



جامعة قطر
QATAR UNIVERSITY

QATAR UNIVERSITY

SUSTAINABLE DEVELOPMENT GOALS

REPORT 2023/2024

KEY FACTS AND FIGURES

KEY FACTS

We are:

The first university in Qatar

The largest and most comprehensive university in Qatar

We have:

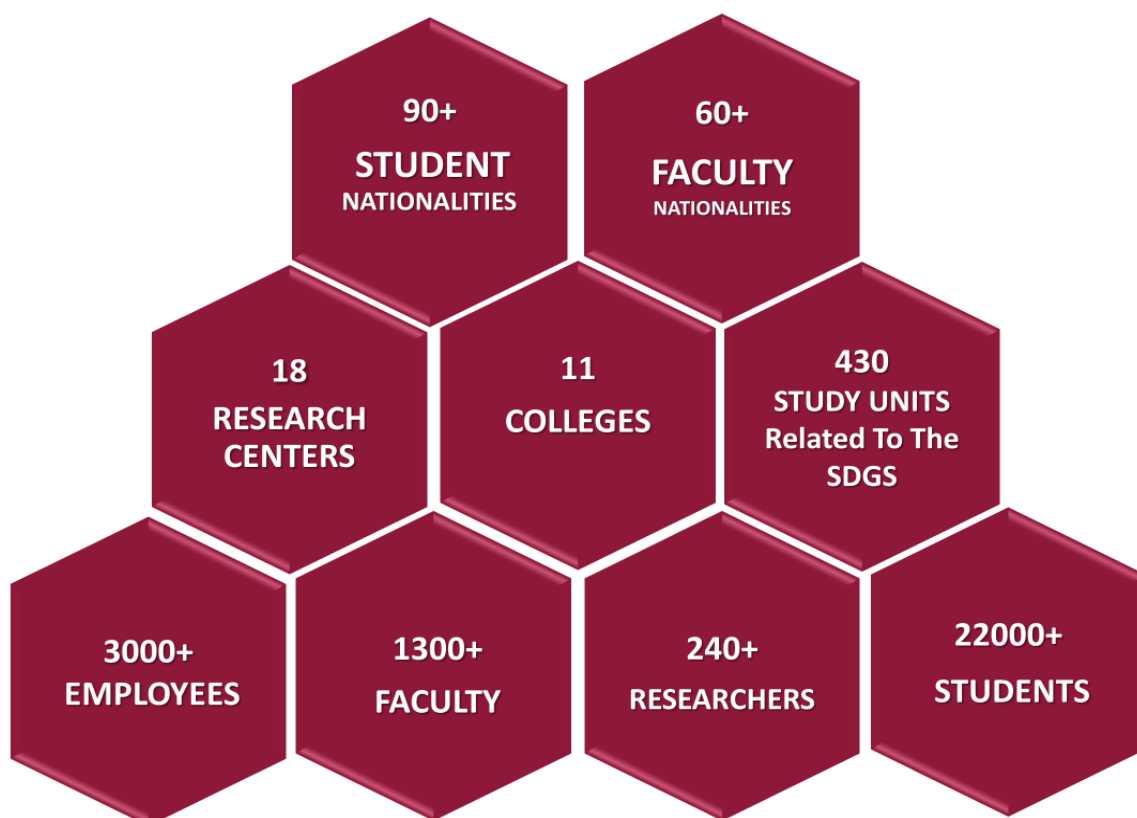
Published the first book in the region on Reverse Osmosis

Published the first volume of the first encyclopaedia on Occidentalism.

Established the first UNESCO Chairs in Marine Sciences in the region.

Established the first UNESCO Chair in Desalination and Water Treatment in the region.

KEY FIGURES



INTRODUCTION

The 17 Sustainable Development Goals (SDGs) adopted by the UN General Assembly in 2015 represent a collective global response to the challenges, threats, and opportunities facing our planet and life on earth as we know it.

We firmly believe that universities like Qatar University are active agents of change within their societies. Through transformational education, research and community engagement, universities are at the forefront of driving the change needed to achieve the SDGs.

As the first higher education institution in Qatar, we are deeply committed to the comprehensive development of Qatari society. We are dedicated to identifying and studying the multifaceted challenges we face, as a country and as humans on earth, and to finding actionable solutions to these challenges. We are building the next generation of change-makers in Qatari society and the world and equipping them with the tools needed to address their challenges.

Our work towards achieving the 17 SDGs follows four pillars: Research, Outreach, Students and Learning, Operations and Collaborations. Research is at the core of our inquiry into finding solutions to the challenges we face. The pillars of Outreach and Students and Learning make our research accessible. Through our outreach work, we raise awareness of sustainable development issues among a diverse wider community and inspire discussion and debate to encourage active engagement with the SDGs. Through the pillar of Students and Learning, we expose the next generation of researchers, industry leaders and activists to the most pressing challenges of our time, transfer our research and experience, and empower them to take the lead in finding solutions. Finally, the last pillar is how we as a university do our part operationally in working towards sustainable development goals while building a strong network of partners.

We understand that the SDGs can only be achieved when different sectors in society work collectively to contribute their expertise in addressing the challenges we face globally and locally. Accordingly, across the pillars we have built local, regional and international partnerships with a range of organisations – including academic, governmental, industry and NGOs - to ensure real, meaningful and effective collective action is taken towards achieving the SDGs.

In this report, we have summarized some of our efforts in working towards the SDGs. We hope that this report acts as a springboard to furthering the SDGs both locally and regionally.

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SDG 1: NO POVERTY

End poverty in all its forms everywhere

1.1 RESEARCH

1.1.1 Qatar University and NHRC: Equality Through Research

Qatar University (QU) and the [National Human Rights Committee](#) (NHRC) have entered a [partnership](#) to advance human rights research. Their collaboration focuses on enhancing civil, political, social, and environmental rights in Qatar through joint research, knowledge exchange, and community initiatives. The agreement includes organizing workshops, seminars, and research grants. Both institutions aim to promote equality, non-discrimination, and social justice, with an emphasis on human rights in Islam. They plan to publish research and celebrate achievements to foster awareness at local and global levels.

1.1.2 Reforming Migrant Worker Rights in the Gulf

Qatar University's College of Law has conducted a pivotal study on the [rights of migrant workers in the Arab Gulf](#), examining the Gulf Cooperation Council's (GCC) labor laws concerning international human rights standards. The study calls for a regional framework to establish minimum standards for worker rights, aiming to enhance ties between citizens and expatriate labourers while ensuring economic stability and dignity for all regional workers.

1.1.3 Labour Reforms

In response to Qatar's economic growth and diversification, the government introduced a part-time work system in the public sector in 2021. To evaluate public attitudes toward this model, the Social and Economic Survey Research Institute conducted the first-ever survey on this topic. The findings were put forward in the policy brief titled "Labor Reforms: Adopting a Part-Time Work Scheme in Government Entities".

1.1.4 Workers Welfare Index

Since Qatar won the right to host the FIFA World Cup, its labour law and the welfare of migrant workers have been under persistent international scrutiny. A team of researchers at the Social and Economic Survey Research Institute (SESRI) at Qatar University developed the [Guest Worker Welfare Index](#) (GWWI) - a unique survey-based tool that measures and monitors the impact of the Qatari government's policies on guest workers. Now in its fifth wave, the survey - which was administered in more than seven languages - evaluates several aspects of the working and living conditions of guest workers, including safety and security at work sites and living compounds; human rights and labor rights; finance and remittances; and treatment by their employers. In addition to assessing and tracking workers' welfare, the index identifies areas of improvement to guide policy formulation.

Scholarly Output	60
Views Count	4288
Citation Count	912
International Collaboration %	61.7%

1.2 OUTREACH

1.2.1 UN Leadership and Humanitarian Affairs Conference

At the UN Leadership and [Humanitarian Affairs Conference](#), Qatar University highlighted the exceptional contributions of its female students. The event gathered young leaders to discuss critical humanitarian challenges. [QU students presented](#) innovative solutions to global issues, emphasizing the

significance of youth involvement in humanitarian efforts. This conference reinforced QU's mission to inspire social change and advance humanitarian initiatives globally.

1.2.2 Qatar Charity and QU Marks International Volunteer Day

Qatar University, in collaboration with Qatar Charity, is hosting the 'World of Opportunities: Be Part of the Experience' event. Focused on highlighting the importance of volunteering, it encourages student engagement for a sustainable society. The initiative aligns with the university's goal of motivating students to acquire new skills and excel in various fields. Timed with International Volunteer Day, the event underscores the crucial role volunteers play in community success. The collaboration with [Qatar Charity](#) emphasizes the significance of volunteers at both individual and institutional levels, showcasing a commitment to fostering a culture of community service.

1.2.3 "Art for Humanity: Gaza Relief Exhibition at Qatar University"

QU's Department of Fine Arts, in collaboration with the QU Alumni Association's Culture and Arts Chapter, organized the "Gaza: A Pulse of My Colors" charity art exhibition. The event, showcased [artworks by Fine Arts students](#) and alumni, with proceeds directed to Gaza relief efforts through Qatar Charity. The exhibition demonstrates the power of art to unite communities and support those in need, reflecting QU's commitment to humanitarian values.

1.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG

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1.3.1 Solidarity Stand in Support of Gaza

The event organized by the Student Representative Board and Ealia Club featured placards, chants, and fundraising for Gaza [through Qatar Charity](#). Students and faculty donned the iconic Palestinian Keffiyeh, emphasizing that the Palestinian cause is a humanitarian issue beyond nationalities. The gathering included mass prayers and calls for action against disinformation campaigns. This event highlighted QU's commitment to global humanitarian principles and its role in advocating for justice and solidarity with oppressed peoples. By fostering dialogue and promoting charitable efforts, the [university community](#) reaffirmed its dedication to raising awareness about critical humanitarian issues.

1.3.2 Humanitarian Modules

QU College of Law has introduced two new [humanitarian modules](#) International Humanitarian Law (LAWC113) and Human Rights (LAWC102). These courses focus on key principles of humanitarian law and human rights, providing students with essential knowledge in these critical areas.

1.3.3 For Palestine's campaign

Qatar University's Core Curriculum Programme (CCP) partnered with the Leadership and Civic Engagement Department and Qatar Charity to host [a two-day campaign, 'For Palestine,'](#) to support Gaza. The event featured information sessions and a Charity Souq, raising QR 81,000 in donations. A charity auction also took place, selling 30 art pieces for QR30,000. Student Maryam Al-Nuaimi shared her experience selling Palestinian food to contribute to fundraising, showcasing the enduring solidarity of the Qatari community with Palestine.

1.4 OPERATIONS AND COLLABORATIONS

1.4.1 Financial Aid

To widen access to education for the most marginalised, we have signed agreements with a number of the most important institutions in Qatar that provide [financial aid to students](#). Partnering with **Qatar Charity, Education Above All Foundation (Al Fakhoora Programme), the Social Development Center (Nama), Jassim and Hamad Bin Jassim Charitable Foundation, Seashore Group and Afif Charity** has significantly increased access of low-income families to educational opportunities and contributed towards bringing them out of poverty.

1.4.2. Qatar Charity and QU Marks International Volunteer Day

Qatar University, in collaboration with Qatar Charity, is hosting the 'World of Opportunities: Be Part of the Experience' event. Focused on highlighting the importance of volunteering, it encourages student engagement for a sustainable society. The initiative aligns with the university's goal of motivating students to acquire new skills and excel in various fields. Timed with International Volunteer Day, the event underscores the crucial role volunteers play in community success. The collaboration with [Qatar Charity](#) emphasizes the significance of volunteers at both individual and institutional levels, showcasing a commitment to fostering a culture of community service.

1.4.3 Basic services for all

At Qatar University, our range of essential services is offered to support students' academic, personal, and professional growth. These services include academic resources such as [our libraries](#), [tutoring](#), [student learning support center](#), and [career advising](#), alongside health and wellness offerings like our campus [health clinics](#), [mental health counselling](#), and wellness programs. Our

student life is further enhanced through [various clubs](#), [cultural centres](#), [dining facilities](#), [on-campus housing](#), and [financial aid programs](#). Campus safety is prioritised with our comprehensive security services, [emergency alerts](#), and convenient transportation options such as [shuttle services and parking](#). Together, these services ensure that our students have access to a well-rounded and supportive environment at Qatar University.

SDG 2: ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

2.1 RESEARCH

2.1.1 Vertical Farming Technology

The Agricultural Research Station (ARS) at Qatar University (QU) has developed [Vertical Farming Technology](#), a **patented** hydroponic system for growing fresh leafy vegetables. This method represents a shift in agriculture, using stacked indoor layers to maximize space and reduce resources, enabling year-round production with minimal environmental impact. The [Qatar University Vegetable Factory](#) (QUVF) features precise climate control, LED lighting, and automation to optimize growing conditions and resource efficiency. Vertical farming reduces water and energy use, limits the need for chemicals, and offers urban-friendly, space-efficient solutions.

2.1.2 Hydrogel Agriculture

Qatar University has introduced a research project on [hydrogel agriculture](#) to improve water retention in greenhouse farming. Hydrogels, which absorb water multiple times their weight, retain nutrients, and prevent soil erosion, are being tested as a solution for Qatar's arid climate. The project involves a [biodegradable hydrogel](#) material placed in compost bags to reduce water loss and enhance plant growth. Initial tests at a [local farm show promising](#) result, with hydrogels improving water efficiency and promoting steady plant growth. This innovation could significantly boost food production while reducing water use in agriculture.

2.1.3 QU and AUB Join Forces on Food Security

A Memorandum of Understanding (MoU) has been signed by QU's [College of Arts and Sciences](#) and the AUB's [Faculty of Agricultural and Food Sciences](#). This strategic partnership aims to promote collaboration in food security and sustainable food production, aligning with global environmental imperatives.

2.1.4 QU's Farm

Our [Agricultural Research Station](#) is a specialised research farm and centre for [agricultural research](#) in the north of Qatar. The station develops innovative agricultural techniques including developing biofertilizers for the improvement of plant productivity, salt tolerance and fruit quality; development of hydroponics and irrigation systems; and the application of integrated agricultural pest management and plant disease control. The station also develops and creates organic and sustainable crops and produces sustainable organic fertilizers to increase and preserve agricultural soil fertility.

Scholarly Output	113
Views Count	7625
Citation Count	1794
International Collaboration %	75%

2.2 OUTREACH

2.2.1 First Agricultural Census in Qatar

A pioneering [Agricultural Census](#) has been conducted in Qatar by SESRI, in collaboration with the Ministry of Municipalities and Environment and under the supervision of the Arab Organisation for Agricultural Development. This first-of-its-kind census gathered data on the structure of agriculture,

including property numbers and sizes, land usage, cropping areas, irrigation, farm animal counts, resources, and workforce. A team of 115 researchers, including veterinarians and agricultural engineers, carried out the data collection across various plant and animal facilities throughout Qatar.

