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## UNIDO Supports Sidpec - First Egyptian Petrochemical Company Certified in ISO 50001

IEE project provided the necessary technical support for Sidpec company for petrochemicals to achieve ISO 50001 in applying EnMS to improve energy efficiency consumed in the industrial processes. This achievement is attained through strong partnership with IEE project in Egypt, implemented by the UNIDO and financed by the GEF in cooperation with Ministry of Environment, the Ministry of Industry, Trade Small and Medium Enterprises and the Federation of Egyptian Industries.

Eng. Ahmed Helmy, Chairman of the company, stated that he is proud that this company was ISO 50001 certified which ensures the company's commitment towards applying EnMS. He mentioned that applying EnMS in production processes will save up to 10% of the energy consumed using simple, no cost measures. Eng. Helmy added that receiving the ISO certificate reflects the staff commitment in quality management to promote energy efficiency and achieve sustainable development.

It is worth mentioning that achieving the ISO 50001 is a result of the technical support provided by the UNIDO. The company's staff was trained on the means of applying EnMS and auditing the procedures and practices according to the international standards to achieve the maximum savings of the consumed energy



without affecting production process or quality. This contributes in reducing production cost, increasing the production and quality and thus maximizing the profit and competitiveness. Also, it aims at decreasing the negative environmental impacts and reducing emissions which in turn contributes to environment protection.

As UNIDO believes in sharing successful models, and as Sidpec company is one of the companies that gained technical support from IEE project in Egypt - a project that prepare national cadres capable of increasing the awareness and applying EnMS in industry - Sidpec company will transfer the knowledge gained and apply EnMS in petrochemicals companies with support from the Egyptian Petrochemicals Holding company.

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Ministry of Trade & Industry  
وزارة الصناعة والتجارة الخارجية

## IEE Project Initiates Cooperation with ECHEM

A seminar was held at the Egyptian Petrochemicals Holding Company (ECHEM) on the 6<sup>th</sup> of November. The seminar was attended by ECHEM management and representatives from Petrochemical companies.

During the seminar, Eng. Hany Abdel Aziz, Vice President for Quality, Safety, Occupational Health and Environment of ECHEM highlighted the importance of Energy Management Systems (EnMS) and its benefits in reducing production costs by utilizing energy efficiently.

Dr. Tamer Hikal, Assistant General Manager for Planning and Projects at ECHEM and IEE project Steering Committee member highlighted the importance of energy savings in the industrial sector due to the energy challenge which is currently facing Egypt.

The IEE project introduced its training programmes on EnMS and standards targeted to industrial enterprises. Sidi Kerir Petrochemicals Company (SIDPEC) is one of the enterprises who was enrolled in the training services provided by the IEE project and achieved good results.

Eng. Mohamed Ibrahim, SIDPEC Quality Control Sector Manager presented the energy savings achieved by applying EnMS and ensured that SIDPEC team has the sufficient capacity and expertise to take the lead in rolling out the EnMS training among its peers with the support of IEE project and Egyptian Petrochemicals Holding Company in the Petrochemicals sector (ECHEM).

ECHEM was established to manage and develop the Petrochemicals industry in Egypt through new promising areas of investment. ECHEM priority is to enhance the growth of Petrochemical industry.



## Spreading the Concept of EnMS to EEAA's Regional Branch Offices

The IEE project in Egypt implemented by UNIDO held an awareness seminar on Energy Management System (EnMS) for the representatives of Egyptian Environmental Affairs Agency's (EEAA) Regional Branch Offices (RBOs) in Egypt on Sunday 12<sup>th</sup> October 2014 at Cairo House, the project held this awareness seminar to highlight the importance of EEAA RBOs role in responding to energy challenges facing the country.



## UNIDO Calls for Improving EE in the World Standardization Day

In the annual celebration of the World Standardization Day for the year 2014, which the member states of International Organization for Standardization (ISO) celebrate, the Egyptian Organization for Standardization and Quality (EOS) organized an event "standards ensure fair opportunities". The event was held under the auspicious of the Minister of Industry, Trade and Small and Medium Enterprises on Sunday 16<sup>th</sup> November 2014 at Semeramis Hotel.

