

PRESS RELEASE

## **HBKU Research Institute Holds Important Workshop on Photovoltaic Innovation in Qatar and the MENA Region**

Doha, February 07, 2016 – Qatar Environment and Energy Research Institute (QEERI), one of Hamad bin Khalifa University's three national research institutes, held a workshop on February 2<sup>nd</sup> and 3<sup>rd</sup> at the Qatar National Convention Centre that explored innovation in photovoltaic technologies titled "Building-Integrated Photovoltaic (BIPV) Technologies and their Application to Qatar and the MENA Region".

The event was organized by QEERI in collaboration with Fraunhofer Center for Silicon Photovoltaics (Fraunhofer-CSP, Germany) and IRESEN (Research Institute for Solar Energy and New Energies) as partners, with Qatar National Research Fund as its sponsor. The 90 participants included scientists from research organizations and experts in the field of real estate and construction, with local entities such as Kahramaa, Msheireb Properties, Qatar Electricity and Water Company (QEWCo), The Supreme Committee for Legacy and Delivery and Siemens represented at the event. International delegates from the United Arab Emirates, Saudi Arabia, Germany, Austria, Switzerland, the United States of America, and Australia also attended.

The event showed the advantages and resources available for Qatar to integrate photovoltaics (PV) technology in the urban environment, allowing buildings to be converted from energy users to energy producers. At the workshop, architects and building engineers learnt how PV systems can be introduced in buildings with good design, structures and energy concepts, as well as how BIPV products can be multifunctional (electricity generation, weather protection, heat insulation, sun protection, noise protection, modulation of daylight, and security).

BIPV are photovoltaic materials (converting solar energy into direct current electricity) that are used to replace conventional building materials in parts of the building envelope such as the roof, skylights, or facades. They are increasingly being incorporated into the construction of new buildings as a principal or auxiliary source of electrical power, although existing buildings may be retrofitted with similar technology.

A roundtable discussion on BIPV opportunities and needs in Qatar highlighted the challenge of promoting the use of solar energy in Qatar when the cost of energy in domestic buildings is free of charge for Qataris and subsidized for expats. It was noted that there is a big need for sustainability awareness, a task where Kahramaa's Tarsheed program is taking the lead.

Speaking at the event, Dr. Ahmed Ennaoui, Research Director of the Solar Energy Group at QEERI explained: “PV solar cells can be used in houses, buildings and stadiums at large scale, however, Qatar’s desert environment poses unique challenges for PV; the dust and high temperatures decrease their efficiency, in addition, to the challenges of integrating solar energy to the grid. QEERI’s research addresses these issues, so collaborating with both local stakeholders and international experts in this field is vital to our success. This conference has been very fruitful.”

The BIPV workshop also included research posters from local and international scientists. The workshop concluded with a ceremony for the Young Contest Award, where five students from Hamad bin Khalifa University and Qatar University received awards for their innovative projects in solar photovoltaics.

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### **About Hamad bin Khalifa University**

Hamad bin Khalifa University (HBKU), a member of Qatar Foundation for Education, Science and Community Development, is an emerging research university that is building its foundation upon unique collaborations with local and international partners. Located in Education City, HBKU delivers undergraduate and graduate programs through its College of Science and Engineering, Law School, College of Public Health, Qatar Faculty of Islamic Studies, and its College of Humanities and Social Sciences. It also provides unparalleled opportunities for research and scholarship through its research institutes, and its Center of Executive Education delivers customized programs for the business community of Qatar and the region, in line with Qatar National Vision 2030.

### **About Qatar Environment and Energy Research Institute (QEERI)**

Qatar Environment and Energy Research Institute (QEERI) is one of Hamad Bin Khalifa University’s three national research institutes. QEERI plays a leading role addressing the national Energy and Water Security Grand Challenges through Research and Development (R&D). Aligned with the Qatar National Vision 2030’s strategy of transforming the State into a diverse and sustainable knowledge-based economy, QEERI’s water R&D program is developing innovative technologies in water desalination and treatment; water quality and reuse; aquifer recharge; and climate change and atmospheric science. QEERI’s energy R&D focuses on Solar

Photovoltaics (PV), energy storage and smart grids. For more information, please visit  
[www.qeeri.org.qa](http://www.qeeri.org.qa)