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## Issue 3

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June 2017

### Qatar National Vision 2030

*Building Qatar's knowledge-economy*

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### From Doha to DC

*Spotlight on Qatar's promotion  
of global citizenry via  
international education*

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### Qatar Foundation International

*Creating meaningful connections  
to the Arab world*

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Embassy of the State of Qatar  
in Washington, DC

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## *Foreword*

# A few words from the Ambassador

It gives me great pleasure to introduce the third Q Magazine. This latest edition has a relevant and important emphasis: Our determination to transform Qatar into a blossoming knowledge-based economy.

But what is a “knowledge-based economy,” exactly?

For years, Qatar’s economic landscape has been driven by revenue from traditional resources, primarily oil and natural gas. However, we have long recognized that economic diversification must be a top priority to achieve our ambitious goals set out in Qatar National Vision 2030 (QNV 2030).

We hope that through this magazine, we can share just a few stories of how Qatar is preparing for our future, whether this means investing in technology, healthcare, tourism, or a new generation of entrepreneurs.

It is my desire that readers of this newest edition of Q Magazine discover how Qatar and the US are working together and interacting in a variety of areas to meet shared goals and promote mutual prosperity. It is through shared knowledge and ideas that an economy flourishes, and this has been a staple of Qatar’s efforts in striving for a true knowledge-based economy.

As I begin my tenure as Qatar’s Ambassador to the United States, I am both excited and humbled to continue working alongside my American friends to develop strong relations between two friendly nations.

We have much in common, and I am certain that Qatar and the US will continue to cooperate in a number of sectors, ensuring that this robust relationship continues to grow.

**His Excellency Meshal Bin Hamad Al-Thani**

Ambassador of the State of Qatar to the United States

**Qatar At A Glance:**

*From the Discovery of Oil Through to Today's Diversifying Economy*



**1939**

Qatar's oil reserves discovered



**1950s**

Qatar's infrastructure expanded and modernized with oil revenues



**1971**

World's largest gas field discovered in Qatar



**1977**

Qatar University founded with four colleges dedicated to Education; Humanities & Social Sciences; Sharia Law & Islamic Studies; and Science

**1995**

Qatar Foundation for Education, Science and Community Development founded by His Highness the Father Emir and Her Highness Sheikha Moza bint Nasser



**2005**

Qatar Investment Authority founded to manage oil and gas surpluses and minimize risk from Qatar's reliance on energy revenues

Qatar Financial Center founded to offer a world-leading environment for businesses across a wide range of sectors to develop and expand



**1998**

Virginia Commonwealth University School of the Arts becomes the first international educational institution to open its doors in Education City. It was soon followed by Cornell Medical College, Texas A&M University, HEC Paris, University College London, and many others

**2006**

Qatar hosts the 15th edition of the Asian Games, welcoming a record 45 participating nations and over 9,500 competitors to Doha



**2010**

Qatar wins the bid to host the 2022 World Cup, in line with the country's vision to become a global hub for sports, science, and technology



**2013**

His Highness the Father Emir hands power to his son, Sheikh Tamim bin Hamad Al-Thani, who becomes the eighth Emir of Qatar



**2017**

Qatar prepares to launch its National Development Strategy 2017-2022, seeking to empower Qataris to participate in a knowledge-based economy



**2008**

Qatar launches its National Vision 2030 aiming to transform Qatar into an advanced society capable of achieving sustainable development



**2011**

Qatar launches its National Development Strategy 2011-2016, deepening the country's commitment to increasing the well-being of all citizens through education, healthcare, social protection, and opportunity



**2014**

Qatar wins bid to host the 2019 IAAF World Championships as the country's status as a global hub for sports is further solidified



## Qatar National Vision 2030: *A Roadmap for Qatar's Future*

**F**ew countries have experienced such a dramatic transformation over the past century as Qatar. Once an unknown pearl on the Arabian Peninsula, Qatar has undergone a period of rapid growth and development. Today, Qatar is at a crossroads. Its substantial wealth presents immense opportunities, and also equips it to address some of the future's most pressing challenges.

Qatar has been blessed with a wealth of natural resources, but we have long recognized the need to build a diverse and sustainable economy, one that is based on knowledge, not carbon fuels. That is why, in October 2008, we launched our Qatar National Vision 2030 (QNV 2030).

QNV 2030's aim is simple: to "transform Qatar into an advanced country by 2030, capable of sustaining its own development and providing for a high standard of living for all its people for generations to come." It seeks to build a bridge between the present and the future, and provide a roadmap for successful and sustainable development.

Four pillars underpin this vision: human, social, economic, and environmental.

**Human:** Qatar recognizes that its future success will depend on its citizens. That is why Qatar is establishing modern, world-class education, and health systems. These investments aim to unlock the potential of the next generation of Qatari men and women so they have the skills and knowledge they will need to prosper in the century ahead.

**Social:** Qatar's vision is to build a safe, stable, and more equal society. The State will promote tolerance, openness, and humanitarianism, celebrate its national and artistic heritage, and will also seek to empower women to participate fully in the political and economic spheres. At the global level, Qatar will seek to increase international cooperation, and work with its allies to celebrate and enhance religious and cultural exchange and coexistence.

**Economic:** Qatar's aims are threefold. First, it will ensure sound economic management to create an attractive business climate. Second, it will ensure that it responsibly exploits its hydrocarbon resources, so that "future generations inherit ample means to meet their aspirations." Third, Qatar will spearhead a transition towards a knowledge-based economy to remain competitive for generations to come.

**Environmental:** Finally, Qatar seeks to strike a balance between meeting its development needs and protecting the environment. To do this, the State will build institutions and a legal system that will preserve and protect the environment. This will be underpinned by sustainable policies for urban and infrastructure development.

Qatar's national development plan is more than just a vision. It is the roadmap to guide the country towards a prosperous and sustainable future.

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# Qatar's Investment in Budding Tech Ideas

**T**he Qatar Business Incubation Center (QBIC) is one of the largest mixed-use business incubators in the MENA region. The center empowers entrepreneurs to start and grow their business by providing support and mentorship, financing opportunities, and office space, among other services. Its goal is to develop the next wave of QAR 100 million companies in Qatar.

## Towards a Knowledge-Based Economy

QBIC was founded by the leading entrepreneurship institutes in Qatar: Qatar Development Bank and the Social Development Center. The center was designed to advance QNV 2030, which reinforces the importance of targeting entrepreneurship as a long-term strategy for developing Qatar's wealth into high-value industries and services.

QBIC envisions Qatari entrepreneurs as the future of the nation's business success and economic growth. The center offers entrepreneurs LeanStartup and LeanScaleup programs, which are 10-week courses that provide a hands-on learning experience on starting and growing a company. These programs provide financial

support and unique coaching opportunities to give entrepreneurs the support they need to turn innovative ideas into successful businesses.

## Forming Global Partnerships: Microsoft Qatar

QBIC partners with international organizations to exchange knowledge, encourage investment, and build best practices. Microsoft Qatar is one such partner, having supported Qatar's drive towards a knowledge-based economy since the opening of its Qatar offices in 2003.

In 2015, Microsoft Qatar and QBIC signed a Memorandum of Understanding to provide training and business opportunities for entrepreneurs. QBIC will become part of Microsoft's BizSpark program, which provides free software and training support for start-ups as well as access to a global online community. BizSpark will help Qatari entrepreneurs engage with the global technology marketplace, connect with other budding entrepreneurs, and learn the practical tools they need to succeed.



| Qatar Business Incubation Center

# How Qatar is Investing in a New Generation of Tech Leaders

Qatar continues to invest in the next generation of innovators and business leaders.



| Texas A&M at Qatar

As one of the leading hubs of education and technology in the region, Qatar continues to invest in the next generation of innovators and business leaders to achieve the goals set out in QNV 2030.

A commitment to STEM (science, technology, engineering, and math) entrepreneurship is facilitated through innovative organizations like QBIC and through partnerships with leading universities like Texas

A&M at Qatar (TAMUQ) that produce scholarships and awards for educational excellence.

Since its inception in 2014, QBIC has played a crucial role in funding and supporting Qatari start-ups and small businesses. Led by CEO Aysha Al-Mudahka, QBIC develops its entrepreneurial talent through a variety of workshops and networking opportunities and has helped launch successful

international ventures ranging from fashion products, communications tools, and tech management services like Event Developers and New Line 4 Media.

Schools like TAMUQ are at the forefront of Qatar's STEM education programs and innovative entrepreneurship. TAMUQ's IgniteDoha series is a STEAM (science, technology, engineering, arts, and math) initiative that

develops communication, organization, visual literacy, and presentation skills for young students in a TED-talk-style format. Six TAMUQ students competed in the IgniteDoha finale, receiving feedback and advice from judges from Qatar Petrochemical Company, Shell Oil, Stanford University, and Maersk Oil. Abdulaziz Al-Qahtani, an engineering student, won the competition for his presentation on problem-solving and critical thinking.