In conjunction with this, QU-SESRI organized a workshop titled "[Results of the 2022 Agricultural Census: Towards Achieving Sustainable Food Security](#)". The workshop featured a presentation on the census phases, methodology, and insights into agricultural costs and productivity. Key contributions were made by experts, including the Director of Agricultural Affairs at the Ministry of Municipality. The workshop emphasized the significance of the census in achieving food security in Qatar.

2.2.2 Doha Horticultural Expo 2023

At the 2023 [Horticultural Expo in Doha](#), Our Research and Graduate Studies Sector hosted a series of impactful seminars focused on sustainability in research and innovation. Experts from various disciplines shared cutting-edge solutions in water and food security, highlighting advancements in sustainable agriculture and modern technologies. Sessions explored the role of [plant tissue culture in horticulture, water solutions for sustainable agriculture](#), and innovative plant ingredients to enhance nutrition and food security. Notably, discussions on water management aligned with Qatar's Vision 2030.

2.2.3 Sustainable Change in Agricultural Systems

SESRI's [recent work](#) supports sustainable agriculture in Qatar by helping farm managers use data to improve efficiency and reduce costs.

- [Agricultural Costs Study](#): SESRI collaborated with Qatar's Ministry of Municipalities to analyze agricultural

costs and net returns, providing data to help monitor product pricing.

- SPSS Data Analysis Workshop for Farms.

These efforts not only support the agricultural community but also align with goals for a cleaner environment and responsible food production. This proactive approach highlights how sustainable practices can help build a greener future in agriculture.

2.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG
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2.3.1 Food, Water, and Waste Sustainability Program

QU's Center for Sustainable Development (CSD) is advancing sustainability through five dedicated research programs, one of which includes the [Food, Water, and Waste Sustainability Program](#). This Program aims to enhance food self-sufficiency in Qatar while conserving limited natural resources. Conventional and unconventional agricultural methods address key challenges, such as scarce arable land, poor soil quality, and limited water.

2.3.2 Planting for Tomorrow

Our [Environmental Science Club](#) (ESC) regularly organizes initiatives to promote tree planting and environmental awareness among students and the local community. In celebration of World Environment Day, ESC hosted [school children](#) at the university, where they learned firsthand about the importance of planting trees for a sustainable future. Another impactful event included a trip to [Purple Island](#), where QU students participated in [mangrove planting](#),

contributing directly to local biodiversity and coastal health. Through these efforts, ESC actively fosters a deeper appreciation of nature and environmental responsibility, encouraging the next generation to take part in creating a greener future.

importing these products, and hence minimising their cost. The engineering, procurement services, supply and installation of the cultivation equipment of the project [was awarded to Chiyoda Corporation](#) and Chiyoda Almanca Engineering jointly.

2.4 OPERATIONS AND COLLABORATIONS

2.4.1 Waste Not

Our [Qatar University Zero Waste Plan](#) demonstrates the university's commitment, priorities, goals, targets and activities that will lead the university to be a truly zero-waste university. The plan operates on four central pillars: governance and monitoring structure; waste measurement and prevention system; communications strategy; and culture of innovation and social change. Indeed, as part of this initiative, the first batch of fertilizer was created using food waste from our campus.

2.4.2 Workshop on Agricultural Efficiency

The [Qatar Chamber](#) recently held a workshop on increasing production, improving the efficiency of agricultural activities, and boosting profits in the farming sector. During the event, results were shared from a study on food security in Qatar, conducted in partnership with Qatar University and a team from the University of Western Sydney in Australia.

Headed by [Dr. Talaat Abdulfatah Ahmed](#) this four-year research focused on optimizing the productivity of vegetable crops such as cucumbers, tomatoes, capsicums, and eggplants. The study aims to reduce irrigation and fertilizer usage by up to 75%, enhance crop quality, and promote sustainable practices.

2.4.3 On-Campus Vegetable Plant

We established the first [leafy vegetable plant on campus](#). Using hydroponics, the plant produces lettuce, spinach, rocca, and other leafy vegetables – minimizing the need for

SDG 3: GOOD HEALTH AND WELLBEING

Ensure healthy lives and promote well-being for all at all ages

3.1 RESEARCH

3.1.1 National Mental Health Study

In collaboration with the World Health Organisation (WHO), Harvard University, the University of Michigan, Hamad Medical Corporation (HMC) and the Ministry of Public Health (MoPH), our SESRI has conducted the [first National Mental Health Study in Qatar](#). The Mental Health project collected comprehensive data on the prevalence and associated factors of mental disorders to enhance understanding of the epidemiology of mental illness in Qatar's society today. Day

3.1.2 Cancer Research

QU Students and Faculty are actively advancing cancer research and education through its various initiatives. The university focuses on developing novel treatments and understanding cancer's molecular mechanisms. In collaboration with national health entities, QU's researchers are improving early detection methods and personalized treatments. Notably, QU is contributing to Qatar's vision for a health-focused future, as highlighted in several recent announcements, such as advancements in medical training and research. For more details, visit [article 1](#), [article 2](#), [article 3](#), [article 4](#).

3.2 OUTREACH

3.2.1 Smart Start Campaign

To combat childhood obesity in the Qatar population, our university, led by the College of Health Sciences, runs the ['Smart Start' campaign](#): The campaign aims to build a physically and psychologically healthy society by raising awareness and educating schoolchildren and parents about the different facets of health. Some topics include the significant role of [good nutrition, physical activity and healthcare in the early years](#). The campaign introduced food groups and included hands-on activities about creating balanced meals and packing balanced lunchboxes, as well as tips on increasing physical activity and reducing screen time.

3.2.2 Save a Life, Donate Blood

A blood donation campaign was organized by QU Health in collaboration with Hamad Medical Corporation's Blood Donor Center under the theme "[Save a Life, Donate Blood](#)." The campaign raised awareness of blood donation's life-saving impact and encouraged community involvement. Such initiatives by QU Health aim to strengthen [public health support](#) in Qatar. Donors benefit from improved circulation and potential heart health, while the community gains from enhanced healthcare resources and shared responsibility.

Scholarly Output	2264
Views Count	85692
Citation Count	51806
International Collaboration %	76%

3.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG

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3.3.1 Mental Health at QU

World Mental Health Day

QU-Student Counselling Center recently celebrated [World Mental Health Day](#) with the theme “**It's Time to Prioritize Mental Health in the Workplace.**” The event featured a student-driven panel discussion, moderated by a QU counsellor, which highlighted strategies for fostering a supportive university environment. [Students contributed valuable insights](#) on how mental well-being impacts academic and social success.

Inter-Professional Education Mental Health

Our Continuing Professional Development Unit launched its Fall 2024 Interprofessional Education (IPE) activity, focusing on ["Mental Health: An Interprofessional Team Approach,"](#) involving 392 students across diverse health disciplines. The event fostered teamwork through activities such as the Spaghetti-Marshmallow Tower Challenge and a collaborative mental health awareness project. It highlighted the importance of interprofessional collaboration in addressing mental health.

3.33 QU's Awareness Campaigns

QU HEALTH recognizes the critical need to raise awareness among students about important health issues by co-hosting with partners in the health sector the following:

[Breast Cancer Awareness](#)

[Organ Donation Awareness](#)

[Diabetes Awareness](#)

[Global Breast Cancer Awareness Month](#)

[Cancer Awareness on World Cancer Day](#)

3.4 OPERATIONS & COLLABORATIONS

3.4.1 WHO & QU HEALTH

After securing the honor of being designated a '[Healthy University](#)' by the World Health Organization (WHO) last year, our Biomedical Research Center has now been named a [WHO Collaborating Center](#) for Research and Capacity Building on Emerging and Re-emerging Zoonotic Diseases.

3.4.2 Health Tech Hackathon

We recently celebrated the successful conclusion of the first Health Tech Hackathon 2024, [themed "Innovating Health, Empowering Tomorrow."](#) The hackathon, organized in collaboration with the Qatar Foundation and Hamad Medical Corporation, focused on key themes like telemedicine, genomics, AI, and mental wellness.

3.4.3 Future of QU Medicine: University Hospital

QU Health hosted the third meeting of the Joint Clinical Academic Steering Committee. QU Health's 2023–2027 strategic plan was presented, along with progress reports on the strategic objectives. [The creation of a university hospital,](#) expanding the number of clinical training spots available to dentistry students and updating scholarship programs were among the topics of discussion. In keeping with Qatar's National Development Strategy (2024–2030) and Vision 2030 for a healthy society, the meeting focused on QU Health's cooperation with partners such as MOPH, HMC, and PHCC to promote health education and innovation.

SDG 4: QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.1 RESEARCH

4.1.1 Education Research Center

We are committed to educational excellence and high-quality research. Combining these values, we inaugurated the [Educational Research Center \(ERC\)](#). The ERC engages in educational research for Qatar’s sustainable development by providing research-based answers to educational challenges in Qatar. The ERC contributes to and supports our university as a research institution by nurturing a culture of multidisciplinary research in K-12 and post-secondary education, in addition to assessment and evaluation. The centre works to bring about change, innovation, and improvement in Qatar’s educational system.

4.1.2 Journal of Educational Sciences

The [Journal of Educational Sciences](#) is a major academic platform published by our College of Education that promotes educational research. Since its beginning in 2002, it has expanded to cover three issues each year, highlighting cutting-edge theoretical and applied research in education. Per its objective of being a global leader in educational knowledge transmission, the magazine has broadened its scope to cover current concerns and educational innovations. It presently has a growing network of scholars, increased publishing frequency, and great worldwide recognition, with an impact factor of 0.381 in 2023. [The journal remains committed](#) to improving educational knowledge, facilitating worldwide collaboration, and providing evidence-based insights to decision-makers.

4.1.3 Academic Network for Developmental Dialogue Paper Series

Beyond issues that sectoral and technical factors can identify, the [Academic Network for Development Dialogue \(ANDD\) Paper Series](#) seeks to promote formal discussion of the structural opportunities and challenges facing the Arab world. Through the paper series, ANDD promotes dialogue on [important topics that are rarely discussed](#) in regional, national, and local development discussions. It offers a platform for the younger generation to exchange critical thoughts and creative solutions for regional issues, addressing young Arab intellectuals and early-career UN employees working on development issues in the region.

Scholarly Output	248
Views Count	10038
Citation Count	2216
International Collaboration %	58%

4.2 OUTREACH

4.2.1 International Day of Education

Every year on January 24, we commemorate and highlight the importance of education in accomplishing the Sustainable Development Goals (SDGs) by holding [the International Day of Education](#). Several lecturers from the College of Education discuss the value of education as a top priority and the partly educated people play in creating a robust and sustainable society on this worldwide day.

4.2.2 Accessible Education

To widen access to education for the most marginalised, we have signed agreements with a number of the most important institutions that provide [financial aid to students](#). Partnering with **Qatar Charity, Education Above All Foundation (Al Fakhoora Programme), the Social Development Center (Nama), Jassim and Hamad Bin Jassim Charitable Foundation, Seashore Group and Afif Charity** will widen access to quality education to low-income families and contribute towards bringing them out of poverty.

4.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG

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4.3.1 Third Science Camp

The third edition of the "[Science Camp](#)," which was organized by the Bio-Education Chapter of the QU- Alumni Association, brought together a diverse collection of students and instructors from different schools as well as a group of professionals and academics. The camp aims to encourage innovation, develop critical thinking, and strengthen problem-solving skills among students, preparing them to actively contribute to Qatar's future as a leading knowledge-based society.

4.3.2 Community Courses @ QU

Community Service and Continuing Education Center (CCE) is the leading provider of non-academic programs in Qatar, allowing the greater community access to the resources available at the university.

We offer [FREE Massive Online Open Courses \(MOOCs\)](#) on [edX](#) as well as [training programs and professional development courses](#) in a range of disciplines including languages,

business, leadership, management, finance, accounting and information processing. We also offer preparation courses for GMAT, GRE, IELTS, ACT, PMP and others.

4.3.3 STEM @ QU: BRIDGE PROGRAMS

- [Our Young Scientist Center \(QU-YSC\)](#) is a scientific hub that trains and [empowers the next generation](#) in STEM subjects. Through a range of programs, the Center makes STEM accessible to high school students namely [National Science Promotion Program \(NSPP\)](#), ['I am a Researcher'](#) program and [QU Gateway](#) program. Recent study A team of researchers from Qatar University Young Scientist Center (QUYSC) has developed and tested a novel model based on a new theoretical framework for enhancing research competencies and learning outcomes among undergraduate students in STEM fields <https://www.qu.edu.qa/en-us/Research/Pages/andd.aspx>
- Al Biraq offers a range of programs, from Science in Sports to [Design Thinking](#).
- [Al Qabas program](#) educates high school students from grades 10 and 11 about university life. The program introduces students to the skills required to succeed at university, improves their English and math skills, and enhances their chances of successfully enrolling in STEM and Health majors at Qatar University.
- Every year, QUYSC organizes a research forum where young researchers can get together and share their experiences. The theme of the [Sixth Youth Research Forum](#) is "Innovation for Developing Societies."

4.3.4 Evidence-based training

Our [National Center for Educational Development \(NCED\)](#) builds local educational capacity in Qatar by adopting evidence-based research and current best practices. The centre has several professional development projects and programs for educators. These include general **vocational teacher training** through **school-based learning programs** and more specific support such as the '[Reading Together for Qatar](#)' program that supports students **in public schools to improve their Arabic language reading skills**. The centre also includes the **International Math-Teacher Professionalization** Using Lesson Study (IMPULS) program, a joint effort between our university and [Tokyo-Gakugei University in Japan](#) to teach through problem-solving.

4.4 OPERATIONS AND COLLABORATIONS

4.4.1 Academic-Network for Developmental Dialogue (ANDD)

[ANDD held its fourth annual conference at Hamad Bin Khalifa University's \(HBKU\) College of Public Policy \(CPP\)](#), in partnership with [Qatar University](#), Al-Quds University and the United Nations Economic and Social Commission for Western Asia (UN-ESCWA). [The conference, themed "Sustainable Development Goals Unpacked: Ethics, Policies, and Culture,"](#) focused on the ethical, policy, and cultural aspects of the SDGs while also encouraging information exchange, conversation, and capacity building among attendees. Since its [founding three years ago](#), ANDD has grown to encompass 36 international institutions.

4.4.2 Innovators in Education

The inaugural "[Innovators in Education](#)" [project](#) aimed to develop practical educational tools to enhance learning opportunities. It encouraged educators and university students [to design innovative tools](#) that address challenges in educational and vocational fields. A collaborative effort between QU's Colleges of Education, College of Engineering, and the Office of Strategic Innovation, and [sponsored by ExxonMobil Qatar](#), the initiative aimed to foster creativity and innovation among educators and higher education students to design educational tools that support student learning.

4.4.3 Employee Benefits

We provide all our employees with a range of **benefits** including an **educational allowance** for up to three dependants, from grade 1 until age 18. We also offer **academic scholarships** to children of full-time university employees – with a maximum of three children at any one time. This way, we are ensuring all our staff and their families have **equal access to quality education** throughout their time at the university.

