network lifetimes, and enhancing energy use, offering a viable solution for sustainable, reliable WSNs in challenging environments.

Similarly, AURAK research aligns with a broader set of SDG targets and indicators as shown in figure 6, with maximum contributions to SDG7 (Clean Energy), SDG 9 (Industry Innovation and Infrastructure), and SDG 12 (Responsible Production and Consumption).



AURAK Research Contributing to SDG 12 (Responsible Consumption and Production)

This study by Dr. Tahseen Arshi and his team evaluates how blockchain and the Internet of Things (IoT) can enhance transparency in the food supply chain, particularly in inventory management and food safety tracking. The food industry faces challenges like economic adulteration and microbial pathogens, prompting the need for advanced technology. Blockchain and IoT can transform the industry by enabling real-time tracking, improving responsible sourcing, reducing waste, and increasing consumer satisfaction. The chapter highlights these benefits along with the challenges in the current food supply chain and how these technologies can help address them.



AURAK's research contributing to SDG 8 (Decent Work and Economic Growth)

Entrepreneurial values and circular economy adoption: A cross-lagged SEM-based machine learning study

The article by Dr. Tahseen Arshi and Prof. Joseph Wallis provides an entrepreneurial value-based perspective on adopting the circular economy (CE). It argues that significant shifts toward CE require a fundamental change in values. While previous studies have examined self-transcending values that promote CE, there has been limited investigation into self-advancing values that hinder adoption in an entrepreneurial context. Results indicate that self-enhancing values foster linear consumption patterns. However, awareness of the negative impacts of harmful CE business models can moderate this effect. The study recommends policy interventions to balance self-transcending and self-advancing values to improve CE adoption in entrepreneurship. It is one of the first to identify these barriers to circularity.



AURAK research contributing to SDG 4 (Quality Education)

Ethics and Risks in Using Large Language Models (LLM) in Academia: Investigation Study

The research conducted by Dr. Muataz Al Hazza, Prof. Ahmad Sakhrieh and Dr. Khoulood Salameh show that the rise of artificial intelligence (AI) and data-driven decisions have significantly impacted academic life. AI's large language models (LLMs) have revolutionized research by enabling very rapid processing of vast amounts of data. IBM estimates that 2.5 quintillion bytes of data are created daily, much of it personal and private due to the influence of social media platforms like TikTok and Facebook. While data anonymization efforts exist, ethical concerns and risks remain, including the potential for incorrect information generated by LLMs. This research investigates these risks and ethical issues in using LLMs for scientific research and education, aiming to develop a framework to mitigate ethical problems while acknowledging the benefits of efficiency in research.



AURAK research contributing to SDG 3 (Good Health and Wellbeing)

A Sustainable Approach Towards the Therapeutics for Brain Cancer

Glioblastoma is an aggressive and common type of cancer that starts as a growth of cells in the brain or spinal cord and has a poor prognosis for survival. The sRNA-sequencing and biocomputational analyses investigated the effects of SHG-8 on the miRNome and its bioavailability within the human body. Dr. Shagufta and Prof. Irshad Ahmad synthesized the small molecule β -Amino Carbonyl (SHG-8, a potent anti-cancer molecule) in-house using Green Chemistry techniques. This research advances brain cancer therapy and aligns with the UNSDG, supporting the United Nations mission for good health and well-being.

Finally, AURAK research helps promote several indicators, as shown in Figure 6, with maximum indicators related to SDG7 (Clean Energy).

AURAK Research and SDG Targets (2023-2024)

By promoting a culture of innovation and collaboration, AURAK's research initiatives contribute to achieving the SDG targets and establish thought leadership in addressing global sustainability challenges (Figure 6). AURAK empowers faculty and students to develop transformative solutions for a sustainable future through rigorous investigations and practical applications.