TAMUQ has also collaborated with Maersk Oil to organize Dhia: Engineering Leaders and develop initiatives that expose young Qataris to STEM

programs. The initiative has helped hundreds of students pursue professional opportunities around the world. Since 2013, the Dhia partnership has also held its annual STEM Educator of the Year award competition, commending the important and inspiring work of teachers in Qatar who are committed to developing future leaders of Qatar's innovative economy and society.

The investment in these educational and business ventures has accelerated the technological growth of Qatar and continues to augment its dynamic and knowledge-based economic future.

# Qatar Foundation International: *Creating Meaningful Connections to the Arab World*

Qatar Foundation International (QFI), LLC, is a US-based member of Qatar Foundation (QF). QFI operates as both a grant-making organization, and a convener of thought leadership on issues related to global and international education, open education, and education technologies as they intersect with the three core QFI programmatic areas: Arabic language and Arab culture, STE{A}M (STEM plus the Arts), and Youth Engagement.

**Q**FI inspires meaningful connections to the Arab world by creating a global community of diverse learners and educators and connecting them through effective and collaborative learning environments – inside and outside the classroom.

Through its activities, QFI is committed to providing K-12 students in Qatar, the Americas, and the United Kingdom with the intellectual, communicative, and cultural competencies that will enable them to become engaged global citizens.

## QFI works across four themes:

- **Challenge:** Through educational programs, QFI addresses the most pressing challenges of the 21st century
- **Access:** QFI provides access to educational opportunities for students with diverse social, economic, and cultural backgrounds
- **Dialogue:** QFI values discussions that enhance mutual respect, understanding and appreciation of varied voices and perspectives
- **Community:** QFI seeks to build a global community by challenging individuals to rethink how they define and contribute to their surroundings



| Qatar Foundation International event

# From Doha to DC: *Spotlight on Qatar's Promotion of Global Citizenry via International Education*



## Moneera Al-Badi

Moneera Al-Badi is a proud Qatari. She has lived in Qatar all of her life – except for the two

years spent in Washington, DC. While Moneera was working abroad and collaborating with people from different places, she felt a responsibility to act as an Ambassador for her home country and her heritage. When she thought about students learning Arabic, she felt there was a tool missing that could assist them in connecting to the language. Moneera created a device to help students write their names in Arabic as a way to find a personal connection to the language.

With support from Qatar Foundation International (QFI), Moneera designed and patented The Q Wheel or “Madar Al-Huruf.” “Madar Al-Huruf,” which means “wheel of letters” in Arabic, is a valuable, open, and free language

tool that introduces users to the Arabic alphabet. Anyone who is unfamiliar with the Arabic alphabet can write his/her name by matching English letters and sounds to their Arabic phonetic counterparts. The wheel has been used to ease Arabic learning and communication by demystifying the characters, which can be perceived as intimidating.

Due to the success and demand of the physical Arabic wheel, QFI partnered with Moneera and Qatar Computing Research Institute (QCRI), a non-profit, multidisciplinary computing research institute, to adapt the design into a mobile application. The app was subsequently nominated to represent Qatar at the World Summit Award Mobile 2016.



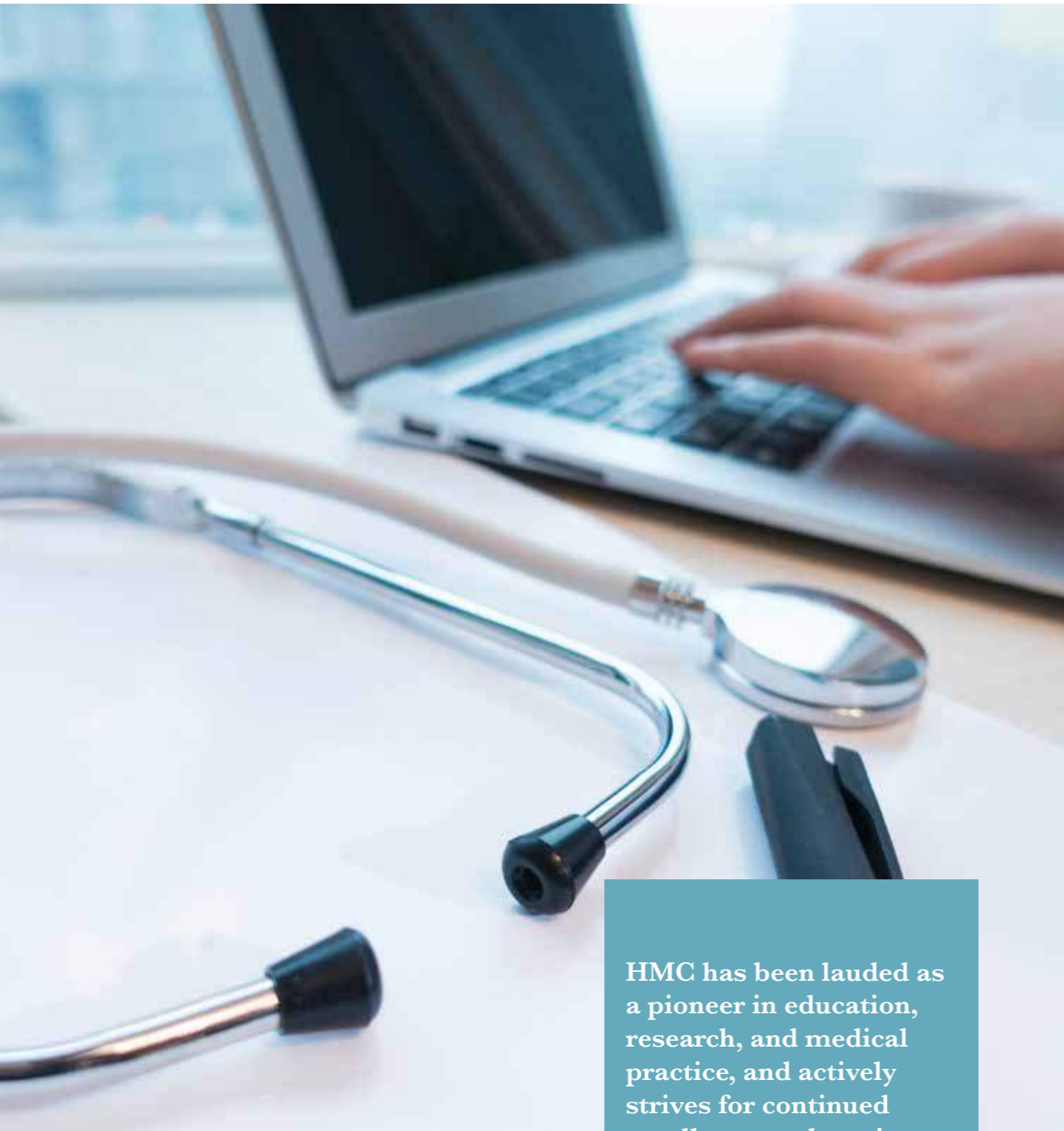
## Mohammed Al-Muhannadi

“Change is what I aimed for,” said Mohammed Al-Muhannadi, founder of 1Earth1Ocean (1E1O). “Contribution to the community was the way to reach it.” After returning from Ocean For Life, a summer program organized by Qatar Foundation International, Mohammed said that he had found a different perspective about many things, most importantly community service.

Mohammed, who has become a leading student advocate for the environment in Qatar, aimed to create a project that would change his country for the better. He wanted to start a venture that would engage and inspire Qatari youth to protect the environment in their country. He spent long hours studying the issues facing the environment in Qatar, but Mohammed also delved into the issues that he felt were facing his local community.

The result was the creation of 1E1O, an organization that helps young Qataris raise awareness of environmental issues through the use of new and social media, and make the change now which will benefit future generations. 1E1O also organizes environmental trips, sets up workshops, and holds local events, such as beach cleanups.

Since he began the project, Mohammed has recruited students from schools across Qatar and united them in a mission to protect the country’s environment. He has led student excursions to Qatar’s coast, teaching his peers about the importance of the mangroves, and showing students how to use QFI’s Mapping the Mangroves app to monitor the coastal ecosystem. During the 2012 United Nations Climate Change Conference, he represented the Qatari youth voice on a panel that included experts from Conservation International, the Qatar Environmental Research Institute, and other regional environmental organizations.



HMC has been lauded as a pioneer in education, research, and medical practice, and actively strives for continued excellence – advancing the role Qatar plays in medicine and healthcare worldwide.

## Hamad Medical Corporation: *Pioneering the Region's Latest Healthcare Innovations*

**H**amad Medical Corporation (HMC) is the main provider of secondary and tertiary healthcare in Qatar and one of the leading hospital providers in the region. The corporation oversees eight hospitals, the National Ambulance Service, as well as home and residential care services. It also boasts research and education facilities, working at the nexus of clinical care, education, and research.

### Pioneering the Academic Health System

HMC has pioneered the Academic Health System as a cornerstone of its practice – combining clinical care, education, and research. The goal: to foster a unified approach to research, teaching, and hospital practice across disciplines to advance the healthcare industry in Qatar and across the globe. Combining engagement across disciplines advances opportunities for innovation within medicine and healthcare, helping to ensure a modern and sustainable workforce.

