



Federation of Egyptian Industries

Environmental Compliance Office and Sustainable Development

Eng. Ahmed Kamal
ECO Manager

Establishment steps

- The “Environmental Compliance Office - ECO” was established in accordance with article 3 of presidential decree no. 64 of 2001 under the aim of presenting services to the industry concerning environment and the techniques of cleaner production.
- The office is established to link between donor agencies and FEI members, that it will achieve sustainability and self-funding.
- Appointment experts for the different industrial sectors.



FEDERATION OF EGYPTIAN INDUSTRIES
الاتحاد الصناعي المصري

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”



EGYPTIAN CLEANER PRODUCTION AND ENERGY EFFICIENCY INSTITUTE
المعهد المصري للإنتاج الأنظف والكفاءة الطاقية

ECO Aims

- to encourage industry's compliance with environmental legislation
- to promote environmental investments by offering soft loans
- to improve the occupational health and safety situation in enterprises
- to create production and export opportunities for ECO clients



FORNIA EUROPEA, A PARLAMENTO EUROPEO
المنتدى الأوروبي ... للتجارة والاستثمار

Financial Support

An agreement was signed by EEAA, FEI and the National Bank of Egypt (NBE), to implement CP in the industrial sector to support initiatives against pollution and encourage environmental compliance through providing soft loans 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. .



الهيئة العامة للغابات والبيئة
الهيئة العامة للغابات والبيئة

Key Elements of the work

Based on practical application instead of producing theoretical reports. This happens by:

- Facilitating and supporting the implementation of cleaner production technology and the environmental management systems in the industrial enterprises.
- This shall be applied by offering soft loans with a maximum value of 3 million Egyptian pounds in order to implement small environmental investments with cooperation with the NBE.
- Supporting enterprises with consultancy in environmental concepts.



مؤسسة المحافظة على البيئة
Environmental Conservation Fund

Key Elements of the work

Organizing workshops for the workers throughout Egypt:

- Great Cairo initiative
- Alexandria initiative
- Kafr El Sheikh initiative
- Aswan initiative
- Mansoura initiative
- El Mahala initiative
- Meet Gamr initiative
- Assuit initiative



Key Elements of the work

Organizing workshops : Meet Gamr initiative



الوزارة العامة للصناعة والتجارة والحرف اليدوية
Ministry of Industry, Trade and Handicrafts

Key Elements of the work

Practical training programs directly in the production lines



FORNIE RESEARCH, A SAMSUNG ADVANCE
الإنتاج المتقدم ... المعرفة المتكاملة

Key Elements of the work

Study tours to introduce the most advanced technology of the cleaner production in industry .



❑ Study tour to South Africa for twelve factories for Engineering industries



❑ Study tour to Romania for ten factories for Textile industries



FORNIA PER REGIONI, A SOSTEGNO AZIENDALE
الإنتاج الأكاديمي ... التنمية الاقتصادية

Key Elements of the work

Study tours to introduce the most advanced technology of the cleaner production in industry .(Continued)



❑ Study tour to Denmark for eleven factories for Metallurgical industries



❑ Study tour to Denmark for ten factories for food industries.



EGYPTIAN ENVIRONMENTAL AFFAIRS AGENCY
الإتحاد الأوروبي ... للتعاون والتنمية

Key Elements of the work

- Capacity building for the Egyptian technical consultants to increase their capabilities in implementing the cleaner production in the industrial sectors.



مبادرة المنتدى المصري للبيئة النظيفة

Work sectors of ECO

- Eco is work in applying the cleaner production's methods and environmental management in small and medium enterprises and boosting this application.
- There are five sectors in which ECO is working in its primary stage:
 - ❑ Textile industries
 - ❑ Food industries
 - ❑ Engineering industries
 - ❑ Metallurgical industries
 - ❑ Chemical industries

in addition to Energy Efficiency Sector



FORNIE REFINITION, A SANSUCTION APPOINTEE
الاستاذة الانشائية ... الترقية الصناعية

Linking Stakeholders to Decision Makers

- Close contact to industry stakeholders through the Federation of Egyptian Industries (FEI)



Gender Issue, Child labor and Poverty alleviation

These issues are important priorities when selecting among industries to benefit from the project services. ECO management is focused on supporting working women through improving working conditions inside the factory, capacity building, improving living conditions and organizing awareness meetings for factories owner concerning child labor law in Egypt.