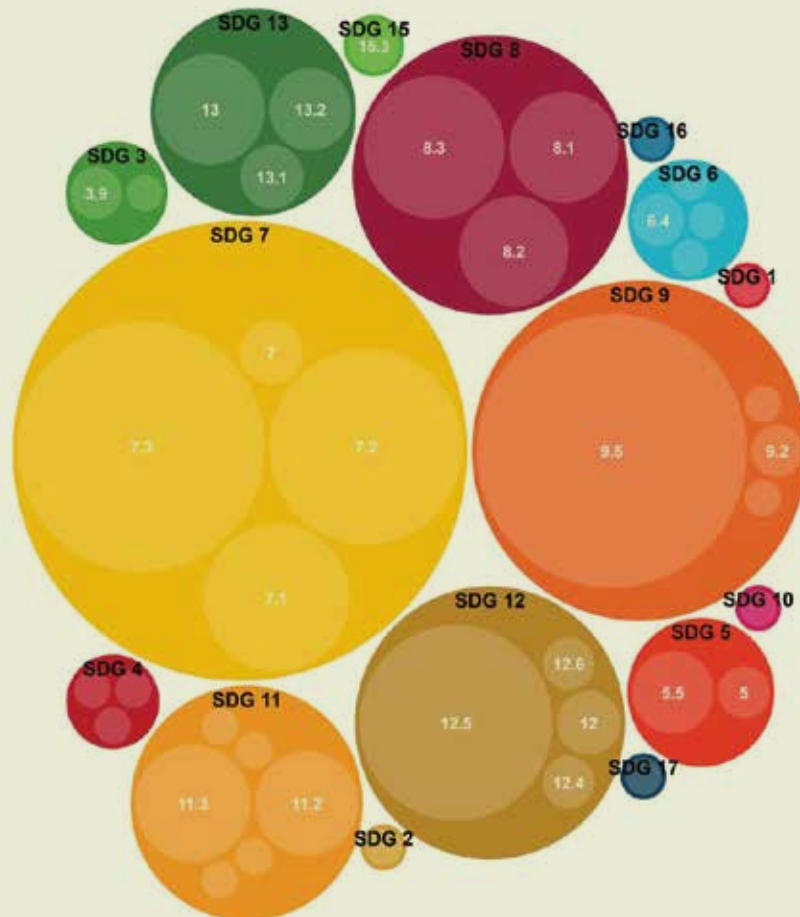


Figure 6: AURAK Research's Contribution to SDG Targets

The bigger circles in Figure 6 represent SDG goals mapped to AURAK's research, while the smaller circles within the goals represent the SDG targets mapped to AURAK's research.

Interlinkages:

Since the 2030 Agenda was conceived to be integrated and indivisible, the SDGs are interlinked and interdependent by design. Hence, SDG Interlinkages refer to the complex network of interconnections existing across the SDGs, their targets and indicators: these interconnections can be positive, negative or have a mixed nature, and can happen at different geographical and temporal scales with different impact. SDG Interlinkages show how actions directed towards one SDG can influence all the others. Uncovering and understanding these interactions helps achieving the 2030 Agenda, avoiding the unintended set back to any SDGs. Figures 7a-7f show the chord synergies between SDG goals and targets.



Figure 7a: Chord synergies for SDG 7 (Goal level)



Figure 7b: Chord synergies for SDG 7 (Target level)



Figure 7c: Chord synergies for SDG 8 (Goal level)



Figure 7d: Chord synergies for SDG 8 (Target level)



Figure 7e: Chord synergies for SDG 4 (Goal level)



Figure 7f: Chord synergies for SDG 4 (Target level)



Community Engagement at AURAK: Advancing the Sustainable Development Goals

At the American University of Ras Al Khaimah (AURAK), community engagement is a foundational element of our commitment to the United Nations Sustainable Development Goals (SDGs). By cultivating meaningful connections with local and global communities, AURAK actively contributes to sustainable development through collaborative efforts, educational initiatives, and service-oriented projects.

Fostering Economic Resilience:

By providing opportunities for entrepreneurial venturing and partnering with licensing bodies and entrepreneurs, AURAK facilitates the promotion of employability sustainable economic growth (SDG 8) through incubation, training, mentoring, and opportunities for collaboration. In 2024, AURAK organized the Middle East Startup Awards to promote an entrepreneurial culture. These initiatives stimulate innovation and create pathways toward economic empowerment within the community. AURAK organized the Middle East Startup Awards to improve the entrepreneurial ecosystem for students at AURAK.



Students of UNIV 200 actively participated at the competition of the Middle East Startup Awards and as a co-curricular activity they also completed an assignment on their experience on diversity and global learning contributing to employability sustainable economic growth (SDG 8) and Partnership for Goals (SDG 17).

The Middle East Startup Awards promoted the development of an entrepreneurial ecosystem and reinforced a culture and mindset of entrepreneurship among critical stakeholders, most notably the students. The awards celebrated the spirit of entrepreneurship and promoted bridging boundaries between countries and regions (United Arab Emirates, Oman, Qatar, Saudi Arabia, Bahrain, Kuwait, Lebanon & Jordan). Hosting the award and the inter-university business idea presentation at AURAK inspired students to dream big and confidently embark on entrepreneurial ventures.