HMC is the first institution to establish an Academic Health System that brings together all of a nation's academic and healthcare providers into a single partnership, working towards a shared goal of a healthier society. A comprehensive world-class healthcare system

that is accessible to the whole population is one of the goals of QNV 2030, and HMC is leading the way.

### Global Excellence

In January 2016, HMC became the first hospital system in the Middle East to achieve institutional accreditation from the Accreditation Council of Graduate Medical Education – International, which demonstrates excellence in training for medical graduates. Working with international institutions such as Weill Cornell Medical College and University of Calgary in Qatar, HMC strives to lead healthcare and medical research not only in Qatar, but across the world.

HMC is a global leader in its field, hosting an international training center, fundraising initiatives in partnership with international NGOs, and launching global workshops to develop best practices in medical training. HMC has been lauded as a pioneer in education, research, and medical practice, and actively strives for continued excellence – advancing the role Qatar plays in medicine and healthcare worldwide.

# How Qatar Tourism Authority is Establishing Qatar as a Global Tourist Destination

Over the past decade, Qatar's tourism industry has developed into one of the country's burgeoning trademarks and has an increasingly significant part to play in the Qatari economy.

Over the past decade, Qatar's tourism industry has developed into one of the country's burgeoning trademarks and has an increasingly significant part to play in the Qatari economy.

Whether it's relaxing on one of the country's sparkling beaches, witnessing the thrill of an international sporting event, or experiencing magnificent displays of art and culture, travelers are beginning to see Qatar as a center of adventure. Tourism will be vital in Qatar's efforts to diversify an economy that previously has been driven primarily by oil and natural gas revenues.

Qatar has hosted some of the world's premier international sporting events. In addition to the 2011 AFC Asian Cup and 2015 World Handball Championships, Qatar will also host the prestigious FIFA World Cup in 2022, bringing hundreds of thousands of visitors from around the world to the Gulf peninsula. Additionally, Qatar hosts a number of annual sporting events popular with Americans, including the

Commercial Bank Qatar Masters golf tournament, the Qatar ExxonMobil Tennis Open, the Qatar International Rally (motor sport), and the Commercial Bank Grand Prix of Qatar (Moto GP).

In recent years, the Qatar Masters has featured famed American golfers such as John Daly and Ben Curtis, while participants in the Qatar ExxonMobil Tennis Open have included American legends Serena and Venus Williams. Doha is fast developing a reputation as the sporting capital of the Middle East.

But sports are just the beginning in Qatar's evolution into a rich cultural destination. Since 2015, Doha has hosted the annual New York Times "Art for Tomorrow" conference, which attracts over 200 world-renowned art and cultural influencers from more than 30 countries. The conference invites those with knowledge from all across the globe, and aims to investigate the issues that occupy the territory between art and public life, featuring interviews and solution-oriented discussions



| Museum of Islamic Art



| Zubarah Fort



| Katara cultural village, Doha

led by award-winning New York Times' journalists. Nothing quite demonstrates the pursuit of a knowledge-based economy like "Art for Tomorrow," which this year featured The New York Times Company Chairman of the Board, Arthur Sulzberger Jr., as well as renowned artists and journalists, including The New York Times' Roger Cohen.

Also located in Qatar is the Zubarah Fort and surrounding 60-hectare archaeological works, a UNESCO-recognized heritage site that is one of the most extensive and best preserved examples of an 18th-19th century settlement in the region. Moreover, Doha's Museum of Islamic Art displays some of the finest art and artifacts from across the Islamic world, earning it recognition among the world's top cultural institutions.

To accommodate an influx of visitors in the coming years, Qatar has placed a strong emphasis on infrastructure development. Qatar is preparing for a massive wave of tourists in the coming years, and world travelers will surely not be disappointed upon arrival.

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**XLR8**

Held biannually, XLR8 is Qatar Science & Technology Park’s signature accelerator program, designed to provide aspiring regional entrepreneurs with intensive training, coaching, and mentorship.

# Qatar Science & Technology Park

## “XLR8”

The XLR8 program supports budding entrepreneurs to adapt their idea or product to the market, capture interest from potential customers, and pitch to investors for support.

Over three months, Qatar Science & Technology Park’s (QSTP) network of mentors and coaches guide up to 30 teams of five entrepreneurs as they assess the commercial potential of their idea, and transform it into a viable product.

The program not only provides guidance and mentoring, but also a first-class working space for innovators to turn their idea into reality. XLR8 even provides financial support as teams work to create their commercially viable product.

Based just outside the center of Doha in Ar-Rayyan, QSTP is fast growing into an international hub for scientific and technological innovation. The park’s very environment is designed to foster innovation and collaboration, with fully-furnished communal offices and dedicated buildings.

QSTP is not only a hub for research and innovation, it also houses Qatar’s first-ever free zone, designed to attract investment and stimulate exciting technological advancement. It already counts among its members global technology companies including Microsoft, Cisco, Vodafone, and Mitsubishi.

QSTP and the XLR8 program underline Qatar’s commitment to encouraging fresh thinking, entrepreneurship, and cutting-edge innovation as the basis for the country’s rapidly diversifying economy.

In the words of its Managing Director, Dr Maher Hakim, QSTP “enhances the potential for Qatar to make significant contributions to the regional and global technology industry through actively sponsoring the development of viable, home-grown tech products and services”.

# Q&A with Aysha Al-Mudahka, CEO of Qatar Business Incubation Center

## Why was Qatar Business Incubation Center (QBIC) established?

QBIC was established in order to provide all the necessary means that will help Qatari entrepreneurship to thrive and flourish – including funding, office space, mentorship, and guidance.

Today, it has grown into a leading mixed-use business incubation center, providing business support services to help entrepreneurs and companies who either have an idea to start a business, or want to grow an existing scalable company.

It is backed by respected government institutions that are seen as leaders in promoting entrepreneurship in Qatar: Qatar Development Bank and Nama.

## Why is QBIC’s work important as Qatar moves forward to become a knowledge-based economy?

The Government of Qatar is keen on developing and heavily investing in the private sector, as in the long run this diversification is what aids Qatar in transforming into a knowledge-based economy. This is also the vision of one of our founders, Qatar Development Bank, which strives to diversify the market by supporting and creating a strong SME sector. QBIC supports that vision by providing incubation opportunities. We support innovative start-ups and provide them with the tools that they need in order to grow their businesses.

QBIC’s goal is to foster innovative ideas and help create the next business leaders of the country. Since our

establishment three years ago, we have become one of the largest incubation centers in the region. We have aligned our strategy with Qatar National Vision 2030, and are therefore focused on carefully targeted sectors.

For example, we have partnered with Qatar Tourism Authority (QTA) to set up a specialized incubator, QBIC Tourism, which focuses on incubating start-ups in the tourism sector. We have also partnered with Ooredoo Qatar to set up the specialized incubator “Digital and Beyond”, which focuses on supporting start-ups which will provide digital solutions.

## Of which QBIC achievements are you most proud?

Here at QBIC, we’re particularly proud of all our incubated start-ups’ achievements. Their success is our success and nothing makes us happier than to see them prosper and grow.

Some of our start-ups have reached new heights this year that are particularly noteworthy, including Trifoglio, a local brand which aspired to reach international markets.

Trifoglio produces fine leather bags and jewelery inspired by the clover flower. They recently exhibited their products at the Doha Jewellery and Watches Exhibition alongside globally-renowned brands. Their booth was visited by members of the royal family including His Highness the Emir, Sheikh Tamim bin Hamad Al-Thani.

Oola Sports is another example: a brand that designs comfortable and trendy sportswear for women while being mindful of the culture in Qatar and the region.



| Qatar Business Incubation Center

Despite being a newly incubated start-up, they have already acquired a broad base of loyal female customers. Her Highness Sheikha Moza bint Nasser recently wore Oola’s attire on Qatar’s National Sports Day, and continues to show an interest in the local brand.

## What does QBIC seek to achieve?

Put simply, QBIC’s mission is to develop the next QAR 100 million companies in Qatar.

The Government of Qatar is keen on developing and heavily investing in the private sector, as in the long run this diversification is what aids Qatar in transforming into a knowledge-based economy.

# Starting-up in Doha

Encouraging an entrepreneurial spirit and supporting young businessmen and women is a key component of the Qatar National Vision.