SDG 5: GENDER EQUALITY

Achieve gender equality and empower all women and girls

5.1 RESEARCH

5.1.1 Female Labor Force Participation

Qatar has made remarkable strides in reducing gender disparities in health, education and the labour market. Despite this, little empirical data about factors affecting female labour force participation in Qatar is available. Researchers at SESRI are leading the way in this regard. Using nationally representative surveys, they are studying how micro-level factors such as age, education, and marital status affect [women's participation in the workforce](#) in Qatar, and how public attitudes affect participation. This research also explains how state-directed initiatives can encourage women to participate in the labour market and calls for enacting policies to facilitate a rapid increase in the number of employed women in Qatar.

5.1.2 Entrepreneurship for Women

Researchers at our College of Business and Economics received a National Priorities Research Program (NPRP) grant to create a [platform to promote entrepreneurship for women in Qatar](#). The project explored opportunities to stimulate and support Qatari women's engagement in action-oriented entrepreneurial activities such as practical training, international collaboration, knowledge exchange and shared learning to foster entrepreneurship among Qatari women to enable them to initiate new business start-ups. It adopted a structured program of training and mentoring that combined multiple methods and ICT tools to facilitate the process of joint-innovation and start-up between Qatari and international female entrepreneurs.

5.1.3 Women in Nanotechnology

A special issue of *Emergent Materials* (EMMA), a multidisciplinary journal of QU focused on [women in nanotechnology](#), intends to highlight the work of research groups led by female researchers around the world. The issue includes distinctive projects in the field of nanotechnology written and supervised by women.

Scholarly Output	94
Views Count	5364
Citation Count	1158
International Collaboration %	57%

5.2 OUTREACH

5.2.1 Women in STEM

Our university runs a range of initiatives that highlight women in STEM to celebrate the success of [women in STEM](#) fields and encourage future generations to join these fields. [Cyber Women](#) is an initiative by our KINDI Computing Research Center (KINDI) that aims to inspire and encourage females to engage with STEM subjects and to bring women in academia and industry together to collaborate, share inspiring success stories and discover new talent. Additionally, our university celebrates the [International Day of Women and Girls in Science](#) annually, where prominent women in STEM are brought together to discuss pertinent issues in their field, and to honor female researchers at our university.

5.2.3 Women in Law

Female faculty and students from our College of Law have organised and conducted the oral history exhibit titled ["Voices of Qatari Women in Law and International Diplomacy"](#). Sponsored by our university, the exhibition memorializes the stories of female pioneers in law, development, international law, and

diplomacy in Qatar while inspiring youth by introducing them to new role models. The exhibit toured Qatar and showed at several special events including Hamad Bin Khalifa University's (HBKU) "Maker's Majlis: Islam in a Global World", THIMUN Qatar's "Qatar Leadership Conference," the "XIX World Congress of Criminology" and the "Doha Learning Days," part of the WISE Summit.

5.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG
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5.3.1 L'Oreal Prize

A female graduate from College of Health Sciences was awarded the [L'Oreal-UNESCO for Women in Science Middle East Regional Young Talents Award](#) – a prestigious award recognising young female scientists in the region. She was recognized for her research towards developing non-conventional, novel therapeutic tools to prevent the development of diabetes mellitus and cardiovascular diseases.

5.3.2 Boss Ladies

Each year, we [celebrate Women's Entrepreneurship Week](#) by organising a series of events highlighting female entrepreneurs - their stories, lessons learnt, and hope for the future. These inspiring stories empower our female students, highlight the important role women play in economic development, and encourage our students to pursue their entrepreneurial ideas.

5.4 OPERATIONS AND COLLABORATION

5.4.1 Arab Women In Judiciary

Through programs like the "Judges of Tomorrow" program and law clinics, Qatar is setting an example for how academic institutions and cultural support can drive gender equality in leadership, advancing societal change for a sustainable future. Experts celebrated the important role of women in the judiciary and the progress made in empowering them at the recent regional conference, "[Arab Women in the Judiciary: Achievements and Challenges.](#)" The event was organized by the International Center for Human Sciences, under the auspices of UNESCO, in collaboration with the German Konrad Adenauer Foundation.

5.4.2 Nursing Hours

Female staff who have recently given birth have a [right by law to 'nursing hours'](#) in addition to their maternity leave. While Qatar's law stipulates that female employees are entitled to one hour daily for nursing for a period of one-year, female employees at our university are given **two nursing hours** daily for a period of **2 years** after the end of the maternity leave, **without a reduction in remuneration**. The female employee can choose how to use these hours, by arriving to work later or leaving work early.

5.4.3 Equality Matters: QU's Policy Workshops

QU's College of Business and Economics, in collaboration with the International Labour Organization (ILO) and the Ministry of Labour, [hosted workshops](#) to develop policy guidelines on diversity, equality, and inclusion in Qatari universities. The workshops emphasized ILO Conventions No. 111 and No. 190 on discrimination and harassment. The initiative aims to foster inclusive policies and prepare future leaders for diverse workplaces.

SDG 6: CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all

6.1 RESEARCH

6.1.1 Natural Solutions for Wastewater Remediation

As chemical analysis advances, small but toxic heavy metal pollutants increasingly risk contaminating our water, food, and ecosystems. Tackling this issue, researchers at Qatar University, [in collaboration](#) with Omar bin Abdul Aziz Secondary School, are exploring natural solutions like humic acid and clay to remove heavy metals from [lab wastewater](#). This pioneering project not only trains students in sustainable research but also tests natural absorbents to reduce pollutants. By innovating eco-friendly waste management, scientists are paving the way for cleaner, safer environmental practices.

6.1.2 Cooling water blowdown

QU's Chemical Engineering Department (QU-CED) conducted a study on the impact of [cooling water blowdown \(CWBD\) discharge](#) from district cooling plants on wastewater treatment plants, groundwater, and surface water. Collaborating with relevant authorities such as Asghal, the Ministry of Environment and Climate Change, Kahramaa and Qatar Cool, the study assessed CWBD's effects and established practical standards for discharge. QU-CED analysed water samples and employed advanced mathematical modelling to simulate short and long-term impacts on discharge points. The study aimed to address concerns about CWBD's impact on the environment and society, focusing on discharge regulations across various environments. This [collaboration](#) underscores QU's commitment to addressing Sustainable Development Goal 6 (SDG6) by

ensuring sustainable water management practices in Qatar's cooling industry.

6.1.3 UNESCO Chair for Water

Together with UNESCO, QU is to set to establish [A UNESCO CHAIR IN DESALINATION AND WATER TREATMENT](#) at our Water Technology Unit at CAM. It is the first of its kind in the region under the UNITWIN/ UNESCO Chairs Program, and it is the outcome of the cooperation of more than 30 universities and organizations from 15 countries in the region. The objectives aim to establish a multi-disciplinary research program in desalination and water treatment, fostering international collaboration and knowledge exchange.

6.1.4 ALECSO Chair for Water: Sustainable Water Solutions

The [ALECSO Chair](#) for Water, led by Dr. Maryam Al-Ejji at our Center for Advanced Materials, is advancing sustainable water treatment. [Key research areas](#) include wastewater treatment, membrane technology for purification, biofouling control, and using nanotechnology to boost efficiency. Recently, a specialized workshop in collaboration with ALECSO—an organization focused on promoting education, culture, and scientific research across the Arab world—trained industry professionals in cutting-edge desalination and treatment techniques.

Scholarly Output	571
Views Count	26380
Citation Count	9609
International Collaboration %	66%

6.2 OUTREACH

6.2.1 QSTP's 'Meet the Expert'

At the recent ["Meet the Expert"](#) session at Qatar Science & Technology Park (QSTP), in collaboration with [ConocoPhillips Global Water Sustainability Center \(GWSC\)](#), experts from QU highlighted innovative strategies for treating and **reusing wastewater** from oil and gas operations. With **growing global water scarcity**, their discussions emphasized the immense potential of these solutions in advancing water sustainability. The event fostered collaboration, showcasing how cutting-edge technology and sustainability practices can pave the way for cleaner, more efficient water management in the future.

6.2.2 Addressing Qatar's Water Challenges: A Call to Action

As Qatar marks [World Water Day](#), the spotlight is on the urgent need for innovative solutions to secure the nation's water future. [Prof. Hamad Al Saad Al Kuwari](#), Director of the Environmental Science Center, calls for immediate action to preserve water resources in the face of dwindling freshwater supplies and coastal seawater intrusion. Qatar's [heavy reliance on desalination](#) highlights the importance of water-saving technologies, regulation, and practices like rainwater harvesting and cloud seeding. At Qatar University, research is advancing sustainable water management, with new initiatives such as the **UNESCO Chair in Desalination and Water Treatment**, reinforcing Qatar's commitment to a water-secure future aligned with its National Vision 2030.

6.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG

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6.3.1 Summer School "Desalination Technologies"

QU's UNESCO Chair on Desalination and Water Treatment, in collaboration with Aligarh Muslim University (AMU), India, recently hosted [a two-day online summer school](#) focused on **"Desalination Technologies."** Attended by over 600 participants, primarily from AMU, the event aimed to address global water challenges, emphasizing Sustainable Development Goal 6 (SDG6) for clean water and sanitation. Renowned experts delivered lectures and virtual lab tours on various desalination techniques, engaging participants in discussions and sharing innovative ideas. This summer school signifies a collective commitment [to promoting](#) sustainable water management practices and achieving SDGs by 2030.

6.3.2 Students visit to Treatment plant.

Students from Qatar University's Department of Biological and Environmental Sciences recently visited the [Doha West Sewage Treatment Plant](#) (STP) operated by the Public Works Authority. The visit provided firsthand exposure to wastewater treatment processes and environmental conservation efforts. They observed initial treatment phases and learned about subsequent biological and chemical processes. Additionally, students engaged with industry professionals, exploring career opportunities in environmental science, engineering, and related fields.

6.3.3 Materials Science & Technology program

The Master's Program under the College of Arts and Sciences focuses on advancing research and knowledge in materials science. Among its diverse [research interests](#) is sustainable water technology. Our department extensively addresses sustainable water management through various water treatment methods, including [desalination](#) technology, photocatalysis,

[metal ion](#) recovery, and membrane filtration. The team employs advanced materials and innovative manufacturing methodologies to develop hollow fibres, porous materials, and adsorbents for effective water treatment.

6.4 OPERATIONS AND COLLABORATIONS

6.4.1 QU-Korea Water Partnership

On April 22, 2024, the Symposium on Sustainable Water Environment and Energy Technology ([SWEET](#)) was hosted by the Water Technology Unit (WTU) at QU's Center for Advanced Materials (CAM), in collaboration with the Korea Water Cluster (KWC) and the Republic Korean Embassy in Qatar. The symposium featured speakers from ConocoPhillips, ExxonMobil, Qatar Shell Research & Technology Center, Doosan Enerbility, Acciona, and Bintech-Korea. Technological trends and challenges in the [water-energy nexus](#) were discussed, with a focus on Sustainable Development Goals (SDGs) 6 (Clean Water and Sanitation) and 7 (Affordable and Clean Energy). The commitment to sustainability and innovation in water technology was reaffirmed by QU and KWC, aiming to enhance global water and energy security.

6.4.2 Qatar-German Water Sustainability Day

Qatar University recently organized the Qatar-German Water Sustainability Day ([QGWS](#) [2023](#)), addressing water sustainability challenges. Desalination is Qatar's primary water source, but it poses environmental issues such as increased salinity in inland wells and high energy consumption with CO₂ emissions.

QGWS 2023 focused on integrating desalination with renewable energy and managing brine and industrial water. The [collaboration](#) aims to support informed decision-making for water sustainability in Qatar.

6.4.3 Academic-Industry Water Nexus

A Memorandum of Understanding has been signed between QU and [Apex Water and Services \(W.L.L.\)](#) to enhance cooperation and leverage their combined expertise in [water treatment](#) research and development within Qatar. This collaboration underscores the importance of knowledge sharing and partnership between academic institutions and private companies, affirming their dedication to advancing research and innovation in the vital area of water treatment within the State of Qatar.

SDG 7: AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy

7.1 RESEARCH

7.1.1 Renewable Energy Lab

QU's College of Engineering (CENG) and College of Arts & Sciences (CAS) have established a [joint Renewable Energy Lab](#) to advance research in renewable energy sources. This initiative aligns with [Qatar National Vision 2030](#), focusing on solar, wind, biomass, CO2 conversion, and energy storage. The lab will facilitate joint research projects, resource sharing, workshops, conferences, student programs, and public outreach. This collaboration aims to drive impactful research and train future energy leaders. The Renewable Energy Lab underscores the university's commitment to research excellence and global energy solutions.

7.1.2 Seawater Lithium Extraction

A collaboration between our Center for Advanced Materials (CAM) and global partners has led to a groundbreaking, [eco-friendly method for extracting lithium](#) from seawater. Lithium, essential for energy storage in electric vehicles and electronics, is now being sustainably harvested using solar energy and membrane distillation, cutting down on emissions and energy consumption. This innovation not only capitalizes on Qatar's abundant seawater resources but also positions the country as a leader in clean technology, setting a global example for sustainable resource management in energy.

7.1.3 Harnessing Sunlight for Clean Energy

A researcher at Qatar University has made progress in [perovskite material research](#), focusing on solar energy applications. [His](#)

[work](#) addresses challenges like material instability for commercialization. By neutralizing surface defects, his team enhanced perovskite structure stability, promising more reliable solar cells. Inspired by nature, their approach yielded efficient results, marking a step towards sustainable energy.

7.1.4 Energy at our Centers

Qatar University researchers developed a novel material for [hydrogen gas](#) sensing, enhancing safety and efficiency. These structures offer scalable production, eco-friendly synthesis, and high yields, making them suitable for large-scale applications. This discovery could make using hydrogen gas safer and more practical for things like energy and transportation. This advancement holds promise for improving hydrogen sensing technology, contributing to safety measures in various industries.

Scholarly Output	1459
Views Count	48502
Citation Count	21298
International Collaboration %	71%

7.2 OUTREACH

7.2.1 QU LAUNCHES H2 SUSTAINABLE ENERGY SOLUTIONS

A Research and Policy Group is a joint initiative between QU's (QU) College of Engineering and College of Business and Economics. [H2 Sustainability Energy Solutions](#) aims to equip the country and the research community with cutting-edge technology and energy policies to support Qatar in unlocking its potential and develop a critical component of a long-term strategy to secure continuing prosperity for decades.

7.2.2 Energy Transition & Sustainability

The QU-Gas Processing Center and Department of Chemical Engineering will host the 6th [International Gas Conference \(IGC2024\)](#) in Qatar, in December 2024. The conference is themed 'Energy Transition & Sustainability'. International experts from industry and academia will discuss topics like energy transition, digital transformation, process optimization, and sustainable chemical processes. The conference seeks to advance discussions on energy transition, sustainability, and process safety, facilitating networking and showcasing cutting-edge research.

