

# **CASE STUDY**

# ELEVATING POST-GRADUATE EDUCATION IN THE GULF

# A Critical Pillar to the Development of Innovation Ecosystems



"An innovation ecosystem is ideally facilitated by a space where science meets commercial vision and entrepreneurial efforts; where large investments are channeled into human capital; and where governments establish useful policies, regulations and incentives."





# The Role of Post-Graduate Education in the Development of Innovation Ecosystems in the GCC

The idea of innovation is one way to understand the evolution of research universities as they transition from a role focused on providing points of access to knowledge to one that emphasizes acting as social, economic, and cultural agents that both create and apply knowledge with and in their communities. More specifically, the role that Post-Graduate Education plays in innovation ecosystems is to discover and invent the future in part through research, in part through education, and in part through active efforts to move university-derived ideas into industry. The most important product of Post-Graduate Studies is educated students and capable researchers. These students include not just the founders of new industries and technologies but also the future leaders of companies, academia, and government organizations. A post-graduate community of Masters and PhD students in the GCC ultimately supports and contributes to a country's transition into a diversified and knowledge-based economy with a rich research and development (R&D) network.

### **GCC National Research Strategies Focus on Human Capital Development**



### UAE - National Innovation Strategy (NIS)

NIS is dedicated to building a first-rate education system as a foundation for innovation. It aims to promote research and development across universities and produce innovative national talents and capabilities in science, technology, engineering, and mathematics.



### Qatar - National Research Strategy (QNRS)

Develop Qatar's current and future capacity to address Qatar's Grand Challenges of Energy Security, Water Security, and Cyber Security through a well-developed R&D workforce and improved quality of education.



### Oman - National Research Strategy of the Sultanate (2008-2020)

Research is the highest level of any educational system, as it is built on higher education capacity. The National Research Strategy aims to create an innovation ecology that is responsive to local needs and international trends, fosters social harmony, and leads to creativity and excellence.



### Saudi Arabia - The National Science, Technology and Innovation Plan (NSTIP)

NSTIP aims to build a knowledge-based economy by developing Saudi Arabia's human resource capacities; supporting research and innovation activities in universities and research centers; funding innovative techniques; and transferring and localizing technology.



### Bahrain - National Research Strategy (2014-2024)

Improve the higher education and research sector, to enable this vital sector to go beyond teaching to producing knowledge and conducting quality research, which will contribute to the overall development of Bahrain.



### Kuwait - 2030 Vision and Strategic Plan

Kuwait Foundation for the Advancement of Sciences aims to improve public understanding of science, strengthen innovation and research capacity, support talented researchers, translate knowledge into innovation, and drive the potential capabilities of the private sector.



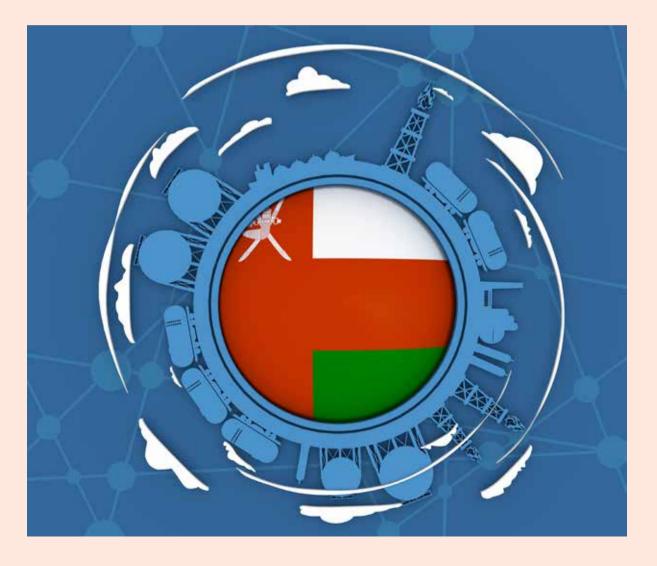
### **Data Insights & Findings**

### **Oman Energy Master Plan 2040**

What Are The Top Strategies Needed To Align Academia And Industry To Deliver An Enhanced R&D Ecosystem In Oman?

- ✓ More Omani PhD students to get their PhD's in Oman.
- Bring Industry and academia together to establish public-private partnerships for R&D.
- Establishment of research cluster & incubators with universities across the country linked with promotion entities.

More Omani students need to get their PhDs in Oman.
Encouraging a higher number of PhD students to study and work in Oman is vital - they represent the intellectual value and home-grown driving force behind top-level research.





### **Advancing Post-Graduate Education in the GCC**

A Critical Pillar to the Development of Innovation Ecosystems

### **Executive Summary**

Gulf Intelligence research shows that Investment in R&D can be seen as buying down the risk that a country or organization faces.

The driver behind the region's investments in R&D is to help achieve the National Vision of their respective states – creating a diversified and knowledge-led economy.