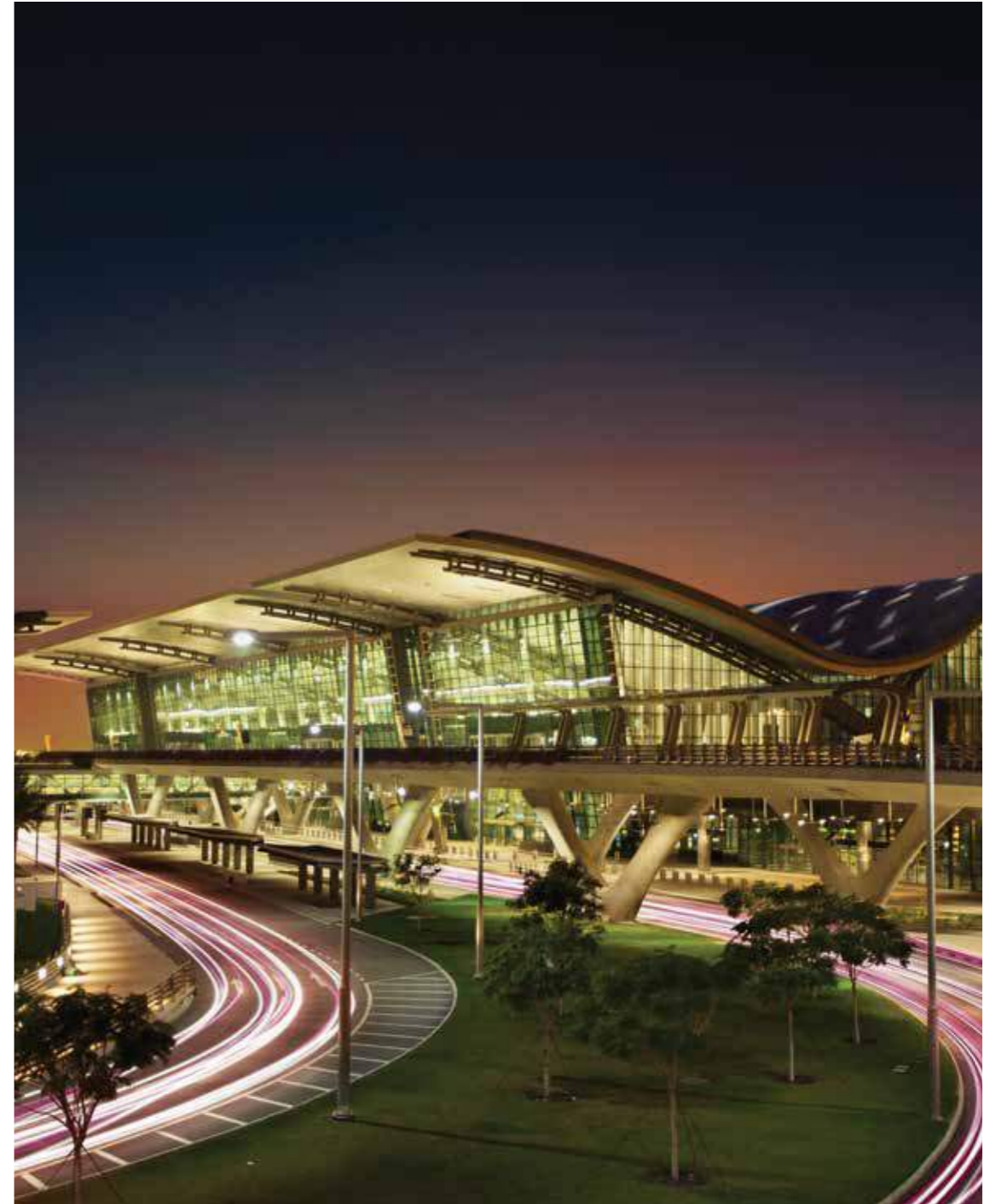
| *Entrepreneurs*

**S**tartup Weekend UNI Doha, which took place between 13 and 15 October 2016, is a prime example of how Qatar's institutions are investing in the next generation by supporting and mentoring aspiring students.

This particular event – a collaboration between the Qatar Development Bank, QSTP, INJAZ Qatar and Hamad Bin Khalifa University – saw 40 participants from across Qatar form teams to develop viable business ideas, before pitching them to veteran entrepreneurs and experts.

Each team was guided by a specialist, who helped participants to test and develop their ideas and prepare for the final presentations to a panel of judges. The panel consisted of representatives from each of the four host partners, and the teams' ideas were judged on their innovativeness, creativity, and viability.

Prizes of QAR25,000, QAR15,000 and QAR5,000 were awarded to the top three ideas. The winners, from Georgetown University in Qatar, created a prototype for an e-commerce website called AhlanGifts.com, specializing in Arabian-themed gifts such as fragrances like oud and bukhoor. The idea simplifies the gift-buying experience, and expands Arab-themed gifts to a new audience.



| *Hamad International Airport, Doha*

# Qatar Mobility Innovations Center

The first of its kind in the region, Qatar Mobility Innovations Center (QMIC) seeks to address challenges in the areas of transport, healthcare, the environment, and sports by pioneering smart mobility systems and services.

**Q**MIC aims to use locally-engineered innovations and knowledge to create technology-based industries that address local and regional challenges.

Among the challenges currently being addressed by QMIC's team of researchers and thinkers are how to improve Qatar's traffic systems, rethinking local postal delivery systems, and deploying automated vehicle systems in the region.

The center's flagship smart living product is Masarak™, a suite of transportation and logistics solutions developed in partnership with Qatar's Ministry of Municipality and Environment. Masarak's suite of products and services tackle major daily challenges on Qatar's roads, such as traffic congestion, workflow



delays, and road hazards. They include a popular mobile app that helps drivers assess traffic conditions and select the shortest and fastest routes.

QMIC is a locally-conceived yet widely-influential set-up that represents the best of QNV 2030 in practice – knowledge-based innovation driving forward a diversifying economy. And its reach is extending beyond Qatar's borders, with January 2017 seeing the signature of a partnership with Belgian enterprise, SmartEnds.

# First edition of *Shop Qatar Festival*



| Al Hazm Mall, Doha

**Q**ataris have long been aware of the wealth of local talent and creativity their country has to offer.

As Qatar's diverse retail sector witnesses an exciting boom, these home-grown talents are finally being recognized internationally.

It was with this in mind that the Shop Qatar Festival was conceived. January's month-long shopping festival showcased 42 small businesses through 30 pop-up

shops across five malls. Visitors were also treated to concerts, comedy shows, and family entertainment programs.

Modelled on the successful Dubai Shopping Festival, Shop Qatar was lauded for positioning Qatar as a shopping destination, while showcasing the work of Qatari designers and supporting local businesses.

The festival was developed as part of the Qatar National Tourism

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**By all accounts, the first Shop Qatar Festival was a resounding success.**

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Strategy, which aims to see the tourism industry contribute more than 5% to Qatar's GDP by 2030. Shop Qatar is one of several programs helping to reach this target, while boosting the retail and tourism industries and diversifying the country's economy.

By all accounts, the first Shop Qatar Festival was a resounding success. Qatar witnessed a 16.8% increase in visitors, the hospitality sector enjoyed a 70.5% occupancy rate, and the country's retail and tourism sectors were energized.

As Qatar looks towards its second Shop Qatar Festival, this economic and cultural event looks set to grow in importance and help cement the country's position as a global retail hub.

## From ‘Will Do’ to ‘Can Do’: *Qatar’s Promising Ecosystem for Young Filmmakers*

December 1<sup>st</sup> 2016 was a proud day for Qatar’s filmmakers, Qataris and those who call this nation home, when a record seventeen films “Made in Qatar” screened at the fourth Ajyal Youth Film Festival, presented by the Doha Film Institute (DFI).

In Qatar, a small but growing number of people are committed to pushing beyond hobby filmmaking, resulting in a steady growth of the country’s film industry as nationals and non-residents step forward to make films locally.

Qatari writer and director Hend Fakhroo says the transformation to the nation’s film industry has been remarkable – and it is not just about the numbers. “It is the production values, and the audience response that our films receive; the landscape has changed for the good. It is a shift from the days when people used to say ‘we will someday do films,’ to now, young people in Qatar making a statement with films made here.”

Only a few years ago, the scenario was different. Then, it was not

only difficult to find talented professionals and support crew, but also challenging to present a film to a wider audience if it did not belong to the traditional Hollywood or Bollywood fare. Qatar today offers the support and guidance needed for young filmmakers, and there is a clear vision to develop the country’s film industry.

Annual industry event Qumra, launched three years ago, supports the growth of the Qatari and



| Qumra, Doha



| Qumra, Doha

regional film communities, and is fast gaining ground as a serious space for mentoring new filmmakers from the Middle East and beyond. A DFI initiative, Qumra lays the foundations to support new projects and provides a nurturing space where filmmakers can learn their craft, develop their skills, and present their work to audiences around the globe.

This year, Qumra featured 33 projects from 25 countries, including 12 films from Qatar, five feature films and seven shorts in various stages of production. These stories, the fruits of the continuous work that DFI has undertaken with these filmmakers, lay the foundations of a new era in Qatar’s young film industry. Participants highlighted the role that Qumra plays in facilitating networking opportunities with international film experts, and for making a tangible difference to their projects across all aspects of film production – from script consultation to international film festival outreach.

Speaking about the assistance that he has received via DFI and Qumra, Fahad Al-Kuwari, the brains behind short film “Angels, Spiders and other Miserable Creatures,” said: “It is very important for us as filmmakers to interact with experts and industry professionals. Qumra serves as

productive time spent with all colleagues as we share insights and experiences. Thanks to Qumra, we are now able to curate our projects in a better way.”

Qumra expands on the DFI’s existing support mechanisms for filmmakers, taking it beyond financial contributions into a more meaningful level of support. Since its inception, DFI has launched initiatives that nurture emerging talents and aid the new generation of filmmakers, making a positive impact in Qatar and the region in setting the foundations for a vibrant film industry and taking local stories to the world.

