



## PROJECT FACT SHEET

## CENTER OF EXCELLENCE FOR ENERGY

Energy self-reliance requires the sustained, collective efforts of the education community working in partnership with the private sector and policymakers. The Center of Excellence for Energy will inform national energy policy formation, link research into renewable energy solutions with entrepreneurs, promote energy efficiency, and develop innovative applied research solutions utilizing both conventional and alternative energy sources. Internationally recognized leaders in engineering, conventional energy technology, and research on alternative energy sources implement the Center of Excellence for Energy, including the Massachusetts Institute of Technology and Center host Ain Shams University.

Through the establishment of the Center of Excellence for Energy, USAID, in cooperation with the Egyptian Ministry of Higher Education and Scientific Research, will help Ain Shams University to produce high quality applied research in energy, deliver world-class training in engineering, and create a dynamic energy innovation ecosystem focused on meeting local challenges and contributing to economic growth. The Center of Excellence for Energy will support research that is vital to Egypt's economic growth and job creation, create scholarship opportunities for students to pursue studies in energy-related fields both in Egypt and the U.S., and develop energy engineering curricula that includes new courses and degree programs that address challenges identified by private sector partners.

Implementing Partners: Massachusetts Institute of Technology and Ain Shams University (with Aswan University and Mansoura University); Life of Project: February 2019 – February 2024; Total Estimated Cost: \$30 million; Governorates: Nationwide

## **MAIN ACTIVITIES**

- Convene Egyptian and American energy experts from academia and the public and private sectors to share best practices and breakthroughs in research; organize symposia to share energy research being conducted in Egypt and the United States
- Shape energy engineering curricula through updating teaching methods, offering experiential learning opportunities, and developing new courses and degree programs that align university education with the needs of industry and the Egyptian government
- Facilitate joint research projects and visiting scholar programs for Egyptian and American faculty, as well as applied research opportunities for undergraduate and graduate students
- Establish scholarship programs and internship opportunities that deepen cross-border learning and private sector expertise. Scholarships will focus on women, financially disadvantaged students, and students with disabilities
- Build local capacity to pursue market-driven applied research projects that address Egypt's needs in the energy sector
- Promote an inclusive educational culture to solve local and global energy challenges
- Foster innovations and technologies that may be suitable for commercialization

## **EXPECTED RESULTS**

- Introduce the latest concepts in engineering education that align with the current needs of Egypt's commercial and public sectors and that catalyze the expertise of industry, academia, and public sector networks
- Support market-driven, applied research in conventional and alternative energy technology and engineering
- Inspire Egyptian students and faculty to discover entrepreneurial solutions to Egypt's energy sector challenges
- Increase effective government policy-making in the energy sector that is informed by high-caliber, collaborative research