



## ECO - Environmental Compliance Office Achievements 2005 - 2006

### ECO Vision

ECO strives to support enterprises in Egypt and other Arab countries in achieving environmental compliance combined with financial benefits.

ECO is an independent centre of excellence for Cleaner Production and Energy Efficiency under the umbrella of the Federation of Egyptian Industries (FEI).

### ECO Mission

Promoting the sustainable application of Cleaner Production (CP) and Energy Efficiency (EE) in order to increase the productivity of Egyptian industry and reduce risks to people and the environment.

#### ECO's aim:

- To encourage industry's compliance with environmental legislation
- To promote environmental investments
- To improve the occupational health and safety situation in enterprises
- To create investment and export opportunities for our clients.

1100 Corniche El Nil, Cairo - P.O. Box 304, 1st Floor  
Phone: +972 2 50 8070 - +972 2 50 8080 Fax: +972 2 50 1778  
e-mail: info@eco-fei.org - web: www.eco-fei.org

### Revolving Fund / Financial Support

Denkva has provided funds (99 million DKK) to be allocated within the industrial sector to support initiatives abating pollution, promoting safe working conditions and ensuring environmental legislative compliance.

A Cooperation agreement was signed in February 2005 between EEA, FEI and the National Bank of Egypt (NBE) for the purpose of operating the ACE Revolving Fund (RF) for investing in new equipment.

The Revolving Fund provides enterprises with the opportunity to make economic benefits and ensure proper compliance with environmental laws. Small and medium size enterprises that are members of the FEI are eligible to apply for loans.

Loans can reach up to EGP 3 million per enterprise carrying a 2.5% interest rate per year.

Loans are repaid over 5 years and funds are reused for financing new Cleaner Production initiatives in other enterprises.

### Statement of enterprises financed through ECO

Status	Amounts L.E	No. of enterprises
Enterprises that received loans	36,660,000	34
Enterprises with complete technical studies and are in the process of being approved	13,661,700	12
Enterprises that are currently in the process of technical study	4,700,000	6

### Total Number of enterprises distributed all over Egypt

Stage	Number of Enterprises
Screening	235
Full assessment	49

### some of the equipment financed through ECO and its financial and environmental impact



### Environmental and Financial Impact

#### ECO - Taking care of the environment... and of business

ECO helps its clients achieve environmental compliance by the application of Cleaner Production technologies (CP) thus reducing the environmental impacts of their business. CP applications in well over 40 enterprises have significantly reduced emissions of GHG (green-house gases), water consumption, and improved the working environment.

ECO's activities comprise five industrial sectors: chemical, engineering, food, metallurgy, and textile; in addition to the cross-cutting energy-efficiency sector. All sectors have contributed to reducing the energy consumption in the enterprises where CP was applied:

- Total electricity reduction 37,173,270kWh/year
- Over all energy reduction 6,071(TOE/year)
- Maxim. substituted by natural gas 6,067(t/year)
- Total reduction of CO<sub>2</sub> 1,281(t/year)
- Total reduction of heavy metals 274kg/year
- Total reduction of wastewater 396,270(m<sup>3</sup>/year)
- Total reduction of SO<sub>2</sub> emissions 3,251(t/year)
- Total reduction of CO<sub>2</sub> emissions 100,420(t/year)
- Total reduction of PM10-emissions 190(t/year)

36,660,000 EGP

Total loans disbursed      Reduction of energy consumption

At the same time, CP application helps our clients attain higher profits due to reduced energy and water consumptions, improved product quality and reduced waste. The annual savings achieved by around 45 enterprises where CP options have been implemented amount to:

Annual savings achieved: 30 Million L.E.

### Technical Studies

- Safe Hazardous Waste Disposal for Pharmaceutical Companies
- Problem of "why and milk permeate" - Why from Waste to Insect?
- Energy Efficiency, Renewable Energy and Clean Development Mechanism activities
- Achieving compliance for the tanneries in El Max area in Alexandria



### Capacity Building

#### Egyptian Technical Consultants (ETC)

In order to help develop a solid foundation of industry consultants, various training sessions have been held in the following topics:

- CP assessment training
- CP options in dry process, Textile Sector
- Environmental Management System (EMS)
- Energy Efficiency (EE) improvements and CP application in the Chemical Sector
- Communication and reporting
- Circular meeting for EE sector

The programs and materials were developed in cooperation with Danish Technical Institute (DTI) and COWI, Denmark.



