

INDUSTRIAL ENERGY EFFICIENCY









وزارة الصناعة والتجارة الخارجية









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Project Name: Industrial Energy Efficiency in Egypt Project Duration: 2013-2018 Government Coordinating Agency: Egyptian Environmental Affairs Agency (EEAA) Counterpart: Ministry of Industry and foreign Trade (MIFT), Federation of Egyptian Industries (FEI) Executing Agency: United Nations Industrial Development Organization (UNIDO) The project is funded by the Global Environmental Facility (GEF) with a grant of USD 3,950,000. The Egyptian counterpart input is equivalent to USD 24,121,000 in cash and in-kind.

Project Brief description

The project seeks to address some of the key barriers to industrial energy efficiency (IEE), to deliver measurable results and to make an impact on how Egyptian industries manage energy through an integrated approach that combines capacity building and technical assistance interventions at the policy and energy efficiency project level.

Primary target groups of the project are industrial decision-makers (managers), engineers, vendors and other professionals and IEE policy-making and/or implementing institutions. The project will provide technical assistance to develop and help establish market oriented policy instruments needed to support sustainable progression of Egyptian industries toward international best energy performance and to stimulate the creation of a market for IEE products and services.

The project will build knowledge and in-depth technical capacity for IEE, with an emphasis on system optimization and ISO energy management in industry, energy professionals and relevant institutions, such as the Egyptian Environmental Affairs Agency and other concerned institutions. The project will provide technical assistance, including energy audits and support a limited number of pilot IEE projects with high replication and/ or energy savings potential in the key industrial sectors to reach implementation.







Project's ultimate goal

The project ultimate goal is to reduce greenhouse gas emissions by establishing a policy environment that enables and supports sustainable adoption of energy efficient technologies and management as an integral part of industries' business practices; an environment in which a cadre of well-trained and equipped experts in system optimization and energy management assists industries in developing and implementing energy efficiency improvement projects.

Project objective

The Industrial Energy Efficiency project objective is to "facilitate energy efficiency improvements in the industrial sector through supporting the development and implementation of a national energy management standard and energy efficiency services for Egyptian industry as well as the creation of demonstration projects".

Energy and Industry:

Egyptian industry is responsible for approx. 43% of national final energy consumption, and 33% of national electricity consumption (IEA, 2013). Overall industry related emissions account for 29% of the total emissions in 2005 and expected to increase their relative share to ~36% by 2030 (McKinsey 2010).

The final energy consumption per unit of output in the most important industries of Egypt is typically 10 to 50% higher than the international average. Therefore increased EE in Egyptian industry has the potential to make a significant contribution to meeting the growing energy supply challenges facing the country.

UNIDO approach:

The UNIDO approach in energy efficiency is a holistic approach. It will not only focus on technical improvement, but also improvement in policy, management, operations, and financing. It will introduce optimization of an entire energy system rather than optimization of individual equipment component. To ensure sustainability, it will focus on creating a well-functioning local market for Industrial Energy Efficiency services.







Project components and expected outcomes:

Project Components	Expected Outcomes
1. National program to define energy benchmarks and Energy Efficiency policy	Supportive policy instruments (EnMS) for delivering EE in industry and contribute to international competitiveness
2. Awareness raising on industrial EE	Widespread awareness on EE and Energy Management
3. Technical capacity building on EE services	A cadre is available of specialised / certified energy management and system optimisation experts
4. Access to finance for EE improvement projects	Increased access to financial assistance for implementing EE projects
5. Implementation of energy management systems and system optimisation	State of the art energy management practices and EE measures are demonstrated