Impact





Empowering Local Communities:

AURAK collaborates with local organizations, educational and research institutions, and municipal authorities to tackle specific community challenges. These initiatives correspond with SDGs such as SDG 4 (Quality Education), SDG 13 (Climate Action), SD4 4 (Decent Work and Sustainable Economic Growth) and SDG 17 (Partnership for Goals), thereby creating tangible enhancements in the quality of life for community members.

AURAK organized the “7 days seven Emirates” event in collaboration with the Ras Al Khaimah Department for Economic Development. This event, titled Ride for Unity, was designed to spread the message of diversity through a group of cycling influencers. A core team of cyclists composed of influential business leaders, entrepreneurs, and trailblazers cycled into the AURAK campus to spread the message of unity, diversity, tolerance, and sustainability. A significant number of students, faculty, and staff attended the event.



Advancing Environmental Stewardship:

AURAK's community-driven environmental initiatives contribute to SDG 13 (Climate Action) and SDG 15 (Life on Land). Activities such as tree planting, green campus initiatives, and sustainability talks and events promote awareness and encourage collective responsibility for environmental protection.

In collaboration with Emirates Environmental Group, AURAK ran the Waste Paper Collection and Can Collection campaigns, namely 'Paper Walk' and 'Can-do-attitude', and completed the target with appreciation from EEG.





RAK Center of Outdoor Comfort developed the guidelines for human comfort in public spaces, which were endorsed by RAK Municipality. The research-based guidelines produced by RAKCOC now guide multi-billion-dollar developmental projects at Marjan Island and at other major development sites in Ras Al Khaimah.

AURAK recently transformed its RAK Research and Innovation Center into the RAK Center Climate Change and Sustainability (RAK3CS). RAK3CS spearheads AURAK's strategic direction on Sustainability and contributes to several UN Sustainable Goals especially SDG 13 (Climate Action), SDG 6 (Clean Water and Sanitation), and SDG 7 (Clean and Affordable Energy). RAK3CS is an ambitious project to create a forest-centric carbon offset platform for the Ras Al Khaimah region that runs on solar power, food waste, and wastewater.



Encouraging Lifelong Learning and Volunteerism:

AURAK fosters a culture of volunteerism and lifelong learning by encouraging students, faculty, and staff to engage in community service and educational programs. The institution develops a culture centered on sustainability and social responsibility through these activities.

AURAK is continually engaged in organized volunteering activities. As a result, AURAK Students and Staff members come together and distribute meals to more than 400 laborers at various Ras Al Khaimah Municipality labor camps. Food-ATM, an incubator firm, sponsored the event with AURAK Center of Entrepreneurship.



The 1st International Conference on:

Business Management, Entrepreneurship, & Sustainable Circular Economy

04-05

NOV

2024



American University
Of Ras Al Khaimah



Global and Regional Collaborations:

AURAK's commitment to community engagement extends beyond local initiatives, involving regional and international partnerships that align with SDG 17 (Partnerships for the Goals). Collaborative projects enhance the efficacy of community efforts and promote global solidarity in addressing sustainability challenges.

Quality Education and Economic Growth:

Quality Education and Economic Growth: AURAK's commitment towards quality education (SDG4) was fostered through the first International Conference on Business Management, Entrepreneurship, and Sustainable Circular Economy. Hosted by AURAK, the conference highlighted several key issues related to the circular economy and entrepreneurial growth. The International Conference provided valuable insights into how businesses and entrepreneurs can find the right balance to build a thriving circular economy. It marked a significant milestone in fostering a platform where academic researchers, industry leaders, and entrepreneurs worldwide exchanged ideas, insights, and experiences that will shape the future of business management and entrepreneurship in an increasingly circular economy.

QS Higher Ed Summit: Middle East

27 - 29 February 2024
Ras Al Khaimah, United Arab Emirates (Hybrid)

Cultures of innovation: Elevating quality education
for a thriving Middle East



The QS Higher Ed Summit: Middle East 2024, held at the American University of Ras Al Khaimah, UAE, focused on fostering a culture of innovation to improve the quality of education in the Middle East.

Planetary Boundaries was proposed in 2009 by a group of Earth system and environmental scientists. The group wanted to define a "safe operating space for humanity" for the international community, including governments at all levels, international organizations, civil society, and the private sector, as a precondition for sustainable development. The framework is based on scientific evidence that human actions since the Industrial Revolution have become the primary driver of global environmental change.