HE Mounir Fakhry Abdel Nour, Minister of Industry, Trade and Small and Medium Enterprises announced that 3 Egyptian companies working in the fields of food, textiles and petrochemicals won the 1<sup>st</sup> places of the Arab quality award presented by the Arab Organization for Industrial Development and Mining.

HE Abdel Nour demonstrated that these awards are considered an international testimony that confirms the commitment of the Egyptian industry in applying the International quality standards and competitiveness in local and global markets.

Eng. Gihan Bayoumi, National Project Coordinator of the IEE project stressed on the importance of improving EE and introduced EnMS as well as services and trainings offered by the project. Moreover, she referred to economic savings that industrial organizations could achieve through no cost / low cost interventions identified along the implementation of EnMS.

It is worth mentioning that Sidi Kerir Petrochemicals (Sidpec) Company, Arab award winner, is one of the companies implementing energy management systems (EnMS) through the IEE project.



## Energy Committee at FEI invited UNIDO

Believing in the role of the IEE Project in Egypt implemented by UNIDO and its remarkable achievements in industrial energy saving, the Energy Committee at the Federation of Egyptian Industries (FEI) invited the project on 16<sup>th</sup> November 2014 to present the provided services and trainings on energy efficiency. Eng. Gihan Bayoumi highlighted the importance of industrial energy efficiency and the ISO 50001 relevant trainings provided through the project. She highlighted success stories that some facilities achieved through the support and services provided by the project.

The mission of the FEI is motivating economic industrial growth on the national level and exports level too through

employing an independent methodology characterized by sustainability and integration to foster global competitiveness along with balancing the needs of the relevant parties.



## UN Celebration in Egypt

On the occasion of establishing the United Nations (UN) on 24<sup>th</sup> October 1945, the UN held a celebration event on the 25<sup>th</sup> October at Aquarium Grotto Garden, Zamalek.

During the day success stories and beneficiaries of the UN projects in Egypt were highlighted. The Industrial Energy Efficiency "IEE" Project implemented by UNIDO participated in this event. The project introduced the services it provide to improve energy efficiency in Egypt. Energy experts and representatives of the industrial sector participated to speak to the media and the public about industrial energy and how to rationalize it.



## First Euro-Egyptian Energy Day

The European Union (EU) in cooperation with the Ministry of Petroleum and the Ministry of Electricity and Renewable Energy organized "the First Euro-Egyptian Energy Day" on Friday 21<sup>st</sup> November 2014 at Aquarium Grotto Garden in Zamalek to highlight the important role of individuals in saving energy.

HE Dr. Khaled Fahmy, Minister of Environment, stated that there is a huge need to use new and renewable energy not only because the increase in population but the increasing needs of individuals as well. He mentioned that Egypt is facing an energy challenge resulting from entire dependence on fossil fuels such as natural gas and oil, referring that the current crisis requires developing a future energy strategy.

HE Mounir Fakhry Abdel Nour, Minister of Industry and Small and Medium Enterprises, declared that diversifying energy resources and developing new and renewable energies is important. HE Abdel Nour mentioned that energy is vital to industry, as it creates job opportunities and encourage industrial production.

Dr. Anhar Hegazy, Head of the Energy Efficiency unit at the Information and Descision Support Center (IDSC), stated that the selection of EU of this place reflects the importance given to citizens and raising awareness in an entertaining atmosphere to capture their interest.

Dr. Anhar added that energy saving awareness campaigns should include interacting activities as well as engaging citizens directly to ensure their response towards saving energy.

On behalf of the Minister of Electricity and Renewable Energy, Mr. Mohamed Mousa Omran, secretary general of the Minister, stated that electric energy is the basic foundation for all projects. He stated that around 1000 megawatt can be saved daily only if the citizens power off unused equipments.

Ambassador James Moran, EU Ambassador in Cairo, stated that the EU have been witnessing successes in the field of renewable energy and emissions reduction, this is reflected in the participation of a number of Egyptian ministries in this event.



## UNIDO/IEE Project Participates in “INTERCEM Energy Forum”

Under the auspices of Minister of Environment and Minister of Trade, Industry, small and medium enterprises, HE Dr. Khaled Fahmy, Minister of Environment inaugurated INTERCEM Energy Forum for examining sustainable, environmentally secure energy options for cement production. This event took place from the 1<sup>st</sup> to 2<sup>nd</sup> of December 2014 at the Conrad hotel Cairo.