#### On the job training for factory owners and workers:

- A awareness-raising sessions for environmental issues and the importance of the implementation of an EMS
- Training courses and sessions for the induction of the staff on operating alternative production lines
- OHS awareness-raising sessions
- Circular meeting on Energy Efficiency Opportunities, attended by 8 enterprises representative, 3 Egyptian local consultants and 2 Danish consultants
- Training seminar on "Hygienic Conditions in Dairy Industry" attended by 35 enterprise owners, representatives from the Food Industries chamber and some governmental organizations

#### ECO staff:

- Training of Trainer (TOT) program in Profitable Environmental Management attended by Energy Efficiency Coordinator, within "PREMA Egypt Program" on behalf of GTZ EGYPT and UNIDO, and success to acquire a certificate as a National Trainer
- OHSAS 18001 - Certified Lead Auditor
- Gender Mainstreaming training course, Denmark

### Exhibitions and Conferences



- Arranging a workshop for achieving compliance with environmental laws in Chemical Industries: "The Financial and the Environmental Benefits" attended by 110 enterprise owners
- Arranging training sessions in implementing EMS in the textile industry attended by 16 enterprise owners and representatives
- Arranging a seminar about the current status of the hazardous waste treatment of the Drug Holding Company and requirements for safe management, attended by 60 representatives from pharmaceutical companies
- Participating in the 19th International Conference organized by IAPIS International Association for People - Environment Studies with the

### Participation in International Conferences

- Participating in the conference of the role of scientific and advanced technologies in reducing the chemical risks, arranged by Cairo University
- Participating in the 3rd Global Cleaner Production Conference held in Cairo
- Participating in EAAC Forum for SMEs Development held in Alexandria
- Participating in EAAC Forum for SMEs Development held in Assiut
- Participating in the Regional Arab Meeting on chemical hazard communication and the Global Harmonized System (GHS) for classification and labelling of chemicals implementation for Arab countries
- Participating with 3 papers in the 3rd International Conference of the Future of Textile Industry, arranged by The National Research Centre in Cairo

### Memberships in relevant National Committees

- The National Coordination Committee (NCC) regarding the strategic approach for international chemicals management (SAICM)
- The National Committee for Crusts/Ferrous Development
- The National Committee for Sustainable Development
- The Committee for developing the curricula of the technical education for Textile Industries
- The Technical committee for the international electrochemical commission

### Publications

Industry and the Environment Magazine  
The aim of the magazine is to promote Cleaner Production (CP) methods in Egyptian industry and to support the industry in its efforts to introduce CP methods, practices and technologies. The aim is furthermore to encourage industry's compliance with environmental legislation  
three issues have been published

- Office profile
- Case studies
- Fact sheets
- OHS posters
- Awareness articles published in various newspapers and magazines

### Agreements and Memorandum of Understanding

- Three individual contracts were signed with the Canadian International Development Agency (CIDA)
- MOU signed with Business to Business (B2B) program
- MOU signed with the National Bank of Egypt (NBE)
- MOU signed with The Industrial Development Bank
- MOU signed with EAAC for consulting and training



### Occupational Health and Safety (OHS)

A close contact has been established with the relevant chambers and a number of meetings have been held with chamber management and staff members. Sector specific workshops and OHS seminars have been held, where OHS brochures were launched and personal protection equipment (PPE) was given out to the enterprises that participated.



### Gender Issues and Child Labour

Women and children benefit equally from the improvements in working and living conditions caused by the implementation of ECO's recommendations.

Addressing the working environment issue, ECO requests that the owners of the factories it collaborates with give suitable jobs for children (in case any are hired) avoiding very hard and dangerous work. Fulfilling this request is conditional for the factory to receive ECO investment support.



ECO has also developed a gender action plan strategy with the objectives of raising the awareness of the working women with respect to her rights and duties through improving their identification thereof (particularly in entities with a large working force of women), contributing to the fair treatment of women in the industrial sectors and enhancement of available job opportunities by developing the skills of the working women.

In this scope, the following actions have been planned and are in the process of implementation:

- Designing a booklet comprising all the information on the rights and benefits guaranteed by the state to the working women
- Creating a booklet comprising the most significant environmental information
- Organizing awareness seminars to educate the working women about her rights provided for by the national laws and legislation, and about the prerequisites of safety and occupational health, in a bid to protect women from the hazards to which they may be subjected during work

### Contribution to the FEI Environmental Affairs Committee's activities

- Preparing a technical study for the development of coal - ferrous
- Follow-up on the cooperation between the members of the Federation of Egyptian Industries and the National Bank of Egypt to obtain credit for environmental projects
- Formation of a joint committee between FEI represented by the Environment Affairs Committee and the Egyptian Environmental Affairs Agency to discuss the problems of the foundries in Egypt
- Study the compilation of a technical guide to help workers on wood industries to follow the technical instructions and environmental requirements
- Cooperation with Tetra Pak Company to follow up on the establishment of the National Council for Waste Recycling in cooperation with EEA

### ECO's Annual Honouring Ceremony

To support and encourage industry owners to sustain their cleaner production initiatives and to show appreciation for the efforts they exerted over 2006, ECO has distributed certificates and tokens of appreciation to the best industrial facility within every industrial sector over a Ramadan Iftar buffet. The event was attended by representatives of the industrial community, FEI leaders, Egyptian Environmental Affairs Agency, and the Danish Ambassador in Egypt.