Occupational Health and safety

Organizing seminars to raise the awareness of the factory owners and the workers toward the importance of OHS.

OHS gears are distributed to the industrial sectors according to their needs.



Technical Studies

ECO Supports a Study for Safe Hazardous Waste Disposal for Pharmaceutical Companies

The pharmaceutical sector is not yet part of the sectors covered by ECO services, however, ECO/FEI is working to solve the environmental issues facing the Egyptian industries.

A study was prepared by ECO, tackled safe methods for disposal of hazardous substances.



Technical Studies

Whey study

ECO prepared a feasibility study concerning the problem of whey and milk permeate, which are of environmental concern for the dairy industry in Egypt.

A conference was held to shed light on the importance of the whey attended by representatives of enterprises, EEAA, invest authorities, businessmen associations, banks and donors agencies.



Business Networking

- National Bank of Egypt (NBE)
- Industrial Development Bank (IDB)
- CIDA
- B2B
- IMC



Cooperation with the NBE

- With the emergence of new environmental fields of investment, there was a need for an untraditional form of financial management that seeks to boost environmental investments and extend facilities to the project .
- An agreement was signed between FEI and EEAA and the National Bank of Egypt ,whereby the bank was assigned to manage the program's loans.
- By virtue of the agreement, the loan instalments shall be paid annually over the term of one to five years including a grace period of 1 year at an annual rate of 2.5%.



Statement of enterprises financed by the office

The current state	Total amount	Number of enterprises
Enterprises with a paid out	64.400.200	52
Enterprises with complete technical studies and are in the process of being approved	4.600.000	4
Enterprises that are currently in the process of technical study approved	3.000.000	2



الهيئة العامة للغذاء والدواء
... الصحة العامة ...

An application model of the cleaner production in the Textile industries



The factory's state after implementing the cleaner production suggestion

The dyeing tanks before implementing the cleaner production procedures



The cleaner production suggestion:
Replacing the tanks by closed environmental friendly dyeing machines.



الوكالة الوطنية لحماية البيئة
National Environmental Protection Agency

An application model of the cleaner production in food industries

The manual packing line before implementing the cleaner production suggestion



The production line after implementing the cleaner production suggestion



The cleaner production suggestion: replacing the manual packing by an environmental friendly automatic packing machine



الهيئة العامة للغذاء والدواء
الهيئة العامة للغذاء والدواء

An application model of the cleaner production in the Engineering industries

The galvanization line in a painting factory before implementing the cleaner production



The galvanization line after implementing the cleaner production suggestion



**The cleaner production suggestion:
replacing the painting tanks by a half automatic environmental friendly painting line**



ENVIRONMENTAL CONSERVATION DEPARTMENT
MINISTRY OF NATURAL RESOURCES AND ENVIRONMENTAL CONSERVATION

An application model of Energy Efficiency in the Chemical Sector



Before Implementation

As first stage, 2 furnaces used for melting lead and antimon alloy by new close furnaces working with L.P.G to melt the alloy and casting the grid energy efficiency

An application model of Energy Efficiency in the Chemical Sector



After Implementation

- Reducing of electrical consumption due to decrease the heat losses.
 - Reduction the percentage of lead oxide emitted in the work environment
 - Improvement of the work environment and improve the quality of the product and at the same time increase the productivity.
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An application model of the cleaner production in the Chemical industries



Implementation After

Automatic filling and leveling



Before Implementation

Manual batteries Acid filling



CP Pays!

30 SME achieve annual savings of L.E. 16,799,183 through CP application due to reductions in raw material consumption, increased productivity, and energy savings.

CO₂ reduction: 41,727 ton/y

SO₂ reduction: 1,308 ton/y

PM₁₀ reduction: 11 ton/y

Pb reduction: 18 ton/y

amount of Mazout switched to N.G.: 6,740 ton/y

electrical energy reduction: 7,964,145 kWhr/y

energy reduction (incl. electricity): 3,075 TOE/y

solid waste reduction: 32,810 ton/y

COD reduction: 380 ton/y

wastewater reduction: 147,409 m³/y

L.E. 36,660,000

Total Loans Disbursed

Environmental Benefits Achieved

Future Goals

- Expand the frame of work to cover all industrial sectors
- Expand the frame of work to include large factories and business sector factories
- CDM Activities



مجلس التعاون الخليجي ... للتعاون البيئي

Thank you