7.2.3 ICET 2023

QU's College of Engineering [hosted](#) the Third International Congress on Engineering and Technology ([ICET](#)), under the esteemed patronage of Qatar's Prime Minister. Sponsored by leading entities, ICET focused on innovation and global collaboration. The event included conferences on applied energy, social robotics, and mobility logistics.

7.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG
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7.3.1 Student Achievements in Green Energy

QU-Young Scientists Center shone at the [8th International Invention Innovation Competition](#) in Canada (iCAN 2023), securing seven awards, including two golds, two silvers, and three special awards. Competing against 621 projects from 50 countries, this achievement highlights QU's commitment to innovation and sustainability.

Key highlights include:

- **Green Energy Innovation:** Yousef Al-Enezi and Mohammed Al-Kuwari won

a silver medal and special award for their project on generating green energy from nanocomposites made of polylactic acid.

- **AI in Sports:** Khaled Al-Kubaisi, Khaled Al-Midfa, Saeed Al-Kuwari, and Mohammed Al-Khulaifi received a gold medal for their AI-driven football project to evaluate player performance.
- **Sustainable Energy Systems:** Nouf Al-Emadi and Naeema Al-Fakhro earned a gold medal and special award for enhancing lithium battery performance.

7.3.2 Solar-powered mobile library

QU has unveiled a solar-powered [mobile library](#), a pioneering initiative in promoting sustainability and education. Developed by the Centre for Advanced Materials (CAM), the mobile library repurposes a club car, fitted with bookshelves and [solar panels](#), enabling it to carry 200 books and operate entirely on renewable energy. This endeavour aligns with Qatar's National Vision 2030 and supports the United Nations Sustainable Development Goals, particularly Goal 7 on affordable and clean energy. This initiative underscores QU's dedication to fostering sustainability, education, and community engagement.

7.3.3 Cost-Effective Batteries

The QU-CAM has collaborated with Instituto Superior Técnico (IST), Lisbon, has managed to develop new materials used in these [Cost-effective](#), in a manner appropriate to the climate of the State of Qatar, by making an innovative combination that was accepted to apply for patent registration in the US. These research efforts come within the framework of facing the challenges related to energy and environmental pollution, which leads to the effective use of renewable

energy sources and the consequent urgent need for high-performance devices to store this energy.

7.4 OPERATIONS AND COLLABORATIONS

7.4.1 QU and Qatar Energy

QU and QatarEnergy have joined forces to drive sustainable development through [an MoU focused](#) on education, training, and research. By leveraging QU's research expertise and QatarEnergy's industry experience, this collaboration fosters skill-building and knowledge-sharing in vital Energy Fields.

7.4.2 Award Winning Sustainable Energy Building

QU's recently signed [a Memorandum of Understanding](#) (MoU) with the **Abdullah Bin Hamad Al-Attiyah International Foundation for Energy and Sustainable Development**, emphasizing collaboration in research and knowledge exchange. The agreement aims to address energy and sustainability challenges. Established in 2015, the Al-Attiyah Foundation serves as a non-profit think tank focusing on energy and sustainability issues.

7.4.3 Energy Policy

Our [Renewable Energy and Conservation Policy](#) guides different operations at the Facilities and General Services Department (FGSD) to meet QU's commitment towards sustainability. The policy aims to create a more sustainable campus and maximize efficiency while responsibly managing energy, water and human resources.

7.4.4 Solar Panels On-Campus

As part of our green initiative across campus, The Centre for Advanced Materials has introduced an innovative, self-cleaning solar panel system. We have [installed solar panels](#) on the rooftops of our car parks and male and female student housing. The energy generated from these solar panels is used to

heat water at the university. Designed to be [water-free and low-power, this eco-friendly](#) technology is a game-changer for renewable energy, especially in remote, dry regions.

7.4.5 Carbon Quest

In a significant collaboration between Qatar University (QU) and McDermott's team in Doha, the QU Business Challenge aimed to foster innovative solutions for the oil and gas industry. Teams consisting of students and mentors from McDermott and QU, presented solutions emphasizing sustainability and market viability. The winning project, quantifying [the CO2 footprint](#) for the industry, showcased immediate adoption potential. This collaboration underscores QU's commitment to nurturing talent and promoting research and innovation.

SDG 8: DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

8.1 RESEARCH

8.1.1 Shaping Work Policies

Qatar, in its quest for economic growth and diversification, is actively shaping policies to cultivate a skilled and engaged national workforce. One significant move is the approval of a draft decision to introduce part-time work in the public sector in September 2021. However, to gauge the public's perception of this model and understand its impact on employees, reliable data is crucial. In response, the Social and Economic Survey Research Institute conducted the [first-ever survey](#) to measure public attitudes toward part-time work. The results of this survey have been shared with local and international scholars, stakeholders, and policymakers. This initiative marks a significant step towards informed policymaking and underscores Qatar's commitment to shaping labour policies that align with the needs and aspirations of its workforce.

8.1.2 SESRI's Policy Briefs

SESRI's Policy unit has released a series of insightful policy briefs addressing key issues shaping the nation's economic landscape.

- The [first brief](#) delves into the post-pandemic work environment, highlighting public sentiments towards adopting work-from-home models in Qatar. As COVID-19 reshaped global work patterns, understanding these attitudes is crucial for future policy interventions aimed at improving labour-market conditions and maintaining work-life balance.
- The [second brief](#) explores spending and saving patterns within the Qatari

context, shedding light on consumer behaviours, financial planning, and economic welfare. With a focus on enhancing individual and household stability, the findings offer valuable insights for shaping effective economic policies.

- Lastly, SESRI's [third brief](#) focuses on the Kawader National e-Recruitment Portal, aimed at promoting better labour market outcomes for youth in Qatar. By analysing job-searching trends and skill requirements, the study provides stakeholders and decision-makers with essential data to address challenges faced by Qatari youth in the labour market and enhance their overall satisfaction.

Through these policy briefs, Sesri continues to play a pivotal role in informing national debates and driving evidence-based policy development in Qatar.

8.1.3 Workers Welfare Index

Since Qatar won the right to host the FIFA World Cup, its labour law and the welfare of migrant workers have been under persistent international scrutiny. A team of researchers at the Social and Economic Survey Research Institute (SESRI) at Qatar University developed the [Guest Worker Welfare Index \(GWWI\) - a unique tool](#), based on survey data, for the evaluation of the impact of the government's policies on guest workers. Now in its fifth wave, the survey - which was administered in more than seven languages - evaluates several aspects of the working and living conditions of guest workers, including safety and security at work sites and living compounds; human rights and labour rights; finance and remittances; and treatment by their employers. In addition to assessing and tracking workers' welfare, the index identifies areas of improvement to guide policy formulation.

Scholarly Output	329
Views Count	20224
Citation Count	5060
International Collaboration %	60%

8.2 OUTREACH

8.2.1 QU Organizes a Seminar on Labor Market Challenges and Opportunities

SESRI and QU's College of Business and Economics held [a seminar](#) on labour market challenges in Qatar and the MENA region, with the Minister of Labor in attendance. Discussions covered growth in the sector and ministry initiatives to boost workforce participation. [Presentations](#) highlighted QU's role in evidence-based policymaking, while SESRI's contributions to research were underscored. The seminar topics ranged from government policies to skill development for workforce competitiveness. The event targeted policymakers and NGO stakeholders to inform decision-making.

8.2.2 Skills for Tomorrow

In collaboration with the Ministry of Labour and Qatar Career Development Center (QCDC), QU's Student Career Development Association successfully concluded its [first career development camp](#) for university students. The camp aimed to equip graduating students with essential skills for a smooth transition into the job market. It featured fourteen training workshops, practical activities, and job interview simulations to help students identify in-demand specializations and enhance their qualifications. The camp saw a high turnout and commitment from participants, with [workshops](#) led by nine trainers and a 97% attendance rate, concluding with a field trip to the Qatar Scientific Club.

8.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG
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8.3.1 Student Employment

Our [Students Employment Program](#) provides part-time job opportunities for students – filling the gap of part-time job availability in the country and enabling our students to gain hands-on real work experience. Student jobs are available across all colleges, departments and centres in both administrative and academic positions – preparing our students financially and practically for life post-university.

8.3.2 Employer Relations

Our [Employer Relations](#) section opens channels of communication between students and graduates and the [labour market](#) through organizing career events, information sessions, panel discussions, site visits and the annual [Career Fair](#) – where students can interact on campus with more than 60 employers. These events equip students with the necessary skills and knowledge needed for the labour market and provide them with the opportunity to network with potential employers.

8.3.3 Al Fikra

[Al Fikra](#) is a national [entrepreneurship competition](#), in collaboration with Qatar Development Bank. Translated as 'The Idea', it provides an opportunity for university communities to develop and transform their ideas, knowledge, and intellectual outputs into impactful economic outputs. One of the two tracks specifically targets undergraduate students by necessitating an undergraduate team leader. The competition has witnessed an increasing turnout annually, with 600 people participating in 2021.

8.3.4 Inclusive Policy Workshops

Three-day Workshops at Qatar University (QU) aimed to establish policies ensuring diversity, non-discrimination, and integration within Qatar's higher education community. These efforts partnered with the International Labour Organization (ILO) and the Ministry of Labour, emphasising [ILO Convention No. 111](#) on Discrimination within Employment and Occupation. QU's College of Business & Economics stressed the significance of addressing human rights issues for sustainable development, aligning with the UN's Sustainable Development Goals (SDGs). [The collaboration](#) aims to raise awareness and promote gender equality and decent work (SDG 5 and SDG 8). Through inclusive discussions and workshops, Qatar seeks to promote equality and create a progressive environment for its communities.

8.4 OPERATIONS AND COLLABORATIONS

8.4.1 Driving Sustainable Change: SESRI Forum

The SESRI at QU recently organised the [Economic, Social and Cultural Transformation](#) for Sustainable Development Conference, gathering experts, scholars, and policymakers to discuss SDGs in the MENA region. With notable attendees from the Regional Bureau for the Arab States and UNDP, [the conference](#) aimed to foster knowledge exchange and generate insights on sustainable development. Discussions covered topics such as economic productivity, women's leadership, and the role of academic institutions in providing accurate data for policymaking. The conference emphasized the need for international cooperation and the exchange of best practices to achieve comprehensive sustainable development by 2030.

8.4.2 Empowering Entrepreneurs

Qatar University (QU) and the Qatar Financial Center (QFC) have [teamed up](#) to drive

innovation, entrepreneurship, and economic growth. This collaboration aims to boost Qatar's global competitiveness by fostering local and international innovation and entrepreneurship. They will support startups through the Qatar University Business Incubator, providing tailored services and competitive advantages. Under SIEED and QU Holding, QU and QFC will offer essential services to nurture business growth. This partnership aims to reshape Qatar's economic landscape by attracting businesses, fostering innovation, and nurturing talent.

8.4.3 Tax Talks: GCC Perspectives

The third International Conference on Fiscal Policy and Economic Development, organized by QU's College of Business and Economics, focuses on the theme '[Global Minimum Tax and its Impact on Tax Systems in GCC countries](#)'. The conference aims to strengthen collaboration with various government institutions, discussing new economic issues and fiscal policies affecting the economy and business to provide recommendations for decision-makers. [Key outcomes](#) include discussions on tax reforms, implications of global minimum tax adoption, and strategies to attract investors while ensuring alignment with international standards.

8.4.4 CLAW Participation in UNCITRAL Seminar

An important milestone in Qatar's shift to a digital economy was reached on December 4th with the partnership between ICC Qatar and CQUR Bank. [The UNCITRAL Model Law on Electronic Transferable Records](#) (MLETR), a significant step toward efficient, sustainable trade, will be highlighted at the event. [Professor Nisreen Mahasneh](#) of Qatar University will be the international law expert who will discuss the importance of digitizing trade to increase productivity and promote ethical international trade.

SDG 9: INDUSTRY, INNOVATION, AND INFRASTRUCTURE

Build resilient infrastructure, promote sustainable industrialization and foster innovation

9.1 RESEARCH

9.1.1 QU Spin-offs

The Office of Strategic Innovation, Entrepreneurship, and Economic Development (SIEED) at Qatar University has launched several training, coaching, incubation, and support programs.

Spinoffs:

1. [Genesis Technologies LLC](#): faculty-led start-up in the Fintech sector
2. [Clear Exhaust LLC](#): faculty-led start-up in Carbon emission mitigation
3. [Space Vision Digital Solutions LLC](#): faculty-led start-up in AI solutions

9.1.2 Intellectual Property

QU's Innovation Office recently held a "[What are patents and how do we obtain them?](#)" symposium to educate QU faculty, staff, researchers, visiting professors, and students on the intricacies of intellectual property and the patenting process. The event featured Dr. Sushil Iru and Dr. Sean Dean from Fish & Richardson P.C., who discussed patent types, relevance, and evaluation of inventions. [The symposium](#) focused on best practices for protecting intellectual property.

9.1.3 QATAR MOBILITY INNOVATION CENTER (QMIC)

[QMIC](#) is the first independent innovation centre in the region, founded by our university. It focuses on using R&D to develop and deploy Intelligent Mobility and Smart Cities platforms and technologies. QMIC uses locally engineered innovations & knowledge to enable the creation of home-grown technology industries that address

national strategies and tackle regional emerging challenges. In particular, QMIC has played a pioneering role in delivering platforms & solutions focusing on key domains including Intelligent Transport, Logistics & Telematics, Road Safety, and Connected & Autonomous Mobility. Through its integrated innovations development & delivery model, QMIC represents a unique and important category within the national Research & Development & Innovations (RDI) enterprise in Qatar that is strategically driven, R&D-based, solution-focused, and business-oriented.

Scholarly Output	579
Views Count	32205
Citation Count	8927
International Collaboration %	69%

9.2 OUTREACH

9.2.1 Gasna

From competitions organised by the College of Business and Economics, the Young Scientist Center and the Office of Strategic Innovation, Entrepreneurship and Economic Development (SIEED), our university runs several competitions to encourage innovation. One such example is the annual [Gasna Competition](#) for schools, which is run by our Gas Processing Center and sponsored by ExxonMobil. The competition provides students with insight into the energy sector including how it operates, technology used, production and environmental protection. It aims to enhance the level of awareness of the role of the gas industry in Qatar's economy and future and to nurture a skilled future workforce. In 2021, 144 schools participated in the competition and the categories covered kindergarten to grade 12.

9.2.2 Creativity & Innovation Forum

The [Creativity & Innovation](#) for Engineering Solutions Development Forum, organized by QU's Technology Innovation and Engineering Education (TIEE) unit, is a key event for showcasing pioneering innovations in Qatar. This forum provides a platform for QU students and other participants to present their innovative projects, with a focus on potential commercialization. The event not only highlights the ingenuity of young engineers but also fosters networking opportunities, collaboration, and the exchange of ideas, further promoting the advancement of engineering and technology in Qatar.