There are a number of ways to get there and R&D is one contributing factor. Education and research are often viewed as two separate things but they are very much a holistic activity. A research-intensive university helps train students not only for today's jobs, but also for careers of the future. Developing a cadre of people who are invested to tackle important challenges of tomorrow is a critical corridor that nations are looking at to buy down their risk. This is easier said than done. How do you build a world-leading research and innovation ecosystem? There needs to be a fresh focus on how to motivate youth to tackle the GCC's most important issues – they are the ones creating career pathways that can lead to solutions. At the same time, in order for this critical pillar of an innovation ecosystem to thrive, there needs to be complete social and economic buy-in to advance post-graduate education. The cultural shift in the GCC has to change from the traditional path of always promoting "doctors, lawyers, businessmen" to encouraging and celebrating future scientists and researchers who are solving the grand challenges that these nations are facing.

Gulf Intelligence produced and directed campaigns in the GCC to enhance the prestige and attitudes toward research-focused education as a major component to building a knowledge economy and the talent required to deliver an innovative R&D ecosystem. As the project gained visibility and legitimacy, so did the significant role of post-graduate education in the development of knowledge economies in the GCC.

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## **CAMPAIGN OVERVIEW**

The Student Awards for the Advancement of Post-Graduate Education recognize, celebrate, and strategically position future industry and academic leaders who will contribute to developing national R&D hubs in the region and transition to role models for the next generation of innovators.

**INFLUENCERS & ROLE** 

**MODELS FOR NEXT** 

**GENERATION** 



Provide undergraduate students with a better understanding about educational programs available, career options, and guidance about continuing education.



Student Seminars enhance the

industry to ensure students have

a better understanding of why

pursue post-graduate studies

and what career opportunities

are available following a post-

dialogue between students, academic Institutions and

**UNDERGRADUATE STUDENTS** 

**A** Holistic **Approach** 

**IMPACT** 

**STUDENT AWARDS** 

The Inagural ORYX GTL Student Awards in Qatar in 2014. Annual Global Outreach and Media Exposure for winners has increased from +75,000 in Year 1 to +2,000,000 in Year 2.

**STUDENT** 

**SEMINARS** 





**THOUGHT** 

**LEADERS** 

INDUSTRY, ACADEMIA, GOVERNMENT **LEADERS** 

Yousef Al-Jaber, Deputy Director Total Research Centre at Qatar & 2016 winner

**ORYX GTL Student Awards** 

Speaks and positioned at The Abdullah Bin Hamad Al-Attiyah International Foundation for Energy & Sustainable Development Forum of Energy Elders





Dr. Lamya Adnan Al-Haj, 2016 Winner OXY **Oman Student Awards** 

International Public Speaker & Lecturer at SQU on Female Empowerment through research







Dr. Omar Said Al -Abri. 2016









The Student Awards Campaign for the Advancement of Post-Graduate Education recognizes outstanding young ndividuals destined to be the region's future industry and academic leaders, who will contribute to building knowledge economies in the GCC. This pioneering award recognizes role models and is focused on celebrating the importance of building Post Graduate Education capacity as a key pillar in the development of Innovation & R&D ecosystems.



### 2014

**Qatar Foundation launches** its first ever PhD program, 'Qatar Foundation Interdisciplinary Doctoral Program in Energy Sciences' (QF IDPES)



### 2015

The 2nd ORYX GTL Student Awards for the Advancement of Post-**Graduate Education** 



The 2nd ORYX GTL student Seminars at Texas A&M University at Qatar



### 2016

The 3rd ORYX GTL Student Awards for the Advancement of Post-**Graduate Education** 



The 3rd ORYX GTL Student Seminars



The 4th ORYX GTL Student Awards Campaign for the Advancement of Post-**Graduate Education** 

**Previous Award Winners** go on to take leading roles at Qatar Petroleum, Total, Qatar Aluminum Company, Qatar University, Stanford University, Qatar Foundation, and Ashghal.





### 2018

The Inaugural UAE Student Awards for the Advancement of Post-**Graduate Education 2018** 

2012

2013

2013

2014

2015

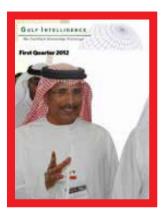
2016

2017

2018

### 2011

"Post Easy Oil" narrative sets in and the GCC begins to ramp up R&D projects to cultivate knowledge economies.



### 2012

Qatar launches the Qatar National Research Strategy (QNRS)



Gulf Intelligence produces the inaugural Qatar Energy R&D Forum on the next steps needed to establish Doha as a global hub for Energy R&D. Increasing Post-Graduate Education capacity is a key recommendation harvested from the gathering.



### 2014

Awards campaign for the Advancement of postgraduate education is launched. The Inaugural ORYX GTL Student Seminars take place in front of 100+ Qatar University Female Students on "Why Pursue Post-Graduate Studies?"



Inagural ORX GTL Student



Based on the success of the Qatar Student Awards the campaign template is implemented in Oman with The Inaugural Occidental Oman Student Awards 2016 for the Advancement of Post-Graduate Education



### 2017

The Inaugural Occidental Oman Student Seminar for the Advancement of Post-Graduate Education





## **Global Innovation Index 2017**



To lay the foundation for future growth, actions that foster human capital and research & development (R&D) are required. Investments into Post-graduate Education directly impacts a country's Innovation Score.

Source: www.globalinnovationindex.org