HE Dr. Khaled revealed that the environmental standards, regulations and terms for using coal in cement industry identified the period for coal usage from 2015 to 2030, while reviewing the international mechanism for its usage.

HE Fahmy revealed that the industrial sector is one of the largest and most important sectors of development in Egypt, and the development of this sector is a priority for the government which encourage a shift towards sustainable development. HE Fahmy highlighted that industry and environment are the two components for development, that's why environmental considerations must be included within the priorities of industry.

This special forum gathered leading stakeholders from across the cement and energy sectors, government, and other interested parties, to provide a balanced and comprehensive discussion that explored all the energy

options available during this transformational period in Egypt and the surrounding countries.

The IEE project in Egypt implemented by UNIDO participated in the event and Dr. Amr Osama Abdel-Aziz, IEE consultant presented “Energy Benchmarking Study for the Cement Sector in Egypt”, a study that has been prepared through the IEE project. Also the IEE project showed some promotional material to raise awareness of the project activities and services.

The cement industry is an extremely important contributor to the development of the Egyptian economy and it is vital that an economic and environmentally sustainable solution is found to fuelling it now, and in the future.



## Energy Benchmarking Could Lead to the Adoption of Better Policies

Developing countries and the economies in transition account for 60% of industry's total final energy consumption. Industry has significantly improved its Energy Efficiency (EE) in recent decades. However, industry's total energy use continues to grow. In order to make significant reductions, ambitious energy savings measures need to be implemented. A wider adoption of Best Practice Technologies (BPT) would enable significant reductions in energy use in the short term.

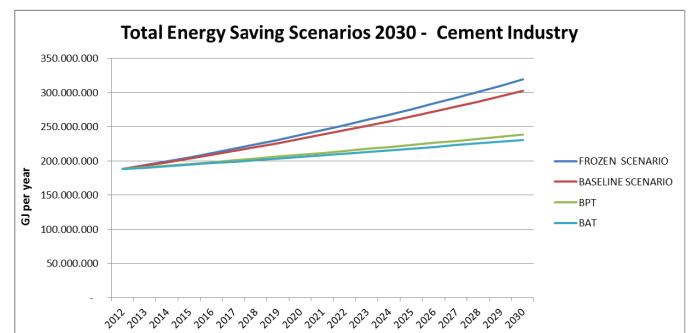
Under this light, the IEE Project implemented by UNIDO has developed energy benchmark reports for 3 energy intensive sectors in Egypt, namely: cement, fertilizers and iron and steel. The reports were developed by 3 national subject matter experts with the support and under the guidance of the Austrian Energy Agency (AEA). For each sector, an analysis was carried out to estimate improvements potential based on primary data collected data from the companies.

An example, for the cement sector in Egypt, data analysis has shown that the most efficient plant has a specific total energy consumption of 3.52 GJ/t and the least efficient consumes 4.6 GJ/t. Comparing these figures to the international Best Available Technologies (BAT) and BPT that correspond to 2.92 GJ/t and 3.62 GJ/t respectively, means that although the best performing plant is more efficient than the BPT however, there is a big opportunity in improving the least efficient plants.

The whole sector improvement potential is based on four scenarios: with the most pessimistic as the “Frozen Efficiency” where no improvement takes place and the most optimistic as the “BAT Scenario” where all

companies reach BAT efficiency by 2030 or 2050.

Analysis shows that the saving potential for 2030 (based on frozen efficiency – BAT) is 88.5 Petajoules (24 TWh) and cumulative savings of 750.5 Petajoules (208 TWh). To put these estimates into perspective, Egypt's electricity consumption in 2012 was ~145 TWh.



Improving IEE might play a pivotal role in securing energy resources for Egypt and hence support the country's overall development. No/Low cost interventions could pave the way and secure some finances to support higher investment interventions.

It is worth noting that these benchmark reports has listed the EE measures and categorized them based on their investment requirements as well as assessing their applicability to some of the surveyed plants.

It is widely agreed that sound financial mechanisms and dedicated policies should act as the locomotive for the process to achieving the best energy performance in the Industrial sector.