9.2.3 STEM Bus

Our [STEM bus](#) is a mobile laboratory that brings STEM to state-school children in Qatar in a fun and innovative way. Sponsored by Qatar Petrochemical Company (QAPCO) and Dolphin Energy Company, the bus motivates students to explore the broad possibilities and applications of engineering, mathematics, physics and science outside the classroom. It enhances their academic achievements and encourages them to study STEM subjects in the future.

9.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG
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9.3.1 Boeing

The partnership between [Boeing](#) and Qatar University- College of Engineering goes back to 2016 and reflects a shared commitment to fostering talent and promoting innovation in Qatar's thriving technology sector. In 2023 Qatar University College of Engineering ([QU-CENG](#)) and Boeing joined forces to launch a new [robotics competition](#),

aimed at promoting innovation in robotics among university students.

9.3.2 Future Tech Nexus

QU's Kindi Center and the Artificial Intelligence Organization introduced the inaugural [Future Technology Forum](#), focusing on cybersecurity and artificial intelligence. The [QU President](#) underscored students' vital role in innovation and AI's transformative potential. The [forum](#) enables students to interact with experts, explore emerging technologies, and impact Qatar's tech scene.

9.3.3 The Design Thinking and Innovation Program

QU's Young Scientists Center (YSC) launches the second cycle of the [Design Thinking and Innovation Program](#) for secondary-stage students. This program, aligned with QU's strategic objectives, aims to foster creativity, innovation, problem-solving, and critical thinking skills among students. It provides interactive workshops and hands-on activities aligned with STEM concepts, emphasizing experiential learning and project-based approaches. Through this program, students acquire various skills essential for their academic and future professional endeavours. Therefore, it primarily serves as a student learning initiative aimed at nurturing students' capabilities and empowering them for future opportunities.

9.4 OPERATIONS AND COLLABORATIONS

9.4.1 THE OFFICE OF STRATEGIC INNOVATION, ENTREPRENEURSHIP & ECONOMIC DEVELOPMENT

The university's dedication to innovation and sustainability is deeply integrated into its core operations, spearheaded by the Office of Strategic Innovation, Entrepreneurship, and Economic Development (SIEED). This office propels various cross-sector initiatives, encompassing entrepreneurship, innovation,

and digital transformation strategies. SIEED plays a pivotal role in driving university-wide implementations vital for socio-economic development, establishing QU as a catalyst for Qatar's advancement. Its primary focus lies in crafting a comprehensive "QU Innovation, Entrepreneurship, and Economic Development Ecosystem" spanning across all QU sectors.

9.4.2 Collaboration for Innovation

A [collaborative effort](#) between Qatar University (QU) and HyperThink Systems. It involves joint efforts to foster innovation and entrepreneurship within the startup ecosystem. QU's Center for Entrepreneurship and Organizational Excellence (CEOE) collaborates with HyperThink Systems to launch the second edition of the [Entrepreneurship Award for Innovation and Excellence](#) in Startups. The award aims to recognize and honor the ingenuity of Qatari-founded companies, regional startups, and exceptional QU students and faculty. The collaboration between QU and HyperThink Systems demonstrates a shared commitment to nurturing budding entrepreneurs and fostering innovation in Qatar's business landscape.

9.4.3 KITE: Igniting Innovation

QU's "Knowledge Innovation and Technology Entrepreneurship (KITE)" program, launched its second edition in May 2023, focuses on nurturing [innovative](#) startups from research and intellectual property outputs. Over thirty teams, including students and faculty members, underwent rigorous pre-incubation programs to advance to the incubation stage. Driven by QU's commitment to Qatar National Vision 2030, the program aims to boost economic development through innovation. Supported by QU Holding Company and Qatar Development Bank, the initiative aligns with QU's strategic emphasis on entrepreneurship, particularly within the College of Engineering. Dr. Mahmoud Abdulwahed highlighted the

program's role in fostering a sustainable knowledge-based economy in Qatar. The program offers specialized workshops and mentoring sessions to accelerate startup growth under the guidance of QU Holding and the Office of Strategic Innovation, Entrepreneurship, and Economic Development at QU.

SDG 10: REDUCED INEQUALITIES

Reduce inequality within and among countries

10.1 RESEARCH

10.1.1 Call for papers

The 8th Annual International Interdisciplinary Conference, hosted by QU, [invites papers](#) under the theme "Gulf Families: Continuity and Change." The conference seeks contributions from scholars offering personal insights into family life within the Gulf Cooperation Council (GCC) member states: Qatar, Saudi Arabia, Oman, Kuwait, Bahrain, and the United Arab Emirates, as well as Iran, Iraq, and Yemen. Scholars are encouraged to provide an insider's perspective (emic view) on Gulf families, encompassing both national and non-national families residing in GCC states. This inclusive approach aims to deepen understanding of the continuity and changes within Gulf families within their cultural contexts.

10.1.2 Smart Shower

Dr. Ahmed Elkhatat of Qatar University developed the [Mobile Smart Shower Room](#) to address the needs of the elderly and individuals with special needs who may face challenges with daily tasks like showering. This [innovative solution](#) provides a safe, comfortable, and integrated showering experience. The room is built with sturdy materials to ensure safety, and it offers features like temperature control and adjustable chair height. Equipped with advanced hydraulic and air systems, as well as an electrical control unit with a touch interface, the room enables efficient operation and user control. By [promoting](#) safety, comfort, and independence, the Mobile Smart Shower Room aims to enhance the overall well-being and dignity of its users. [The explanatory video link.](#)

Scholarly Output	192
Views Count	8689
Citation Count	1656
International Collaboration %	55%

10.2 OUTREACH

10.2.1 Connecting Communities: QU Health's Autism Education Series

In dedication to World Autism Month, QU's (QU) Health Sector launches an [educational webinar series](#) in collaboration with national stakeholders like Hamad Medical Corporation (HMC) and Sidra Medicine. Aimed at enhancing awareness and understanding of autism spectrum disorder (ASD), the series spans five weeks, featuring discussions on diagnosis, management strategies, and patient experiences. The head of Continuous Professional Development at QU Health, emphasizes the importance of collaboration with stakeholders to improve care for individuals with autism. With an estimated 1.14% prevalence of ASD in school-age children in Qatar, these webinars seek to provide essential knowledge and support for patients and caregivers. Participants can access [the webinars](#) via QU Health's YouTube channel.

10.2.2 Empowering Inclusion

QU's Inclusion and Special Needs Support Center [reaffirms its dedication](#) to the International Day of Persons with Special Needs, emphasizing the importance of integration and support for this community. QU ensures equal opportunities for all students through academic and social support services tailored to individual needs. The Centre's commitment extends [to awareness](#) campaigns, workshops, and collaborations with ministries and institutions, aiming to foster understanding and inclusivity across the university

community. Additionally, QU embraces technological advancements to enhance accessibility and ensure an inclusive educational environment for students with special needs, embodying its commitment to equality and diversity.

10.2.3 Unity in Diversity: Insights on Gulf Families at QU's Conference

The Eighth Annual [International Interdisciplinary Conference](#), "The Family in the Gulf: Continuity and Change," hosted by QU's College of Arts and Sciences in collaboration with the Gulf Studies Center and the Doha International Family Institute, reflects a commitment to addressing inequalities within the Gulf region. Over two days, discussions will centre on the evolving dynamics of family life, particularly regarding how socio-economic, cultural, and political factors intersect to shape inequality. Key topics include disparities in marriage trends, challenges in establishing families, and the impact of changing family structures on vulnerable populations. The conference, guided by the principles of Sustainable Development Goal 10, aims to foster interdisciplinary dialogue to develop strategies for promoting greater equality within Gulf families.

10.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG

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10.3.1 Support Center

Our [Inclusion and Special Needs Support Center](#) ensures equal opportunities for students with special needs to access higher education programs and support services at the university. We offer a range of services such as assistive technology, digital and physical accessibility and accommodations

in the classroom and in exams. The Center also raises awareness among those with special needs of their rights and the services they can expect, ensures that all University buildings and facilities are physically accessible, and maintains digital accessibility to all University websites.

10.3.2 Dental Students Brighten Smiles at Shafallah Center

Students from the Qatar University College of Dental Medicine recently visited the [Shafallah Center](#), an institution dedicated to providing comprehensive services for individuals with special needs. The visit aimed to foster community engagement and provide dental care and education to the centre's residents. During their visit, the students conducted dental check-ups, offered oral hygiene advice, and engaged in interactive sessions to raise awareness about the importance of dental health. This initiative not only enhanced the practical skills of the dental students but also underscored the college's commitment to social responsibility and inclusivity.

10.3.3 Debating for Inclusivity

Qatar Debate Center, in collaboration with the Shafallah Center for Persons with Disabilities, recently hosted the second league of university debates in Arabic language at Qatar University. This event showcased the commitment of Qatar's academic institutions to fostering intellectual discourse and [inclusivity](#). The debates engage in thought-provoking discussions on the employment of persons with disabilities despite the challenges posed by disguised unemployment policies. The success of the debates underscores Qatar's commitment to harnessing youth energy for the betterment of society and humanity.

10.4 OPERATIONS AND COLLABORATIONS

10.4.1 Access Across Campus

We offer [free specialised transportation services](#) for students with special needs using vehicles supported with the latest equipment to ensure students' safety and to help them access the buildings and colleges on campus.

10.4.2 Financial Aid

To widen access to education for the most marginalised, we have [signed agreements](#) with a number of the most important institutions that provide financial aid to students. Our partnerships with **Qatar Charity, Education Above All Foundation (Al Fakhoora Programme), the Social Development Center (Nama), Jassim and Hamad Bin Jassim Charitable Foundation, Seashore Group, and Afif Charity** will widen access to low-income families and contribute towards bringing them out of poverty.

10.4.3 Anti-Discrimination

We have a [range of policies](#) that outline measures against discrimination and for disability accommodations, such as the [anti-discrimination](#) Faculty Professional [Conduct Bylaws](#), Student [Code of Conduct](#), [Diversity statement](#), Policies of the Inclusion and Special Needs Support Center, and the Student Housing Instructions.

SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Make cities inclusive, safe, resilient and sustainable.

11.1 RESEARCH

11.1.1 QU Library's Role in Promoting Qatari History and Heritage

Qatar University Library took part in the ['Libraries Lead'](#) conference organized by Qatar National Library. The conference focused on the role of galleries, libraries, archives, and museums (GLAMs) in diplomacy. Sheikha Maryam Al Thani from QU Library presented a paper titled 'Introducing Library Users to the History and Heritage of Qatar,' discussing the library's role in cultural exchange. QU Library highlighted ongoing projects such as The Oral History Project, documenting memories from the 50s and 60s in Qatar, the ["Qatar through the Eyes of Her Majesty"](#) project and an online course on ['Qatari History and Heritage'](#) on the edX platform. The library's [Qatarna](#) collection serves as a repository for Qatari publications, preserving and promoting Qatar's culture and history.

11.1.2 Documenting Qatari Heritage

We are [building an archive](#) that documents the social history and intangible cultural heritage of the early modernization era in the State of Qatar in [the 1950s and 1960s](#). This period witnessed definitive changes in the lifestyle of the Qatari community, yet there is a lack of written records documenting this. Led by QU Library, we are [collecting the stories](#) of Qatari people and their daily lives during the 1950s and 1960s, to preserve this aspect of the national heritage of the State of Qatar. To face the future, you must know your past. Thus, this initiative will benefit future generations of Qataris as well as students and researchers from all around the world interested in studying and researching Qatar and the Gulf region in general.

11.1.3 Balancing Tradition and Modernity in the Qatari Family

This study, conducted by the Ibn Khaldon Center for Humanities and Social Sciences at Qatar University, explores the evolving structure and [functions of the Qatari family](#), aiming to balance tradition with modernity. The research identifies the Qatari family as navigating between traditional values and modern influences, highlighting shifts in gender roles, family structure, and cultural practices. The study's findings encourage a forward-looking approach, urging Arab societies to foster strong family units by blending heritage with modernity. Recommendations emphasize supporting marriage, education, and family values while preserving cultural identity amidst global change.

11.1.4 EV adoption in Gulf countries

A study conducted by our Department of Electrical Engineering analysed the challenges of electric vehicle (EV) adoption in Gulf countries, focusing on Qatar. It identified high costs, insufficient infrastructure, and climate-related battery issues. [The study highlighted](#) problems with EV charger placement affecting grid stability and suggested solutions like smart charging, renewable energy integration, and demand response strategies. It concluded that public awareness, government subsidies, and controlled charging policies are essential to ensure EV adoption without disrupting power systems.

Scholarly Output	546
Views Count	21619
Citation Count	7393
International Collaboration %	68%

11.2 OUTREACH

11.2.1 Traffic Safety

The Qatar Transportation and Traffic Safety Center (QTTSC) at our university is one of several agencies tasked with advancing transportation studies through research, development, education, and community engagement. It [addresses national and regional challenges](#) for safe, efficient and environmentally sustainable transportation systems. The Center has developed a course, "[Traffic Safety and Human Behavior](#)," to introduce the importance of traffic safety, and it organizes scientific international [traffic Safety conferences](#) under the patronage of the Minister of Interior and the Prime Minister of Qatar. The Center has also developed professional road safety training programs and workshops that aim to build road safety capacity locally and regionally. It is heavily involved with Mowasalat-Karwa Driving Schools in developing training workshops for driving instructors (train the trainer) regarding different issues such as autism, aggression, driving errors and violations. They also run the [Traffic Safety Ambassadors Program](#) to raise awareness among school students and the wider community of the importance of traffic safety, and to cultivate safe driving practices among the youth. The program is in coordination with the Ministry of Interior and the National Committee for Traffic Safety, and it is supported by Qatar Petrochemical Company (QAPCO).

11.2.3 Our Culture

Our community supports, enriches and contributes to the national cultural movement at various levels. Our students participated in the [Doha Theatre Festival](#), with a student-led theatrical performance. Our students also took part in [International Story-telling Day](#) by sharing **Qatari folktales** in the English language with schoolchildren. They read

stories to 450 children, in twenty classes from kindergarten to grade five.

11.3 STUDENTS AND LEARNING

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11.3.1 Cultural MOOCs

We have launched [three new cultural Massive Open Online Courses \(MOOCs\)](#) on edX. The courses are Arabic for Non-Arab Speakers, The Human Being in Islam and Qatari History and Heritage. These free, online courses will give people all over the world access to the cultural heritage of Qatar.

11.3.2 Culture on Campus

Our Department of Arts and Culture organises a range of programs, activities, workshops, and cultural-artistic events for [our community](#). These events encourage students to connect to culture, arts and heritage, and promote the cultural and creative movement in our university. Among other activities, The [Awtaar Competition](#) brings together the Orient and the West by providing a platform for students to display their talents in playing the oud and the piano. The [Fasih Poetry Competition](#) encourages our students' literary expression, while the weekly [Qatari Authors Café](#) is a cultural platform that discusses pertinent topics related to the cultural scene.