Emerging filmmaker Rawda Al-Thani, currently making the short film “Reem Planted a Flower,” describes the influence of DFI’s initiative on her career: “I started my journey to film in college with my colleague at Northwestern University in Qatar. I look for local themes from our culture and take it as a story for my films. It is amazing to have this opportunity to develop my film through Qumra. It has been a great support – the workshops and masterclasses helped me have a better understanding of filmmaking.”

# The Growing Success of Qatari Women in the Workplace

**T**he last ten years have seen some important developments in the journey of Qatari women – both at school and in the workplace.

Fields that were previously dominated by men are now industries where women are flourishing. From engineering, to oil and gas, women are holding senior positions across both the private and the public sector.

Today, well over half of Qatari women are economically active and around 20% of senior management positions are currently held by women. There is also a growing number of female entrepreneurs and business owners who are pursuing new and creative ideas with the support of organizations such as Qatar Development Bank.

Qatar Development Bank provides female entrepreneurs with support to develop and pursue their business ideas, including training, market research and, crucially, securing capital. Meanwhile, Qatar Foundation is also working with young female

entrepreneurs to help them build their client base and promote their services.

These developments reflect the evolving role of women in Qatar and the country's commitment to promoting and supporting their active involvement in the economy as part of its 2030 National Vision.

At the heart of this Vision is a focus on ensuring young women and girls have the right educational opportunities. Each year, more and more women are going on from school to pursue further education. In fact, Qatar University's 2016 graduating class comprised almost 75% women. This year, the class looks set to match this impressive statistic again.

Qatar knows that if its economy is to flourish in the post-oil and gas world, the whole of its citizenry, men and women, must play their part. This will require the right conditions and support for everyone to adapt, innovate, and thrive – which is precisely the environment Qatar is working to create.



| Participants at the Qatar-UK Business & Investment Forum



| Secretary-General of the Supreme Committee for Delivery & Legacy, Hassan Al-Thawadi

## Challenge 22:

# *The Supreme Committee's Annual Innovation Award*

In 2015, the Supreme Committee for Delivery & Legacy established the annual innovation award – Challenge 22. The award aims to promote regional innovations that at the same time enhance the infrastructure and visitor experience for the 2022 World Cup.

The Challenge 22 award is currently focused on challenges in various fields, such as sustainability, health and safety, tourism experience, and the “internet of things.”

The sustainability challenge aims to create sustainable outcomes in design, construction, and operation. Health and safety focuses on promoting the well-being of the employees involved. Tourism experience centers on improving the visitor experience and contributing to the long-term diversification of the regional economy. “Internet of things” aims to identify how the internet can create a more accessible, safer, and better tournament experience.

Challenge 22 offers mentorship and opportunities to the participants involved. The competition begins by accepting proposals from throughout the region via a traveling roadshow. Once the participants are filtered, semi-finalists are then mentored by leading scientists and researchers to help develop and refine their proposals.

The contestants are then assessed, and a number of finalists are flown to Doha for business development workshops, and further opportunities to develop their networks and skills. The winners are awarded \$15,000 and have the chance to apply for a grant of up to \$100,000 to develop their idea.

Challenge 22 helps encourage innovation across a broad range of areas and allows people from across the region to contribute to the success of the 2022 World Cup, and Qatar’s long-term future.



# 3

## *Science and Technology*

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Qatar Foundation: Two Decades of Unlocking Human Potential

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Qatar and the Final Frontier

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How Innovation is Improving Delivery of Public Services in Qatar

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Technological Breakthroughs at Qatar Shell Research & Technology Centre

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# Qatar Foundation: *Two Decades of Unlocking Human Potential*

“Scientific research is a human activity that goes beyond geographical and political boundaries to establish the universality of knowledge for the progress and prosperity of mankind.”

– Her Highness Sheikha Moza bint Nasser, Chairperson, Qatar Foundation.

**F**ounded by His Highness Sheikh Hamad Bin Khalifa Al Thani, the Father Emir, and Her Highness Sheikha Moza bint Nasser, Qatar Foundation (QF) has worked for more than two decades to build human capacity and develop Qatar’s sustainable and diversified economy. Since its inception in 1995, Her Highness Sheikha Moza has worked to transform a vision into an organization dedicated to building a prosperous nation.

By driving forward its core mission areas of education, research and development, and community development, QF has successfully brought about the human, social, and economic growth of Qatar. With a focus on developing programs in these three core areas, QF has more than 50 centers that nurture Qatar’s next generation of leaders. At its heart, QF’s mission is to invest in Qatar’s most valuable resource: its people.

At the heart of QF’s success is pioneering forethought and a culture that embraces the importance of advancement and inspires an enduring commitment to human achievement. This culture directly impacts Qatar’s capacity for innovation, science, and technology, taking it to a higher level.

This nurturing environment has provided a platform for celebrating existing achievements and exploring future successes. For example, QF’s Annual Research Conference (ARC), established in 2010, convenes a range of leaders in science and research to share knowledge and insight. The conference brings together global perspectives and applies them to local issues, resulting in a network which provides the necessary impetus for transformative research.

Each year, Her Highness Sheikha Moza bint Nasser invites thinkers from around the world to meet and discuss research challenges and establish a sustainable system within Qatar to address these challenges. Issues discussed include sustainable energy, water security, healthcare, cyber-security, and social needs – and how these issues can be addressed through innovation.

The ARC conferences have resulted in forward-thinking research initiatives, including the Qatar National Research Strategy (QNRS) and the Qatar National Cancer Research Strategy. Since its inception, QF has been central to helping Qatar become a nation that stands as a vanguard for productive change in the region.





| Desert

# Qatar and the Final Frontier

Over the past decade, Qatar Exoplanet Survey (QES) has made significant discoveries in the fields of space exploration and research.

Founded by the Qatar National Research Fund (QNRF), QES uses innovative space exploration technology to expand the known universe and discover new exoplanets – planets that orbit stars other than the sun.

In 2010, QES’ base in New Mexico discovered a new exoplanet, named Qatar-1b. This was followed by a second exoplanet in 2011 and as of 2017, QES has identified five previously undiscovered exoplanets.

In addition to helping humanity charter the universe, Qatar is also pursuing advances in the field of space monitoring. This includes launching Qatar’s first independently operated satellite in 2013, Es’hail 1. This satellite was the first step in a mission to develop a sustainable national satellite industry, and Es’hail 2 is expected to launch in 2018.

Closer to earth, Qatar has also opened up its unique terrain for testing innovative space exploration technology. The terrain of the Zekreet Desert resembles in many respects that of the moon, and Qatar recently welcomed scientists to trial one of the world’s first privately-owned moon rovers.

As scientists across the world continue to push further into the unknown, Qatar is determined to play its part and be a driver for progress and discovery in the field of space research.

# How Innovation is Improving Delivery of Public Services in Qatar

| *The Pearl, Qatar*

In August 2016, Qatar's Supreme Committee for Delivery & Legacy launched the Middle East's first "Nudge Unit", a team of specialized behavioral scientists drawing on economic and psychological research to drive and improve public policy.

Qatar's new Behavioral Insights Unit (QBIU) has since taken a lead role in policy experimentation and is helping develop policies to navigate Qatar and the region towards improved public service delivery.

QBIU, in cooperation with a UK Government-owned social purpose company, The Behavioral Insights Team, presented its initial findings at the November 2016 World

Innovation Summit for Health in Doha.

The report covered three parts: quality of life and well-being of citizens, public health, and the delivery of healthcare. It also explored how behavioral insights can be applied to public policies and the design of public services in a range of sectors.

David Halpern, Chief Executive of The Behavioral Insights Team said, "Behavioral factors – such as diet, smoking, and accidents – now account for the majority of healthy years of life lost. Yet these behavioral factors have received comparatively little attention, and

the behavioral models within the medical community remain surprisingly undeveloped."

Later this year, QBIU plans to host the Middle East's first-ever "behavioral exchange" event. This top-level meeting of globally-renowned speakers, academics, and practitioners will aim to deliver further ground-breaking results to help improve delivery of public services.

# Technological Breakthroughs at Qatar Shell Research & Technology Center

The Qatar Shell and Research & Technology Center (QSRTC) is a vital part of Shell's R&D network and the wider energy sector's research and development community.

Opened in 2008, the center has a \$100 million decade-long investment plan that focuses on bringing cleaner burning and more efficient fuels to the energy market. In order to achieve this, QSRTC collaborates actively with global industry leaders such as Qatar Airways and Qatar Petroleum as well as government departments including Qatar's Ministry of Municipality & Environment.

Through its large-scale investments and close partnerships in Qatar and beyond, QSRTC is able to deliver ground-breaking advances for the energy sector. One major outcome from the center's research has been the development a new aviation fuel – the first new fuel to be licensed for use in the industry for more than two decades.

QSRTC is also pioneering new research to understand Qatar's subsurface, which holds tremendous potential for

| *Shell Aviation Fuel*

oil, gas, and water reserves. This includes a \$70 million, 10-year research project in conjunction with Imperial College London, Shell, and Qatar Petroleum.

