



USAID
FROM THE AMERICAN PEOPLE



ACTIVITY FACT SHEET

CENTER OF EXCELLENCE FOR ENERGY

Energy self-reliance requires the sustained, collective efforts of the education community working in partnership with public sector policymakers and private sector champions. USAID's Center of Excellence for Energy informs national energy policy formation, links education and research into renewable energy solutions with entrepreneurs, promotes energy efficiency, and develops innovative applied research solutions utilizing both conventional and alternative energy sources. The Center is hosted by Ain Shams University in partnership with the Massachusetts Institute of Technology, both internationally recognized leaders in engineering, conventional energy technology, and research on alternative energy sources.

This transformational partnership with the Egyptian Ministry of Higher Education and Scientific Research supports education and research that is vital to Egypt's economic growth and job creation, creates scholarship opportunities for students to pursue studies in energy-related fields, and develops curricula as well as new courses and degree programs that address 21st century energy sector challenges. This dynamic energy innovation ecosystem will advance Egypt's progress in an emerging sector.

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

GOALS

- Shape energy engineering curricula by 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

PHOTO: STEVEN SULEWSKI PHOTOGRAPHY

- Establish scholarship programs and internship opportunities that deepen cross-border learning and private sector expertise; scholarships will be prioritized for financially disadvantaged students as well as students with disabilities and women
- Build local capacity to pursue market-driven applied research projects that address Egypt's needs in the energy sector and foster innovations and technologies suitable for commercialization
- Convene Egyptian and American energy experts from academia and the public and private sectors to share best practices and breakthroughs in research; organize dialogues to share energy research and trends in education and technology in both Egypt and the United States
- Promote an inclusive educational culture to solve local and global energy challenges
- Build the capacity of partner universities to respond to disruptions brought on by the COVID-19 pandemic through online workshops and collaborative knowledge exchange on effective approaches to distance learning

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
- Implement effective teaching methodologies in courses and degree programs; integrate education and applied research
- 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 cutting edge, collaborative research