11.3.3 Cultural Village

Our [Cultural Village](#) is a unique student event that showcases the different cultures across campus annually. The village includes booths, exhibitions, and activities that reflect each culture and present folkloric shows, music, traditional customs and plays.

11.4 OPERATIONS AND COLLABORATIONS

11.4.1 The 9th Edition of Qatar Traffic Report

The [9th Qatar Traffic Report](#), released by the [Qatar Mobility Innovations Center](#) (QMIC), highlights a 23% increase in weekday congestion in 2023 compared to the previous year. This rise, translating to 7 additional hours wasted per driver annually, is primarily due to the population's reliance on cars for commuting, while visitor impact on congestion decreased by 40%. Key factors influencing traffic dynamics include post-World Cup events, infrastructural developments, and Expo 2023 in Doha. The report underscores its role in optimizing transportation operations and enhancing safety measures. QMIC aims to provide comprehensive mobility solutions for urban planning and smart city initiatives through its mobility data platform.

11.4.2 Driving Towards Safety

Qatar Mobility Innovations Center (QMIC) at Qatar Science and Technology Park ([QSTP](#)) is gearing up for a major advancement in how vehicles communicate with each other and their surroundings ([Vehicle-to-everything \(V2X\) technology](#)). As a step towards preparation of country-wide adoption. Well, V2X technology allows vehicles to talk to each other, infrastructure like traffic lights, pedestrians, and networks. This can improve safety by giving vehicles timely information to avoid accidents and enhance traffic efficiency by providing real-time updates on road conditions and alternative routes.

11.4.3 Crash Investigation Workshop

The Qatar Transportation and Traffic Safety Center (QTTSC) hosted a workshop on "[Introduction to Crash Investigation](#)" in collaboration with the International Road Federation (IRF). The workshop aimed to

improve traffic safety by teaching principles and techniques of post-crash investigation. The event brought together experts from the [Qatar Ministry of Interior](#), Ashghal, Neom Company, the insurance sector, and graduate students. They discussed strategies to enhance traffic safety and shared knowledge on systematic crash investigation.

11.4.4 Accommodation Provision

As part of the compensation package, we provide our faculty with accommodation or accommodation allowance, ensuring all faculty have access to decent accommodation. As for students, our [on-campus student housing](#) is highly subsidised and includes transportation and meals. In addition, our free internal [shuttle service](#) makes it easier for the university community to access our buildings and colleges, and for students to move between hostels and university buildings.

SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

12.1 RESEARCH

12.1.1 Nature to Nanotech

An innovative nanomaterial, graphene quantum dots (GQDs), has been developed from [date palm leaf waste](#) by a Qatar University (QU) research team led by Prof. Syed Javaid Zaidi, UNESCO Chair in Desalination and Water Technology. This sustainable preparation method, initiated in January 2022, uses water as a solvent, achieving a virtually chemical-free synthesis of GQDs, marking a significant advancement in eco-friendly scientific methods. This discovery is particularly significant given the prevalence of date palms in Gulf countries, especially Qatar, where large quantities of agricultural waste are produced. Annually, approximately 2 million tons of dry palm fronds are generated during the date of harvest, posing environmental challenges. This agricultural waste is now repurposed into a valuable product, with findings published in ACS Omega, highlighting the research's global significance and rigorous quality. This unique innovation, by turning palm waste into a valuable resource, not only addresses local challenges but also contributes to global sustainability objectives of the United Nations Sustainable Development Goals, exemplifying Qatar's commitment to a sustainable and resilient future.

12.1.2 Consumption Values Survey

Qatar's rapid economic growth and globalization have led to shifts in social values and consumption behaviour. High consumption levels, especially of food, water, and energy, pose sustainability challenges.

Behavioural Economic Theories provide [insights](#) into decision-making and consumer behaviour, emphasizing bounded rationality and social values. [A national study](#) by QU's Social and Economic Survey Research Institute ([SESRI](#)), involving 2000 households, aims to assess consumption values, behaviour, and spending preferences. The findings will inform policies to support Qatar's sustainable development goals and align with the Qatar National Development and Research Strategies.

12.1.3 Waste management

Aligned with Qatar's National Vision and QU's research priorities, QU researchers are dedicated to waste management and biorefinery projects aimed at producing renewable energy. Their work spans various aspects of [waste research](#), including [plastic waste impact](#), [biotechnology](#), [pollution mitigation](#), and [soil water](#) deficit reduction using organic waste compost and water retainers.

Scholarly Output	336
Views Count	23367
Citation Count	4998
International Collaboration %	59%

12.2 OUTREACH

12.2.1 QU Focuses on "Plastic Management & Future Trends" at ISC2024

[The 5th International Sustainability](#) highlighted innovative approaches to tackle plastic pollution, uniting global experts to rethink plastics for a sustainable future. Discussions centred on microplastics in marine environments, sustainable plastic management, and bioplastics in a circular economy. With an emphasis on international collaboration, the event showcased Qatar's commitment to aligning local strategies with

global best practices, fostering community engagement, and promoting biodegradable alternatives.

12.2.2 Corporate Social Responsibility (CSR)

Qatar [CSR National Program](#) is an academic initiative [hosted by our university](#), in partnership with governmental and [non-governmental bodies](#), aiming to advance corporate social responsibility (CSR) awareness among students and engage with the business sector. The program includes academic activities such as [CSR research studies](#), public surveys, workshops, training courses, lectures, awareness campaigns, student competitions, awards, and the [2nd Edition of Qatar Social Responsibility](#) organized alongside the launch of an annual CSR report covering social investment achievements by the public and private sectors in Qatar.

12.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG
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12.3.1 Market time

Our student-led Environment and Sustainability Club have offered [free workshops](#) for children at Torba Farmers Market. The workshops educate children about environmental issues including how to minimize waste and the correct way to dispose of waste. They also include hands-on activities using waste, to encourage children to view 'waste' from a different perspective.

12.3.3 Consume Responsibly Challenge

Our College of Business and Economics (CBE) initiated the '[Consume Responsibly](#)' challenge during Qatar Sustainability Week. Participants were asked to submit digital posters with innovative solutions to

challenges linked to seven themes related to sustainable development and to propose an action plan to put their ideas into practice. Over 300 students presented 117 projects covering the different themes. The competition, sponsored by Abu Issa Holding Company, sought to build awareness and engage students in real-world challenges linked to achieving sustainable development goals.

12.4 OPERATIONS AND COLLABORATIONS

12.4.1 Sustainable Consumption

As part of our commitment to turning QU campus into a model for sustainable consumption with a circular economy, we launched our [Zero Waste Action Plan](#). The ultimate purpose of the plan is to reduce waste on campus. It identifies the initial actions needed to introduce sustainable procurement practices, waste measurement activities and waste prevention policies.

12.4.2 Biosludge Revolution: QU's Contribution

Qatar Shell Research and Technology Centre (QSRTC), in collaboration with Qatar University (QU), Texas A&M University at Qatar (Tamuq), and The Ministry of Municipality (MM), has concluded a groundbreaking research project supported by QNRF. This initiative aimed to repurpose [industrial waste from the Pearl gas-to-liquids plant](#) (Pearl GTL) in Ras Laffan.

The multi-year project achieved a significant breakthrough by converting [bio-sludge](#), an organic-rich by-product of the Pearl GTL process, into a valuable soil enhancer for non-edible crops in Qatar. Historically consigned to landfills, this bio-sludge now serves a sustainable purpose.

The sludge, originating from industrial process water, has been safely repurposed, addressing the viability of cultivating cash crops like cotton. This project underscores the potential for industrial waste repurposing,

contributing to the United Nations Sustainable Development Goals and Qatar's national vision for sustainability.

12.4.2 Closing the Loop

As part of our Zero Waste Initiative, the Facilities & General Services Department in Qatar University (QU) has succeeded in producing the [first batch of fertilizer](#) by converting food waste generated at the students housing. The initiative strives to minimize both virgin material inputs and waste outputs by closing organic resource flow loops (food waste). Furthermore, the use of palm waste fiber generated on campus in the production of smart eco-friendly recycling dumpsters is another example of how we upcycle waste materials on our campus. The use of such products on campus encourages the community to gradually shift towards a more sustainable lifestyle.

SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts

13.1 RESEARCH

13.1.1 Thermally Insulated Greenhouse

QU researchers received a National Priorities Research Program grant to design and build a [greenhouse](#) that can provide favourable sustainable agricultural microclimate conditions for growing produce in the harsh Qatar climate. The project developed a thermally insulated greenhouse that allows the entry of optimum solar radiation levels through negative linear Fresnel lenses located on its roof. The lenses distribute the solar radiation over the plant rows. The performance of the proposed greenhouse in terms of providing the required levels of solar radiation for plant growth and the reduction in cooling load was assessed using ray tracing simulations, cooling load calculations, and field trials. The greenhouse uses modern agricultural technologies such as cooling, lighting systems, and recycling palm leaf waste. The new greenhouse is considered to be a quantum leap in the field of protected agriculture, in which it is expected that production will be increased in quantity and quality while reducing the operating costs of energy and water consumption.

13.1.2 Revolutionizing Diesel Engine Emissions

Qatar University (QU) has unveiled its second faculty-led startup, [ClearExhaust LLC](#), founded by Dr. Samer Fikry, which developed innovative technology to significantly reduce carbon emissions from diesel engines, combating global warming. Diesel engines emit harmful pollutants detrimental to health and the environment. ClearExhaust eliminates 100% of diesel smoke emissions while significantly reducing greenhouse gases. Traditional exhaust filters fail to capture fine carbon particles (soot), posing

health risks. The invention employs a unique water-type filter, effectively trapping all soot particles without affecting engine performance. The technology also reduces other emissions like Nitrogen oxide and Carbon Monoxide, [aligning with Qatar's emissions](#) reduction goals outlined in the National Environment and Climate Change Strategy.

Scholarly Output	473
Views Count	22525
Citation Count	7739
International Collaboration %	71%

13.2 OUTREACH

13.2.1 Advancing Climate Solutions

In collaboration with ExxonMobil employees, Qatar University delivered a comprehensive course on climate solutions at [Texas A&M University](#) in Qatar (Tamuq). The course covered the energy industry's role in addressing modern needs and climate risks, emphasising sustainable solutions and the importance of policy support through innovative case studies.

Students at Tamuq gained valuable insights into the role of engineering in achieving net-zero emissions. The course focused on embedding carbon literacy into education, enhancing their understanding of climate science and sustainable practices.

13.2.2 Greener Schools

In the '[Qatar Greener Schools Initiative](#)' project, our researchers propose a new Energy Management System for greener schools in Qatar. The proposed model architecture aims to provide a new perspective for automatic and intelligent management of electricity distribution networks integrating green energy (e.g. solar energy) and enabling secure and reliable ICT within the future Qatar Smart Grid

infrastructure. This project provides participating schools with the resources and communications support they need to educate their students and staff community on renewable energy and energy efficiency best practices.

13.2.3 Workshop: "Blue Gulf: Navigating Climate Change and Rising Sea Levels"

Co-hosted by Dr. Ammar Abulibdeh at the [14th Gulf Research Meeting](#), the workshop focused on the challenges faced by coastal cities in the GCC region as they tried to balance urban growth with protecting fragile coastal and marine environments. [The goal of the workshop](#) was to create practical strategies and explore solutions for applying "Blue Design" in coastal cities. The workshop also encouraged participants to share their expertise to help build a [resilient "Blue Gulf"](#) and prepare cities for rising sea levels and climate change by integrating water, energy, food, and waste into a unified urban system.

13.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG
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13.3.1 Climate Legislation

The College of Law at Qatar University organized a debate on the impact of [climate change](#) legislation on business, with postgraduate students participating. Arguments were presented for and against the implications of such legislation, acknowledging its influence on business operations. It was emphasized that while the extent of this impact is still being researched, there is a need for legislative frameworks to accommodate environmentally friendly businesses and clean energy projects. The stance of the Qatari legislator on [global climate commitments](#), particularly the Paris Climate Change Agreement, was discussed. Additionally, a research exhibition was held

by the Office of Graduate Studies, showcasing advancements in scientific legal research by master's program students. These initiatives contribute to an understanding of the intersection between climate change legislation and business, highlighting the importance of sustainable legislative practices in addressing global environmental challenges.

13.3.2 Students at COP28

The Ministry of Environment and Climate Change hosted a discussion for [Qatar University students](#) titled "**UNFCCC Climate Change Agreement Priorities and New Developments at COP28.**" The session was part of Qatar's pavilion events at the COP28 conference. The ministry shared an infographic about the session and its speakers on social media. The session was [led by student Nasser Mohammed Al-Hajri, with speakers including Sattam Mutab Al-Marri, Sheikha Saeed Al-Marihi, Hamda Hamad Al-Marzouqi, and Munira Mohammed Haji](#). Qatar University's involvement in the UN climate conference highlights its commitment to addressing climate change and finding global solutions.

13.3.3 Plant a Tree Initiative

Our student-led Environment and Sustainability Club has planned a "[Plant a Tree](#)" event for children on the Qatar University campus. This event aims to educate children about environmental issues and instill the importance of planting for future generations. By engaging young minds in hands-on activities, we hope to foster a lifelong appreciation for nature and environmental stewardship. This initiative aligns with our commitment to sustainability and community involvement, encouraging the next generation to take an active role in preserving our planet.

13.4 OPERATIONS AND COLLABORATIONS

13.4.1 QU's Carbon Footprint Report

Qatar's economy depends mostly on fossil fuels, and the country is one of the highest carbon dioxide emitters in the region. As universities, we must enact change in our communities and environments. Our [Carbon Footprint Report](#) is our effort to do this. The report estimates our contribution to global climate change, assesses the current situation, informs decision-making and plans, and drives the implementation of new techniques to reduce emissions. By paving the way with this report, we hope to inspire and encourage other institutions in the country to take the same measures.

13.4.2 Green Building Systems

The Global Sustainability Assessment System (GSAS) is a comprehensive sustainability rating system for the built environment. It promotes sustainable practices in the construction and operation of buildings and infrastructure, especially in the MENA region. QU Department of Facilities and General Services has initiated the GSAS certification of new on-campus buildings, including the [College of Engineering](#), [Student Affairs building](#), and [College of Law](#).

13.4.3 Conservation

Our [Renewable Energy and Conservation Policy](#) guides different operations at the Facilities and General Services Department to meet QU's commitment towards sustainability. The policy aims to create a more sustainable campus and maximize efficiency while responsibly managing energy, water and human resources.