Qatar recognizes that the world will need a mix of energy resources to meet growing global demand. Through the work of QSRTC and its partners in Qatar and abroad, the future looks bright for cleaner and more efficient energy sources.



# 4

## *Education and Sport*

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WISE: World Innovation Summit for Education

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Programming a Digital Future for Qatar

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World Leading Research: Aspetar Sports Medicine & Injury  
Research Center

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Royal Ascot and Qatar: A Model Partnership

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# WISE: *World Innovation Summit for Education*

Education is the driver of human development and Qatar Foundation's World Innovation Summit for Education (WISE) is a celebration of innovative and collaborative educational projects that work to build a prosperous future.

Since 2009, WISE has built a thriving global, and multi-sectoral community, which generates fruitful dialogue and productive partnerships to deliver quality education. WISE works towards bridging the widening gap between the education systems currently in place and those required to meet the needs of future generations.

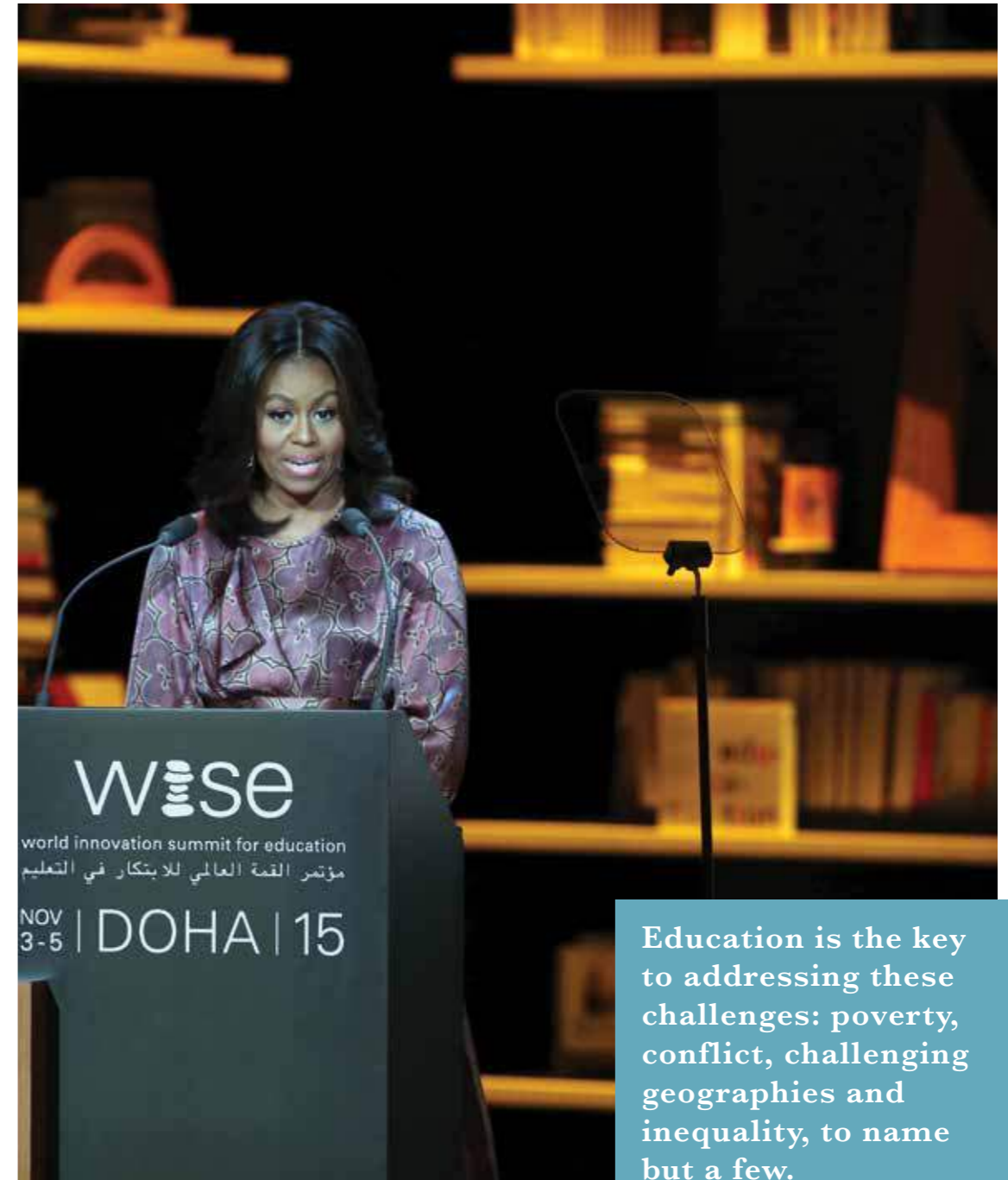
Through an annual conference held in Doha, and a range of initiatives, WISE is a platform for creative thinking, debate, and purposeful action. As the world's challenges appear increasingly intractable, QF and WISE champion the belief that education is the key to addressing these challenges: poverty, conflict, challenging geographies, and inequality, to name a few.

WISE's initiatives include an "Accelerator" program to support and develop innovation in the field of education. Through mentorship programs, WISE selects projects with the potential for scalability, with a view to increasing impact and addressing specific needs. The program

allows Qatar to share learnings in the field of education to a global audience, with the current cohort of applicants hailing from countries as diverse as Canada, the Philippines, the Netherlands, and Australia.

WISE also seeks to recognize those providing an outstanding, world-class contribution to education through the WISE Prize for Education. Every year, laureates are awarded \$500,000 to continue their exemplary work and advocate for education worldwide. Previous winners include Dr Sakena Yacoobi, Ms Ann Cotton, Ms Vicky Colbert, Dr Madhav Chavan and Sir Fazle Hasan Abed.

Dr Yacoobi for example, founded the Afghan Institute of Learning, an organization that provides teacher training to Afghan women to support education for children. Dr Chavan received an award for his role as CEO-President of Pratham, an organization that reaches three million primary school children in India every year.



| Michelle Obama speaking at the 2015 WISE Summit, Doha

**Education is the key to addressing these challenges: poverty, conflict, challenging geographies and inequality, to name but a few.**



# Programming a Digital Future for Qatar

On 27 January 2017, 15 teams of students were hosted by Carnegie Mellon University in Qatar (CMU-Q) to compete in a 24-hour CarnegieApps Hackathon.

The Hackathon followed in the footsteps of last year's successful competition. This year marked the first time, however, that universities outside of Qatar also sent students to participate, with teams from as far afield as India and Australia, bringing a global edge to the event.

Under the guidance of Dan Phelps, Associate Professor of Information Systems at CMU-Q, the event gave students an opportunity to exhibit their programming prowess.

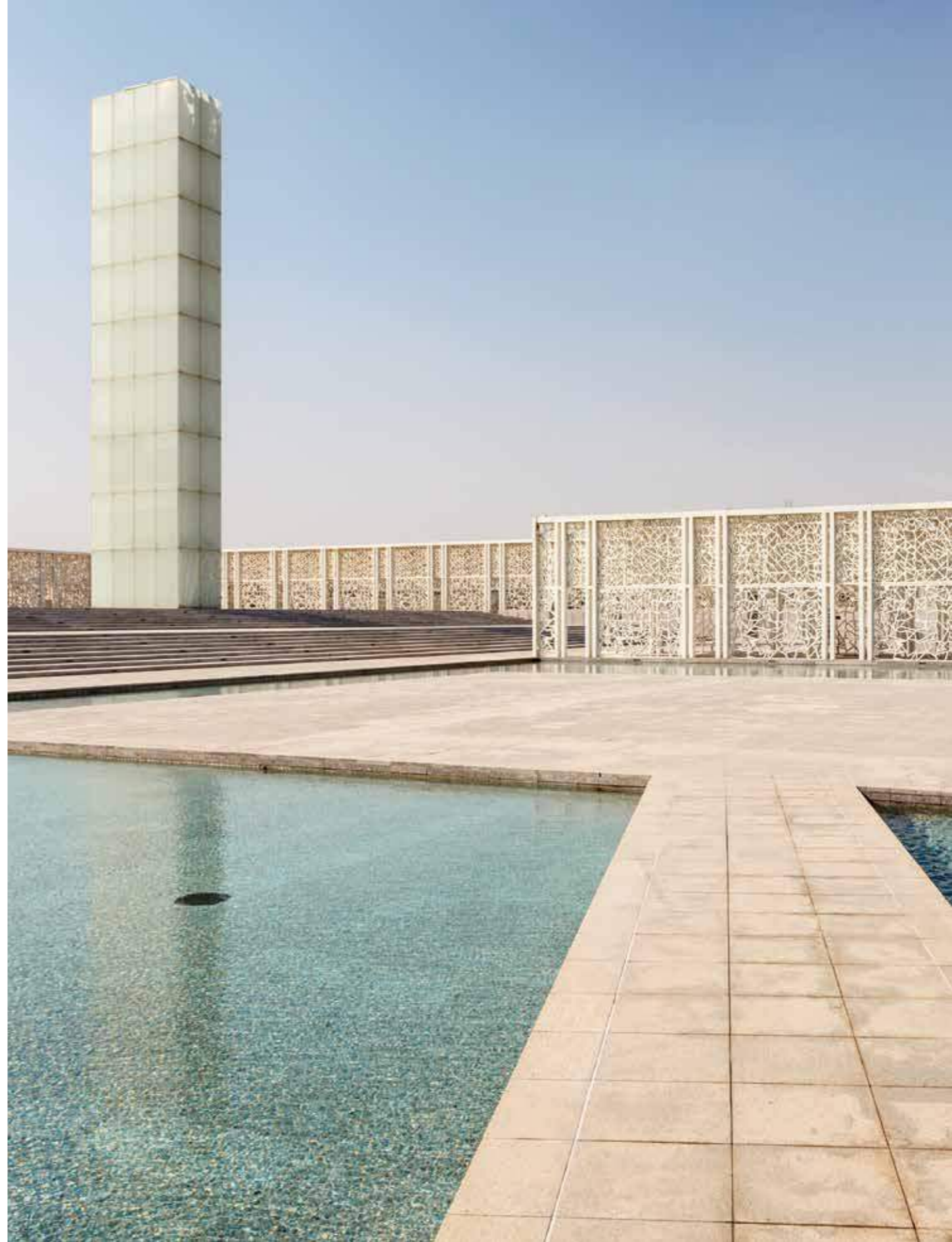
Over the course of the 24 hours, students worked around-the-clock to develop software for the five different prizes at stake: best design, most technically challenging app, best overall app, best rookie team, and best humanitarian technology. The final prize was a

