

Success Story

Creating a Market for Energy Efficiency in Egypt

The Egyptian industrial sector provides job opportunities for more than 1.8 million workers, and contributes to the GDP by over 37%. However, it is the largest energy consumer; and consumes around 43% of the total energy consumption at the national level. When addressing energy crisis, it is important to highlight the importance of the industrial sector as a driving force for the Egyptian economy. Applying the Energy Management System (EnMS) to industries is a mitigation strategy to address climate change; and is considered a cost-effective method that increases competitiveness and improves productivity. EnMS provides benefits for companies on different scales through systematic management and improvement of energy performance.

In Egypt, there is a great need for EnMS. It is a growing market where energy experts are an essential resource. In this respect, the Industrial Energy Efficiency Project in Egypt (IEE) implemented by UNIDO and funded by the GEF delivers intensive training, both theoretical and on-the job, to develop a cadre of national energy experts in EnMS who are capable to provide energy efficiency services and solutions to the industrial sector.

The UNIDO EnMS Expert Training Program has a thorough and comprehensive methodology, which combines theoretical as well as practical on the job experience for the trainees. Lasting one year, the program is divided into three modules, during which national and international trainers and experts guide the trainees and provide them with the opportunity to work hands-on with energy-intensive industries on EnMS implementation.

Training & Capacity Building

The UNIDO EnMS Expert training program builds capacities of local experts and provides them with information and skills regarding international energy efficiency standards to develop a cadre with specialized knowledge and qualifications to be pioneers in Egypt. IEE project has been carrying out trainings amongst representatives from universities; to transfer the knowledge to their curricula, industries; in order to create examples, government; to set policies, and private sector consultants; to implement the work. The training consists of modules cycles, each of which consists of 15-20 trainees. Those who participate as trainees are involved in the industrial and environmental sectors, and are nominated by their respective affiliations to participate in the program. Their role is to roll out to the industrial sector to provide technical assistance and ensure that industrial energy efficiency has a positive impact on individual, sectorial, national and international levels.



Qualified Local Experts

By reducing energy costs, increasing productivity, and optimizing operations, energy efficiency guarantees a improving the competitiveness of Egyptian Industries. UNIDO's Expert Training Program qualifies local experts to pursue energy efficiency projects in Egypt. Egypt consumes energy at a rate that is 10-50% higher than the international rate. Investing in the energy efficiency market is essential and presents a great opportunity for saving Organizations' money. Through creating the demand for energy efficiency services in Industry and supplying the market with qualified experts, UNIDO's interventions through the IEE project are creating a market for energy efficiency in Egypt.

More than 75 local experts were qualified by UNIDO as energy management experts. Those experts succeeded in applying EnMS in more than 45 companies. Those experts were able to reach annual energy savings exceeding 1000 GWH in the companies they were assigned to.



Career Impact and Sustainability

To ensure sustainability beyond the project duration, the UNIDO IEE Expert Training Program was designed to be self-propagating by creating both a push and a pull for energy efficiency in Egyptian industries.

The “pull” factor involves implementing successful EnMS in industries and setting examples for other factories to follow. The “push” factor is training national consultants, who would then have the technical know-how to approach industries and offer qualified services.

The trainees have recognized great potential and growing market for energy efficiency services especially in the industrial sector. After gaining an understanding of the framework for energy management and supporting industries in implementing it, the trainees now have an opportunity to provide consultancy services. “After finishing the training program and understanding the importance of energy efficiency, we are establishing a new framework within the institution where we try to promote for energy efficiency principles and concepts, and I will be responsible of it,” said Rabab Abdelhamid from the Tabbin Institute for Metallurgical Studies. Other trainees, have evolved into trainers, offering EnMS training as a core service in Egypt and other countries in the region.

“We got certified just on time,” said Dalia Nakhla, another trainee who now works as an Energy Management Expert. “The market is growing, and now I have the knowledge and skills to respond to the increased market demand”. With an increasing awareness on ISO 50001 and the removal of energy subsidies, factories are now realizing the potential impact of EnMS and demanding more and more services for implementing energy services. This is creating good business opportunities for the trained experts. “We train factories to decrease consumption at low cost through a systematic approach, which benefits them even if they are not aiming to be ISO 50001 certified,” says Nakhla.