SDG 14: LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

14.1 RESEARCH

14.1.1 'Gardening' Coral Reef

This project addresses the significant deterioration of Qatar's coral reef ecosystem, aiming to enhance coral restoration technologies. Collaborative efforts among stakeholders are crucial for mitigating threats to Arabian Gulf reefs. [Qatargas](#), a key industry player, supports the initiative through its Coral Management Program (CMP), aligning with Qatar's environmental goals. The Ministry of Environment and Climate Change facilitates research permits and provides aquaculture facilities. QU's Environmental Science Center contributes innovative [research to accelerate](#) restoration efforts. Researchers note the resilience of certain coral species in coastal areas and identify the need for improved coral gardening techniques. They enhance Qatar's Coral Fragmentation technology to propagate corals from local colonies, optimising growth conditions in aquaculture facilities. Additionally, they develop an innovative artificial reef design, the mushroom forest, suitable for deeper marine sites lacking natural rock formations. These advancements offer practical solutions for coral restoration, promoting ecological and economic recovery of Qatar's marine ecosystem.

14.1.2 Janan

Our [research vessel Janan](#) is a state-of-the-art platform designed for international marine research standards. It plays a crucial role in providing oceanographic data for [local](#), regional, and global scientific research. At QU's Environmental Science Center (ESC), studies on the weather, air pollution, tidal conditions, and water currents in the marine

environment are conducted, along with monitoring territorial and Arabian Gulf waters. The Sixth Youth Research Forum 2024 included an educational [visit to Janan](#), where young researchers explored its wet and dry sample laboratories, marine chemistry and biology labs, and sample collection cranes. This hands-on experience provided valuable insights into marine sample collection and analysis processes, expanding young researchers' knowledge in scientific research and reinforcing QU's commitment to supporting talent in science and technology

14.1.3 The Qatari Pearl Oyster

Our [Environmental Science Center](#) (ESC) is transforming marine conservation by studying the native pearl oyster, *Pinctada radiata*. Once central to Qatar's economy, these oysters now serve as environmental sentinels, monitoring marine health through cutting-edge biosensors. In partnership with TotalEnergies Qatar, researchers utilize the HFNI valvometer, a non-invasive device tracking oyster behaviour in real-time. Findings reveal that pollutants like noise and light disrupt oyster growth, reproduction, and clustering behaviour—critical for ecosystem health. This research also highlights a [breakthrough for aquaculture](#): year-round juvenile [oyster production](#), offering hope for restoring Qatar's depleted oyster beds and ensuring sustainable marine ecosystems for generations to come.

Scholarly Output	173
Views Count	6712
Citation Count	1933
International Collaboration %	72%

14.2 OUTREACH

14.2.1 QAlgae' Database

QU-[Environmental Sciences Center](#) (ESC) pioneers the "QAlgae" database, the nation's first marine macroalgae database. Qatar's Exclusive Economic Zone (EEZ) hosts diverse macroalgal communities vital to the coastal ecosystem and various industries. The database integrates taxonomy with environmental data, providing a digital platform for [global researchers](#).

The "QAlgae" database signifies a landmark in Qatar's marine research and biodiversity conservation, positioning QU at the forefront of sustainable marine resource management.

14.3 STUDENTS AND LEARNING

UNITS TOWARDS SDG

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14.3.1 Educational Visit to Research Vessel Janan

In our support for undergraduate research, our students participated in the World Congress on Undergraduate Research (WorldCUR) – the first edition of which was held at Qatar University. In the latest edition, one of our undergraduates [won the prize for the best environmental project](#). Her research study entitled "Antibacterial Activity of New Sponge Species Isolated from the Qatari Marine Zone" revolves around the discovery of two new species of sponge on the coast of Qatar that proved to contain antibiotics.

14.3.2 Earth-Friendly Lubricants

A group of our undergraduate students, with funding from the Undergraduate Research Experience Program ([UREP](#)), are carrying out a study on the development of [marine](#)

[microalgal](#) biolubricants using a biorefinery approach. Lubricants are typically petroleum derived. They have harmful effects on the ecosystem and contain non-biodegradable carcinogenic components. The students, led by a faculty mentor, are producing a lubricant from microalgae that does not pose a threat to the ecosystem and is biodegradable.

14.3.3 Law of the Sea

The College of Law at Qatar University organized a student trip to Monaco for a conference on marine geology. The students attended sessions on "[Marine Geology](#), From the Last Century to the Next Decade," which covered topics such as legal regulation of grey zones, modern geological surveying methods, and technical aspects of Article 76 of the United Nations Convention on the Law of the Sea.

14.4 OPERATIONS AND COLLABORATIONS

14.4.1 UNESCO Chair

Together with UNESCO, we have established a [UNESCO Chair in Marine Sciences](#) at our ESC. The chair in marine science is the first of its type in the region. The Science Plan, which is embedded in this awarded proposal, covers the following natural and anthropogenic components related to the Arabian Gulf: Arabian Gulf circulation, climate change, sea level rise, Shamal winds and swells, geomorphological changes due to coastal and offshore developments, marine pollution and its management, hypoxia formation & ocean acidification and anthropogenic impacts on the Gulf's ecosystems.

14.4.2 Protecting the Dugongs

In light of the efforts made to preserve endangered species, especially the dugongs, a research team from the QU's Department of Environmental and Biological Sciences in collaboration with [ExxonMobil](#), used drone technology to study the dynamics of the largest gathering of dugongs in one location in the world; in the Qatari coastal waters. Utilizing unmanned aerial vehicles "Drones", the team aimed to understand factors influencing the largest known dugong aggregation in northwestern Qatar, exceeding 1,000 individuals.

[This three-year study](#) included aerial and marine surveys to assess crucial seagrass habitats supporting dugong survival. Population density changes were correlated with various factors such as births, deaths, habitat alterations, fishing, and boat accidents. The team assessed seagrass habitats' impact on dugong populations and used drone photography for accurate population density measurements in marine environments. Understanding dugong population dynamics and their responses to changing habitats is vital for effective management and conservation efforts, significantly contributing to broader marine life preservation goals.

14.4.3 QU Hosts International Conference On Sabkha

The [International Conference on Sabkha](#) in Qatar, held at Qatar University and sponsored by Qatar National Research Fund (QNRF), ExxonMobil Qatar, and Qatar Airways, the event convened international scholars to discuss the importance and preservation of Sabkha ecosystems.

The conference sessions covered various aspects of Sabkha, including its physical, chemical, and biological characteristics, focusing on microbial mats and dolomite formation. Discussions also addressed clay minerals, soil remediation, and archaeological site preservation. Emphasis

was placed on the unique preservation of Qatar's Sabkha and its important support for coastal ecosystem resilience and Qatar's vision for 2030.

SDG 15: LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss

15.1 RESEARCH

15.1.1 Cleaning Oily Soil

Qatar's limited soil and groundwater resources are affected by hydrocarbon contamination that occurs during the extraction, transport and processing of oil and natural gas. Though oil spills do occur, what is the more common phenomenon is the adverse effect of extensive weathering caused by the harsh weather in Qatar, which has led to oil contaminating the soil. Left untreated, removal of pollutants from the soil would take a very long time and comes with a high risk of spreading the pollution into the air, groundwater, seawater and deeper into the soil. Our researchers have discovered that microbial remediation – i.e. the use of microorganisms to break down toxic pollutants – is a better strategy to [clean polluted soil](#). The bacteria used is indigenous to Qatar and the research shows that these novel bacterial strains are more active under the harsh physical and chemical conditions of Qatari soil, making them appropriate for use in enhanced oil recovery and bioremediation in Qatar. Bioremediation of polluted soil and groundwater is vital to protect the limited soil and water resources in Qatar.

15.1.2 Sabkhas of Qatar

Researchers at our Environmental Science Center (ESC) are collaborating with scientists from international universities and research centres including ExxonMobil Research Center in Qatar (EMRQ); ETH Zurich; Space Exploration Center in Switzerland; NASA Jet Propulsion Laboratory; and the University of

Toronto, to examine the multitude of microbes in the [Sabkhas of Qatar](#). Sabkhas are a coastal, supratidal mudflat or sandflat in which evaporite-saline minerals accumulate as the result of the semi-arid to arid climate and are among the rare environments on Earth where it is possible to study the formation of carbonate and evaporite minerals.

Usually, these are commonly found mineral associations in ancient sedimentary sequences and constitute economically important gas and oil reservoir rocks. These reservoirs are often located at depth in the subsurface, making their characteristics and physical properties difficult to evaluate and predict. Thus, the study of the Qatari Sabkhas, where the same sedimentary sequence is forming today close to the surface, is of great benefit for geologists and engineers engaged in the exploration and exploitation of similarly constituted hydrocarbon reservoirs.

15.1.2 Arid Land Revival

Associate professor of Geography and GIS at QU leads the research team focused on developing a comprehensive model that links food, water, and ecosystems, aiming to combat [desertification](#) and foster biodiversity in Qatar's arid landscape. This approach includes analyzing 30 years of climate data to identify patterns in precipitation and drought, assessing climate change's effects on soil and vegetation, and selecting ideal habitats for native plant growth. Geographic Information Systems and remote sensing support ecosystem modelling, enabling precise re-greening and biodiversity conservation efforts. The findings will suggest how designating 10%–30% of Qatar's land as natural grazing areas can improve food security and water conservation. This approach provides a scalable model for other arid regions.

Scholarly Output	115
Views Count	4562
Citation Count	1209
International Collaboration %	66%

15.2 OUTREACH

15.2.1 Protecting Our Turtles.

Each year, hawksbill turtles come to Qatar to nest. However, human activity has caused negative effects on their habitats. Our Environmental Science Center along with Qatar Energy and [Ministry of Environment](#), work to protect and [monitor the turtles](#) and restore their population and habitats across the Qatari coast, and on Qatari islands. Some initiatives include providing protection for sea turtles during nesting and [hatching](#) periods and using satellite trackers. The turtle protection program also involves the public in their activities to raise awareness and increase interest in environmental protection.

15.2.2 International Conference On Sabkhas

Sabkhas are a coastal, supratidal mudflat or sandflat in which evaporite-saline minerals accumulate as the result of the semi-arid to arid climate and are among the rare environments on Earth where it is possible to study the formation of carbonate and evaporite minerals.

The conference provides an overview of the [importance of Sabkhas](#) as a natural resource and the urgency of protecting and preserving them.

The conference gathered international scholars from the US, Europe, Australia, South America, and the Middle East to share the current state of knowledge on the topic and provide a historical background about the pioneering research on the Sabkha sediments that started during the sixties of

the last century when the first recent dolomite was discovered in the Sabkha of Qatar in 1961.

15.3 STUDENTS AND LEARNING

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15.3.1 16th Qatar University Life Sciences Symposium

Expo 2023 Doha is hosting the 16th Qatar University Life Sciences Symposium (QULSS 2023), held under the theme of "Eco-Friendly Sustainable Solutions for [a Green Desert Environment](#)". The event delved into comprehensive discussions on four key topics: [Optimizing Water Resources](#), [Enriching Desert Soils](#), [Modern Agriculture in Arid Lands](#), and [Sustainable Qatari Vegetation](#) .

15.3.3 Qatar National Environment Day 2024

QU Leads Environmental Advocacy on National Environment Day 2024, through its College of Arts and Sciences. Themed "Together to [Protect Qatar Rodhat](#)(terrestrial ecosystems)," the event emphasized Qatar's Rodhat's role in ecological balance. Discussions centred on preserving green spaces for air purification and biodiversity, aligning with Qatar's environmental vision. Challenges such as urbanization-induced reduction in Rodhat areas and pollution were addressed. The event also discussed the significance of wild plants and preservation methods.

A commitment ceremony highlighted participants' pledge to protect desert plants, emphasizing collective responsibility for Qatar's Rodhat's sustainability.

15.4 OPERATIONS AND COLLABORATION

15.4.1 Qatar's Mangrove Mission: Restoration Project

QU's Environmental Science Center, the Ministry of Environment and Climate Change, and Qatar Foundation's [Earthna Center](#) for a Sustainable Future are collaborating on a national program to conserve and restore [Qatar's coastal ecosystems](#).

The initiative aims to bolster Qatar's resilience against rising sea levels and protect its biodiversity. Mangroves, crucial for stabilizing coastlines and mitigating sea level rise impacts, are central to the project's focus.

The collaboration with Qatar University encompasses research and restoration efforts, aiming to rehabilitate degraded mangrove ecosystems and deepen our understanding of their ecological importance. Mangroves play a vital role in climate change mitigation, absorbing carbon dioxide and preserving natural balance. Efforts supported by the Ministry and Unesco aim to conserve and protect mangrove habitats.

15.4.2 Zero Waste Commitment

QU has recently become part of a global network of universities focused on environmental sustainability, spearheaded by the United Nations Environment Program (UNEP) and the University of Oxford. This aligns with the [UN's ecosystem restoration program](#), aiming to engage higher education in promoting a greener future.

QU's commitment extends across its academic, research, administrative, and supply chain operations, aiming to combat biodiversity decline and protect environmental systems. Initiatives like the "[Zero Waste](#)" plan aim to minimize waste, while [renewable energy](#) policies and [habitat preservation](#) efforts reduce QU's carbon footprint and support local wildlife.

Joining 135 universities across 50 countries, QU is committed to four key pillars:

- Assessing biodiversity on campus.
- Setting specific, measurable, and time-bound nature conservation goals.
- Implementing impactful actions to mitigate negative impacts on biodiversity
- Producing annual reports to track progress and ensure accountability.

This step underscores QU's dedication to environmental sustainability and acknowledges the urgent need for global collaboration in addressing climate change and environmental degradation.

15.4.3 Special Habitats

We have reserved [three natural habitat](#) areas within our campus. Each of these fields exhibits notable differences in their biodiversity of flora and fauna and serves as important sites to study the diversity and interactions of plants, animals, and microorganisms in their natural habitats. Additionally, these fields are used as labs for several courses at the university.

SDG 16: PEACE, JUSTICE, AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

16.1 RESEARCH

16.1.1 QU's International Journal of Law

The International Review of Law (IRL) is a legal journal published twice a year. It features in-depth legal research on international and comparative law topics. Launched in 2012 by Qatar University College of Law and published by Qatar University Press, the IRL is unique in its focus on enriching Qatar's legal system. It achieves this by promoting international understanding and openness to different legal approaches. This Global focus also makes the IRL a valuable platform for researchers and readers worldwide to access legal scholarship from around the globe.

The IRL is an [open-access journal](#).

16.1.2 GCC Framework for Labor Rights

QU's College of Law has pioneered research focused on enhancing [migrant worker rights in the Arab Gulf](#), revealing critical gaps between labor laws and [international human rights standards](#). Their proposed regional program, with clear labor standards and robust enforcement, aims to elevate worker protections while fostering stronger relationships between citizens and migrants. Highlighting challenges like restrictive sponsorship systems, the recent abolition in Qatar offers a hopeful step forward. By prioritizing human rights and development, this initiative promises to strengthen the region's social fabric, attract skilled labor, and create a more sustainable, inclusive future for all.