The "safe operating space" is defined as the threshold for maintaining the Holocene state. When this threshold is crossed, the planet's biophysical subsystems and processes could shift to a new state with potentially negative consequences for humans (Rockstrom et al., 2009).

AURAK's environmental impacts against planetary boundaries is satisfactory as evaluated at a unit level. The environmental impacts of AURAK's consumption exceed the safe operating space for humanity by a factor of 1.6, operating in a zone of uncertainty but much below the high-risk zone, as shown in the figure below.

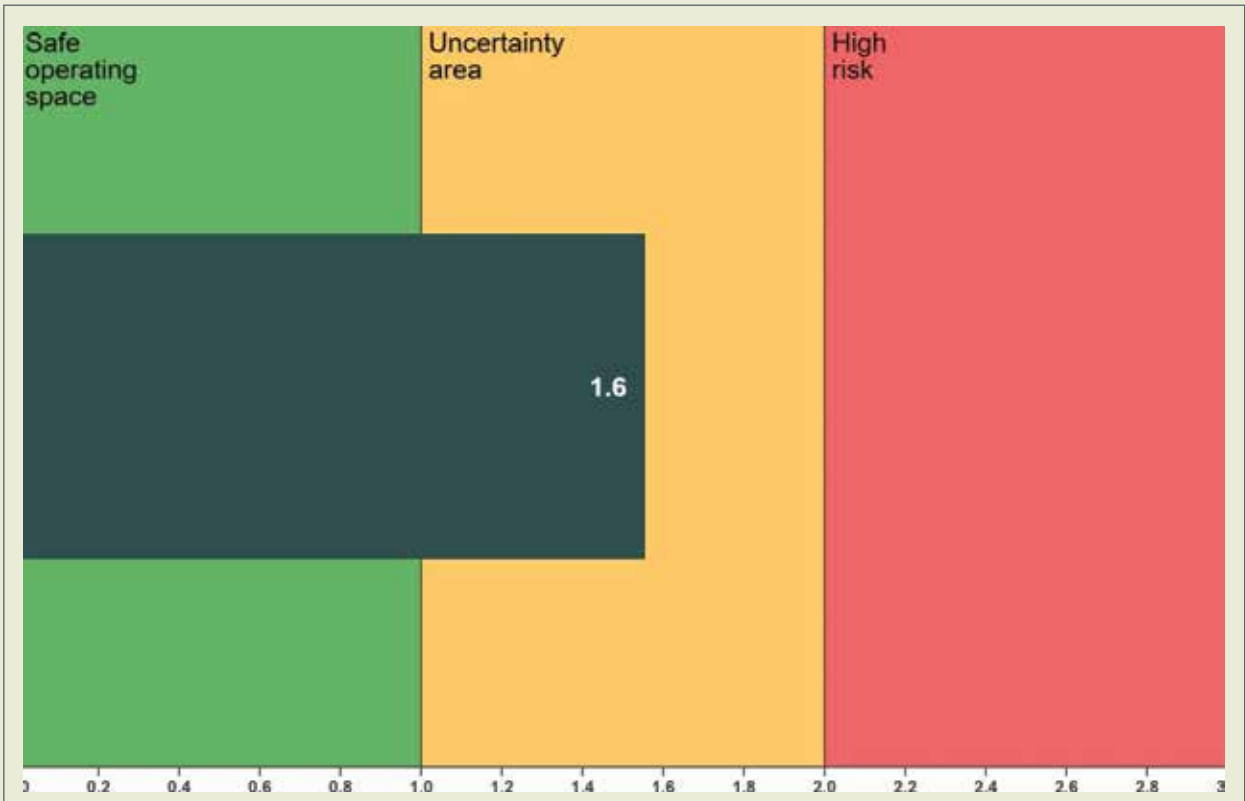


Figure 8: Consumption Footprint of AURAK and Impact on SDGs



AURAK

الجامعة الأمريكية في رأس الخيمة
AMERICAN UNIVERSITY OF RAS AL KHAIMAH



AURAK RISING

SUSTAINABILITY

is part of who we are

Sustainability efforts are ongoing at AURAK.

Office of Research & Sustainability is a central resource office for information regarding activities, projects, initiatives, campus engagements and programs.

Visit aurak.ac.ae to stay up to date.

The online version of this and future Sustainability Action Plan documents, as well as any updates to elements of this plan will be posted at aurak.ac.ae/research-community-service/office-of-research-and-sustainability