new category for 2017 backed by competition sponsor Education Above All's "Protect Education in Insecurity and Conflict" program.

According to Professor Dan Phelps, the competition allows students to "demonstrate everything they have learned ... tackle one of the challenges ... and apply their skills to help solve that problem in a real world context."

The "best humanitarian technology" prize challenged teams to consider the particular issue of children's safety in conflict-zone schools. The winning team was awarded for innovative software that predicts regions where an attack is imminent or possible by collecting information and specific trend data from the web.

The competition is another example of Qatar's commitment to a digital future, encouraging students to use technology and innovation to solve pressing global issues.



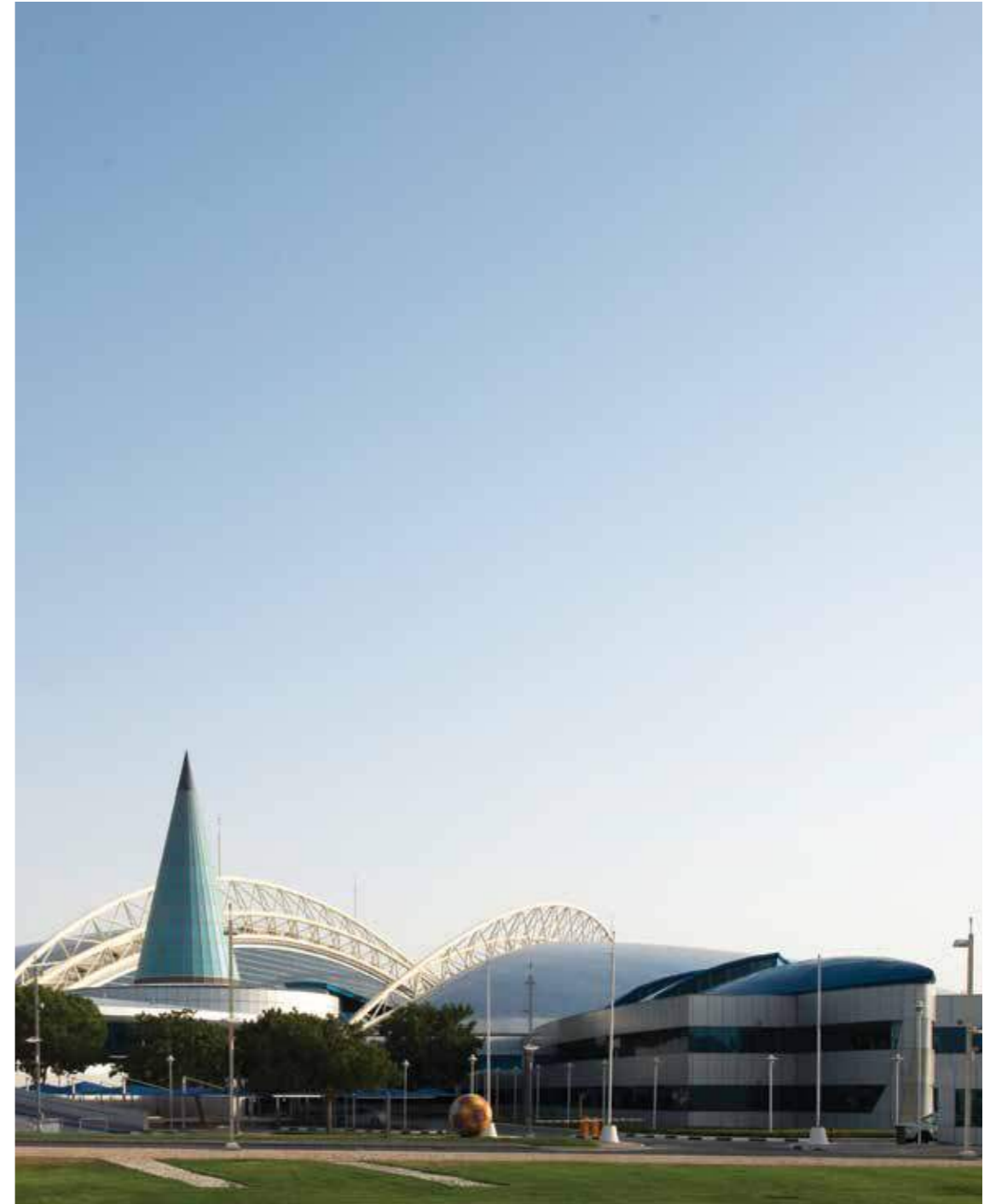
## World-Leading Research: *Aspetar Sports Medicine & Injury Research Center*

**T**he Sports Medicine & Injury Research Center at Qatar's Aspetar clinic brings together a team of world-leading researchers focused specifically on furthering understanding of sports medicine and injuries.

The center places a strong focus on its multidisciplinary approach, with dedicated departments for Sports Medicine, Surgery, Rehabilitation, and Radiology. One of its key focus areas is the study of musculoskeletal injuries, such as hamstring injuries, which are common across a range of sports.

Over the past six years the center has been working with The Qatar Stars League to record injuries and illnesses in Qatar's first football division. This has provided the study with a significant amount of data on injury incidence and patterns in professional football. Once completed, it is hoped the study will provide the required clinical evidence to support the effectiveness of common therapies for muscle injuries such as Platelet-Rich Plasma (PRP).

The center's research findings are frequently published in international peer-reviewed publications and the team regularly presents their knowledge at forums and conferences held by world-leading stakeholders in sports medicine and exercise sciences.



| Aspire Academy, Doha

## Royal Ascot and Qatar: *A Model Partnership*



| QIPCO, Royal Ascot

In 2014, it was announced that Qatari investment body QIPCO Holdings would be the first-ever commercial partner of Royal Ascot in the UK, one of the world's most iconic horseracing events.

Based in Doha, QIPCO has a diverse range of interests, including real estate, construction, oil and gas, trading and services, finance, health, and of course horseracing. This multi-faceted strategy represents QIPCO's commitment to develop an increasingly diversified portfolio in line with its commitment to QNV 2030

This 10-year partnership with Royal Ascot will see QIPCO sponsor some of the biggest races during the event's "Royal Week", the highlight of the racing calendar.

Royal Ascot is far from the limit of Qatar's association with global horseracing. Since 2011, QIPCO has also been the backer for the "Champions Series" of the 35 top British flat races, as well as an increasing number of the races themselves. Over that time, the total prize money for those contests has risen 50% to over \$22 million.

Whether it be as acting as a sponsor, or supporting owners and breeders, a key objective for QIPCO is to promote and increase the popularity of the sport, allowing horseracing to continue to attract the best runners and competitors.

The long-term nature of this model partnership with Royal Ascot will ensure the event remains the highlight of the racing calendar and the pinnacle of equestrian sport for years to come.



A key objective for QIPCO is to promote and increase the popularity of the sport.



# 5

## *Sustainability*

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Building a Sustainable Future: Qatar Green Building Council

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Safe and Sustainable: Qatar's State-of-the-Art Transport Systems

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Arab Future Cities Summit Qatar

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## Building a Sustainable Future:

# *Qatar Green Building Council*



| Downtown Doha

**Q**atar Green Building Council (QGBC) is a non-profit organization providing leadership in environmentally sustainable practices for green building design and development in Qatar.

Established in 2009 by Her Highness Sheikha Moza bint Nasser, QGBC is part of Qatar Foundation. Its mission is threefold: to generate awareness, create understanding

and initiate education; to develop a clear set of environmental and green building guidelines; and to support and pursue research and development.