16.1.3 Reforming Arab League

[Faisal M. Al-Hababi](#), Associate Dean for Research & Graduate Studies at Qatar University, highlights the untapped potential of the Arab League in fostering regional peace and security. By reforming its Charter, the League can strengthen its role in conflict resolution, particularly in crises like Gaza. [Empowering regional organizations](#) with effective diplomatic, mediation, and collective action mechanisms will align them with international law and drive sustainable peace. With strategic changes, the Arab League can transform into a proactive force, addressing broader regional security challenges and paving the way for a more peaceful Middle East and North Africa.

Scholarly Output	131
Views Count	7950
Citation Count	3901
International Collaboration %	59%

16.2 OUTREACH

16.2.1 Elected Representation.

QU Student

Our [Student Representative Board](#) represents our university's students. It functions as a mediator among students, faculty members and the university's administration, and takes part in the administration's decision-making. The board is made up of [student representatives from each college](#), who are democratically elected each year.

Faculty Senate

Our [Faculty Senate](#) is an elected body, with each department selecting a representative. It serves as a liaison between faculty and management, electing a [chair, vice chair, and secretary](#). The Senate [forms committees](#) and advises the President, aiming to maximize faculty input and provide recommendations.

16.2.2 Advancing Legal Aid to the Vulnerable Populations in Qatari Society

QU's College of Law has secured an Academic Research Grant from the Qatar National Research Fund (QNRF) to spearhead a pioneering initiative addressing [legal aid for vulnerable populations](#). Led by Professor Mohamed Yehia Mattar, the research team is developing a national strategy aligned with SDG 16 to promote peace, justice, and strong institutions. Focusing on migrant rights, human trafficking, and social justice, it emphasizes legal aid clinics' role in serving vulnerable communities, supporting Qatar's commitment to SDG 16.

16.2.3 Education for Justice

Members from our college of law have been working together with the United Nations Office on Drugs and Crime (UNODC) to [roll out](#) the initiative to Arabic-speaking countries. The E4J initiative seeks to prevent crime and promote a culture of lawfulness through education activities designed for primary, secondary and tertiary levels. We are translating all E4J University Modules Series to support teaching on the SDGs, and particularly SDG16, across the region.

16.3 STUDENTS AND LEARNING

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16.3.1 Teaching EU Law in the GCC

Our Center for Law and Development (CLD) [has been awarded](#) the European Union Jean Monnet Module funding to deliver courses on EU law to students and professionals in Qatar. The 'Doha Courses on European Union Law' is the first Jean Monnet Module in Qatar and the GCC, and the courses will be

delivered annually for three years. In a funding competition, the Center for Law and Development won a competitive grant and was one of 360 awarded applications out of the 1447 eligible funding applications. The Module will constitute the basis for future knowledge and research about Europe in Qatar and will allow the CLD to deliver tailor-made courses on specific European Union law issues relevant to graduates' professional lives. It will enable Qatar-based lawyers to develop skills and knowledge in EU law to help local businesses and organizations to better trade with EU businesses and deal with EU institutions. [Policy briefs](#) are published by the Centre for Law and Development at Qatar University College of Law as part of the Jean Monnet Doha Courses on European Union Law.

16.3.2 Annual Multidisciplinary International Conference.

Our Gulf Studies Center Annually hosts an [Annual Multidisciplinary International](#), in collaboration with the Doha International Family Institute, which will host the international conference "**Gulf Families: Continuity and Change**". This event will explore key trends shaping Gulf families, including social media, gender, youth, health, marriage, migration, and family policies.

16.4 OPERATIONS AND COLLABORATIONS

16.4.1 Peacebuilding

QU's [2023 IAU Conference](#) tackled "Higher Education with Impact: The Importance of Intercultural Learning and Dialogue." Over 100 university leaders explored how universities can foster intercultural understanding in a globalized world, addressing challenges like geopolitical influences. Discussions centred on promoting peace and equipping students for a diverse world through dialogue and intercultural learning.

The conference also emphasized universities' role in achieving Sustainable Development Goals (SDGs). The Higher Education and Research for Sustainable Development (HESD) Cluster shared best practices for integrating sustainability into university operations. This global gathering aimed to empower universities to create positive societal change through education and collaboration.

16.4.2 QU's College of Law Hosts Conference on International Commercial Legislation

Recent Trends and Future Visions" conference, in collaboration with [the Ministry of Commerce and Industry of Qatar, UNCITRAL, and the Qatar Chamber.](#)

Experts will convene to explore three pivotal topics: provisions of the United Nations Convention on Contracts for the International Sale of Goods (known as the "CISG" or the "Vienna Convention"), the influence of international model laws on the formulation of national commercial legislation, and the applications of the [UNCITRAL model law](#) on arbitration in national frameworks.

QU Law remains committed to contributing to the achievement of SDG 16 by fostering dialogue, research, and collaboration in the field of international commercial legislation.

16.4.3 Legal Consultations

Our [Office of the General Counsel](#) provides free consultations and legal services to the university's academic and administrative staff.

SDG 17: PARTNERSHIP FOR THE GOALS

Strengthen the means of implementation and revitalise the global partnership for sustainable development.

17.1 RESEARCH

[ALECSO Chair](#) for Environmental Seaweed System in the Arabian Gulf region under the direction of Prof Dr Hamad Al Saad Al Kuwari, director of QU's Environmental Science Centre (ESC); the ALECSO Chair for Interdisciplinary Studies in Humanities and Social Sciences under the direction of Dr Nayef Nahar Al Shamari, director of QU's Ibn Khaldun Centre for Humanities and Social Sciences; the Chair for Water, under the direction of Dr Maryam Al-Ejji, professor in QU's Centre for Advanced Materials.

We lead and participate in many global research partnerships. We have been collaborating with academic institutions, government, industry, and NGOs across the world to advance our research involving sustainable development goals.

- One example of our partnerships is the internationally joint research project [M-NEX](#): "The Moveable Nexus: Designed Urban Food, Energy and Water Management Innovation in New Boundary Conditions of Change", granted jointly by [Belmont Forum](#) and [PI Urban Europe](#). Qatar University is one of [seven partners from six countries](#).
- Another example are our international partnerships is in implementing the first-ever [National Mental Health Study](#) - for which we partnered with the World Health Organization, Harvard University, the University of Michigan – and other local partners.

- Research at our Environmental Science Center has seen international collaboration with ETH Zurich; Space Exploration Center in Switzerland; NASA Jet Propulsion Laboratory; and the University of Toronto. The project is a joint effort to examine the multitude of microbes in the [Sabkhas](#) of Qatar.
- We have also partnered with [Imperial College London](#), [Biostage Inc](#) in the US, and the [American University of Beirut](#), Lebanon, to develop living heart valves that can grow with the body and integrate with the patient's native tissue.
- We have established UNESCO Chairs in [Marine Sciences](#) and [Desalination and Water Treatment](#) – both firsts in the region and both aiming to advance international cooperation to institutional capacities, knowledge sharing and collaborative work.

Locally, we have worked side by side with academic institutions, government ministries and agencies, the industry, and NGOs to further research and policy in the sustainable development goals.

QU in Cooperation with Civil Service and Government Development Bureau Introduces "[Researcher](#)" Program for Research and Development Skills.

7.2 OUTREACH- COLLEGES

17.2.1 QU HEALTH

QU Health continues to make significant strides in health sciences, research, and community engagement. Recently, QU scientists achieved a remarkable [precision medicine breakthrough](#), advancing the field of personalized treatment for critical diseases. QU has also conducted extensive research on the [risks associated with shisha smoking](#), linking it to an elevated risk of heart

disease. In collaboration with Hamad Medical Corporation, the university runs impactful health initiatives, including regular [blood donation drives](#) and the "[Smart Start](#)" [campaign](#) to combat childhood obesity.

Additionally, QU's College of Dentistry celebrated [World Oral Health Day](#) and [World Cancer Day](#) through public awareness campaigns and educational events, emphasizing preventive health. These initiatives extend into mental health awareness, as evidenced by QU's recent [mental health brochure](#), addressing the effects of COVID-19 on burnout and anxiety among healthcare students. The university has also been proactive in establishing international collaborations; for instance, its [partnership with the Hazm Mebaireek Dental Academic Center](#) and the [Gulf Center for Disease Prevention](#) is set to enhance academic and healthcare standards.

QU's faculty and researchers have earned global recognition, with [23 highly cited researchers](#) contributing to groundbreaking studies in various fields, including an [investigation into blindness risks in diabetes patients](#). The QU Health faculty continues to set benchmarks in research excellence, with several members being recognized among the [top 2% of researchers globally](#). The university has also celebrated milestones in the [International Clinical Rehabilitation Registry \(ICRR\)](#), marking its first anniversary with significant achievements in global health data management.

Through these endeavors, [QU demonstrates](#) its commitment to fostering a healthier community in Qatar and beyond, with a focus on research, preventative health education, and international collaboration.

17.2.2 SDG @College of Business

QU-CBE is driving sustainable growth and educational excellence through numerous initiatives aligned with the UN's Sustainable Development Goals (SDGs). The [Mena Business Schools Alliance for Sustainability](#)

underscores its commitment to **SDG 13 - Climate Action**. Meanwhile, QU's [Foundation Programme](#) and events like the [supply chain and logistics symposium](#) support **SDG 8 - Decent Work and Economic Growth**. The university also hosted a seminar on [labour market challenges](#) and launched an [Entrepreneurship Award for Qatari Startups](#), further promoting economic empowerment. In **SDG 4 - Quality Education**, QU has introduced a [minor in taxation](#) and organized a conference on [entrepreneurship](#). QU also champions **SDG 10 - Reduced Inequalities** through workshops that [promote diversity and equality](#).

Additionally, QU fosters **SDG 5 - Gender Equality** by conducting [human rights seminars](#) and celebrating [Qatari women entrepreneurs](#). Their [financial literacy workshops](#) also equip communities with essential skills for economic resilience.

17.2.3 SDGs @ College of Engineering

The College of Engineering at Qatar University has been actively contributing to sustainability and innovation, aligning with the nation's vision for a greener future. A notable project involves the development of a [system for monitoring emissions during composting](#), created by Electrical Engineering students to preserve Qatar's environment. This commitment extends to global engagement, as seen in the [Fifteenth World Conference on Energy Applications](#) and the [Global Mobility and Logistics Resilience Conference](#), hosted under the Third Global Congress on Engineering and Technology in December 2023.

Collaborations with governmental bodies are also evident, such as a [training program on phasing out ozone-depleting substances](#) organised with the Ministry of Environment and Climate Change. The College has further partnered with the College of Arts and Sciences to establish a [renewable energy research laboratory](#), fostering interdisciplinary innovation. Student-driven

initiatives like a [solar car competition](#) and a [smart robot for green space maintenance](#) exemplify their hands-on learning approach.

Recognition at global events, including the [World Electric Car Challenge in Abu Dhabi](#), where the College secured four awards, highlights their excellence. Pioneering research includes a patented [DC-DC converter for electric vehicles](#) and the development of a [pipe to reduce diesel emissions](#). These efforts are complemented by workshops such as the [Electrical Engineering Workshop](#), engaging young minds in sustainable technologies.

17.3 STUDENTS AND LEARNING

We are providing our students with diverse learning opportunities that will give them the skills and knowledge to advance the SDGs. We have collaborated with a range of public and private organizations to bring the best learning experiences to our students.

17.3.1 International Sustainability Conference (ISC)

The Center for Sustainable Development at the College of Arts and Sciences hosts the ISC annually, focusing on a different theme each year.

[The 5th International Sustainability Conference](#) highlighted innovative approaches to tackle plastic pollution, uniting global experts to rethink plastics for a sustainable future. Discussions centred on microplastics in marine environments, sustainable plastic management, and bioplastics in a circular economy. With an emphasis on international collaboration, the event showcased Qatar's commitment to aligning local strategies with global best practices, fostering community engagement, and promoting biodegradable alternatives. This platform inspires actionable solutions for a cleaner, more sustainable planet.

17.4 OPERATIONS AND COLLABORATIONS

Partnerships, Agreements, and Memoranda of Understanding

Partnerships are the key to tackling the SDGs. We have 100+ active MOUs in a range of fields. We have entered into partnerships, and we collaborate with different sectors to actively advance the SDGs. A sample of these collaborations and their objectives are presented below:

17.4.1 Global Sustainable Development Report 2023

In partnership with the UN Office for Sustainable Development, Qatar University (QU)'s Social and Economic Survey Research Institute (SESRI) organized a two-day ["Regional Conference for the Arab Region and West Asia - Global Sustainable Development Report 2023."](#) The purpose of this conference is to provide information for the UN Global Sustainable Development Report GSDR 2023, which is scheduled for release in September 2023.

17.4.5 A Sustainable Leap Towards Health Equity

QU's College of Law and the prestigious O'Neill Institute for National and Global Health Law at Georgetown University have forged a [Memorandum of Understanding](#) (MoU) in a transformative move towards sustainability—the MoU's significance in advancing health law expertise and fostering academic exchange. The partnership aims to facilitate student exchanges, cultivate professional skills, and undertake joint research initiatives. This collaboration heralds a future grounded in sustainability principles where legal capacities drive transformative change, aligning with Qatar's national aspirations and global health equity goals.

A LOOK TO THE FUTURE

As an institution, we are taking further steps to continue building on what we have achieved in working towards the SDGs. We hope to drive awareness of and engagement with the SDGs in our university community, nationally and regionally. These further steps include:

1. University Mission, Vision, and Strategic Plan

We are currently developing a new strategic plan for 2023-2028, with new mission and vision statements and new strategic objectives. The plan explicitly expresses our commitment to the promotion of sustainable development through addressing the SDGs. It also includes the developing measurement tools for meeting the goals.

2. Learning and Students

Academic program development and performance improvement, under way in the fields of Mass Communication, International Affairs, and core program, stress the importance of courses in research methodology and practicum hands-on courses in order to enhance autonomous, lifelong learning as a requirement for sustainable development.

3. Research Priorities

We continue to address the Qatar Vision 2030 research priorities that will reinforce and enhance sustainable development in the country. These include work on innovative biotechnology, advanced materials, alternative energy sources (e.g. biofuel, solar, and wind), disease control, environmental protection, and conflict resolution.

4. Leadership

We will continue and expand our role as the leading national university that prides itself

on the quality and job market effectiveness of its graduates, quality and quantity of research output, and engagement with the community and its public and private institutions.

5. Cultural Engagement

We will use our continuing education programs, active research and publications, and presentations and events to promote and spread our culture of excellence, diversity, tolerance, equality, and innovation locally, regionally, and globally.

6. A Future of Sustainable Development

We at Qatar University believe that sustainability is the guiding light to a prosperous tomorrow. We see ourselves as the model for sustainable consumption. Thus, we aim to reach a 50 percent zero waste by 2025, with the management component favouring prevention, repair, and reuse over recycling, landfilling, and incineration. Furthermore, we aim to create a circular economy action plan that involves establishing a governance and monitoring structure to develop a waste measurement and prevention system, initiating a communication strategy addressed to students and employees, and fostering a culture of innovation and social transformation.

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GET IN TOUCH

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