Qatar's National Vision 2030 makes clear that to be sustainable, the country's development needs must be balanced with the protection and preservation of the environment. To support this, QGBC focuses

on a number of areas to raise awareness and build capacity. This includes focusing on technical expertise development, research and development, and sustainability education and training. It works with a range of experts and government stakeholders to increase awareness and knowledge of green building practices, and build the capacity of industry professionals.

Qatar Sustainability Week, which will take place in October-November this year, is a QGBC initiative that serves as a unique platform to promote Qatar's sustainability vision, as well as allowing for the wider community to engage with those leading the change. It is also an opportunity for stakeholders to showcase their innovative and practical solutions to the environmental challenges faced by Qatar and the wider region.

## Qatar Moving Towards Agricultural Self-Reliance

**W**ith a dry, subtropical desert climate, low annual rainfall and hot summers, Qatar might not appear to be the natural environment for growing fresh produce. However, thanks to a pioneering new state-funded farming system that needs no soil and recycles water, Qatar is aiming to grow 70% of its own vegetables by 2023.

Smart greenhouses with no soil and a "dry air cooling system" with no water required: this is arguably the most advanced hydroponic system in the world. Pilot projects using tomatoes have been highly successful, and peppers, strawberries, herbs, and flowers are all expected to grow well under cover.

This hydroponic technology, developed by a Qatar-Spain collaboration, can also be deployed outdoors. Although limited to Qatar's cooler months, a range of vegetables including broccoli, corn, and zucchini are expected to thrive.

This innovative approach is helping Qatar produce its own safe, abundant, and sustainable food supply. Although not yet fully self-sufficient, Qatar's reliance on imported food is drastically decreasing as these new farming techniques spread across the country.

When deployed indoors, the new technology even permits year-round vegetable production, and at a fraction of present costs due to its low energy consumption.

Agricultural self-reliance is an important component of Qatar's long-term vision as its economy expands and diversifies. However, it's not just about being self-sufficient. A sustainable food supply requires a sustainable environment and Qatar continues to pursue new environmentally-friendly technologies to support its development.



## Safe and Sustainable: *Qatar's State-of-the-Art Transport Systems*

**Q**atar is already paving the way for new innovative metropolitan traffic systems in the region through developments such as the Doha Metro and the Expressway Programme – the world's largest road and infrastructure project.

Now Qatar is also building a new tram system in Education City. Education City is an environmentally-smart city, well on its way to becoming the main educational hub in the region.

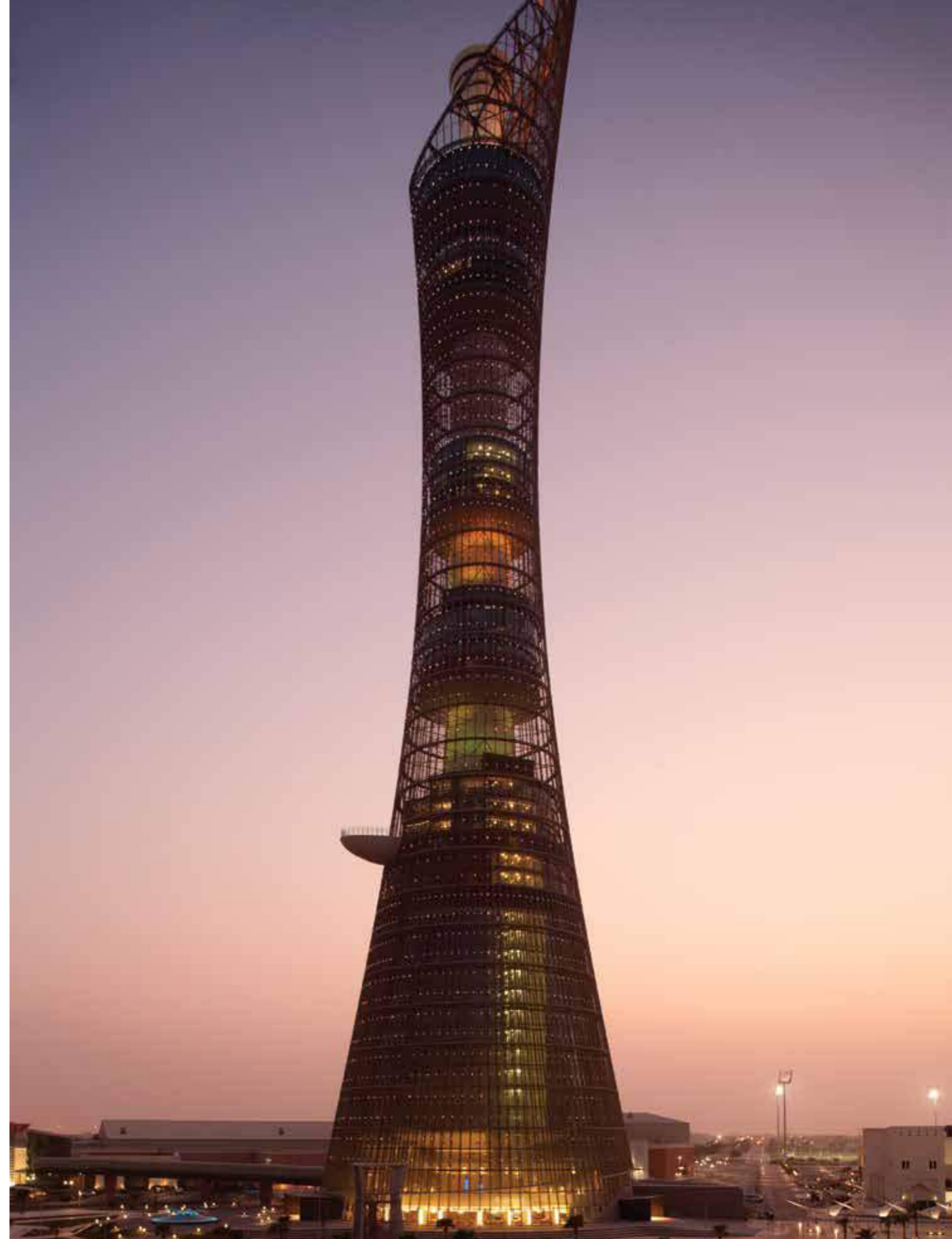
Creating a car-free zone in Education City, the QF Tram System is a ground-breaking project aiming to ensure safety and air quality for students and employees alike. It connects the various parts of Education City, including several universities, cultural spots, and residential areas, in an environmentally friendly and safe way, and serves as a model of future urban development for the region.

Qatar has taken a lead role in promoting more sustainable transport systems in the region. The Global Forum for Traffic Safety and Sustainable Transport Systems, organized by Qatar University in collaboration with the National Traffic Safety Committee, brings together Qatari and international experts in sustainable traffic to exchange expertise and best practice in the field.

These initiatives show how Qatar is using its rapid growth and development as an opportunity to pioneer and trial new ideas in the area of sustainable transport and its integration within the wider urban fabric.



| The Corniche, Doha



# Arab Future Cities Summit Qatar



| View from above, Doha

The Arab Future Cities Summit Qatar is an annual opportunity to explore the future of urban spaces, covering topics such as smart cities, connected transport, and cyber-security.

Hosted by Qatar's Ministry of Transport & Communications and the Ministry of Municipality & Environment, the summit brings together experts from across a range of diverse fields.

This year's event took place in Doha under the theme "Advanced Technology Transforming Qatar's Future". It focused on initiatives that will support Qatar's national cyber-security capabilities, as well as on the challenges of providing a safe online environment as Qatar transforms its urban fabric into a smart one.

Qatar National Vision 2030 outlines goals that are integral to the Arab Future Cities Summit, such as how to adopt sustainable policies for urban expansion and preserve the natural heritage of Qatar, while also ensuring Qatar's place as a global hub for commerce, academia and cultural exchange.

Speaking at the opening of the event, the Chief Operating Officer of international telecoms provider Ooredoo, Yousuf Abdulla Al-Kubaisi, praised QNV 2030 as a "bold vision for nationwide digital transformation, centered on advanced technology infrastructure that fuels smart citizens and the digital economy."

Given the rapid expansion of Information and

Communications Technology, Qatar is making sure it is responsive to changes and developments in these areas, including Digital Citizen Engagement, Smart Government Management, and Data-Driven Infrastructure.

Projects and initiatives such as Lusail, Education City, the state-of-the-art Doha Metro, and the infrastructure around the 2022 World Cup are testament to the country's ambition to be at the forefront of new practices and technologies and develop a smart and sustainable urban ecosystem.

***Photos Courtesy of:***

*Qatar Foundation International*

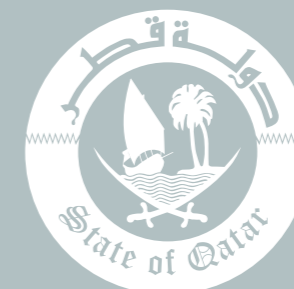
*Royal Dutch Shell*

*Qatar Tourism Authority*

With thanks to *Ambassador Meshal Bin Hamad Al-Thani*

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Issue 3





Issue 3

Produced by the Government Communications Office of the State of Qatar  
June 2017