



# EcoBusiness



## Profile 2024

Last Update: August 2024

## About Us

**EcoBusiness** is a consulting firm established in 2005 to serve the rising market demands for sustainable development, energy conservation and environmental management in Egypt and the Middle East. **EcoBusiness** core group is composed of highly experienced multidisciplinary specialists in the fields of, environmental management, environmental planning and energy efficiency.

Capitalizing on the long-standing experience and in-depth knowledge of its core group, who have been for long involved in initiating and managing major environmental activities in Egypt and the Middle East. Through its core team and its associate experts, EcoBusiness has served a wide spectrum of clients, including municipalities, governorates, tourism developers, petroleum companies and industrial sector, as well as bilateral and multilateral development and financial institutions.

This experience enables **EcoBusiness** to provide its clients with workable solutions to an array of complex developmental problems in a fully integrated and cost-effective way and to ensure that each project is completed on time, within budget and in accordance with the client's quality standards.

## SCOPE OF ACTIVITIES

**EcoBusiness** offers a full range of consulting services:

- Environmental Assessment
- Energy Efficiency and Environmental Auditing
- Marine Surveys & Mapping
- Coastal Management and Protection
- Environmental Measurements (*Air quality, noise modeling, seawater analysis*)
- Environmental Management Systems and Certification Preparation
- Sustainable Tourism Best Practices (infrastructure and operations)
- Sustainable Tourism Planning
- Solid Waste Management studies
- Environmental Training
- Environmental Planning
- Participatory Slum Upgrading
- Soil Investigation & mapping
- Geohazards Assessment

## Our Team

We have established a core team composed of experienced professionals who do most of the work. In addition, we have wide national and international access to specialists and experts in most of the fields that we deal with.

In addition to the core team, [EcoBusiness](#) relies on reputable specialized experts who are among the associate consultants as follows.

## Clients

Our client base listed below (in Alphabetical order):

### Consulting firms

- PPM (Bulgaria)
- Rina (Italy)
- D'Appolonia (Italy & Egypt)
- Eco Plan, Architects and Planners (Egypt)
- Econoler (Canada)
- Hamza Associates (Egypt)
- MTBS (The Netherlands)
- Iberensa (Spain)
- K & A Designs (Egypt)
- Mahmoud Youssry and Associates (Egypt)
- AQUALIA (Spain)
- Scale Group for Urban Development (Egypt)
- United Planning Consulting (Egypt)
- Weidmann Associates Inc
- Khatib & Alami (UEA & Egypt)

### Private Sector Contractors and Service Providers

- ANSALDO ENERGIA SPA
- Aqua Marine Taba Resort
- AQUALIA Infra structures
- Arab Contractors
- Arabian Cement Company
- Daghash Group
- Damietta Furniture City (DFC)

- EGYPTIAN RESORTS COMPANY
- EgySal
- El-Salam International for Tourism Development
- El-Wadi Holding Company
- EMAK for Utilities and Services
- Falcon for Tourism Investment
- International Drug Agency
- Johnson Wax-Egypt
- Light House for Tourism Development
- Medic Tours
- Medica Tours for Tourism Development
- Metito Water Treatment Company LLC
- Misr for Tourism Investment
- Misr Iran for Textile and Weaving (MIRATEX)
- Nubia Sharm for Tourism Projects
- Oberoi Hotels and Resorts
- Ocean Blue for Tourism and Real Estate Development
- ORASCOM Construction
- Oriental for Urban Development
- Qatar National Company for Hotels (Renaissance Sharm El-Sheikh)
- Residence Development
- SCIMITAR Production Limited
- Sunrise Hotels and Resorts
- Talat Mostafa Group – Port Venice Resort
- Taqa Arabia Group
- The United Company for Manufacturing Paper and Cardboard – Uniboard. (subsidiary of Al-Shourouk for Modern Printing)
- TRAVCO Group
- Venice for Tourism Resorts
- AL HAZEK Construction
- DESALIA, S.L.
- Emaar Misr

### **International Development Agencies**

- United Nations Development Programme (UNDP)
- Central European University
- Danish International Development Agency

- United Nations Environment Programme (UNEP-RISO)
- United Nations Industrial Development Organization (UNIDO)

## State Owned Enterprises

- Tabbin Institute for Metallurgical Studies
- National Institute of Oceanography and Fisheries (NIOF)
- Cairo University Center for Hazard Mitigation, Environmental Studies and Research

## Completed Projects

This section lists **EcoBusiness** major areas of expertise exhibiting a summary of completed projects in which **EcoBusiness** founders, partners and associates have contributed major efforts to their formulation, implementation and success.

## Environmental Studies for Major Development Projects

El-Sokhna Water Desalination Complex Expansion (340,000 m<sup>3</sup>/day) - Armed Forces Engineering Authority, Ministry of Defense – Gulf of Suez.

Subcontracted by DASALIA & Hassan Allam to prepare the Environmental Impact Assessment for El-Sokhna desalination plant expansion.

Nabq Sea Water Desalination Plant (12,000 m<sup>3</sup>/day) - Armed Forces Engineering Authority, Ministry of Defense – Gulf of Aqaba.

Subcontracted by DASALIA to prepare the Environmental Impact Assessment for Sharm El-Sheikh Sea Water Desalination Plant. Study is completed and approval acquired.

Sharm El-Sheikh Sea Water Desalination Plant (30,000 m<sup>3</sup>/day) - Armed Forces Engineering Authority, Ministry of Defense – Gulf of Aqaba.

Subcontracted by Orascom Construction & Metito JV to prepare the Environmental Impact Assessment for Sharm El-Sheikh Sea Water Desalination Plant. Study is completed and approval acquired.

## NEW DELTA Strategic Environmental Impact Assessment

Subcontracted by Project JV (Orascom-Arab Contractors, Hassan Allam & Metito) to prepare the Strategic Impact Assessment for New Delta. Study is completed and approval acquired.

EAST MATRUH Sea Water Desalination Plant (60,000 m<sup>3</sup>/day) - Armed Forces Engineering Authority, Ministry of Defense – Mediterranean Sea.

Subcontracted by TAM to prepare the Environmental Impact Assessment for TABA Sea Water Desalination Plant. Study is completed and approval acquired.

TABA Sea Water Desalination Plant (15,000 m<sup>3</sup>/day) - Armed Forces Engineering Authority, Ministry of Defense – Gulf of Aqaba.

Subcontracted by TAM to prepare the Environmental Impact Assessment for TABA Sea Water Desalination Plant. Study is completed and approval acquired.

NEW DELTA (HAMMAM) Wastewater Treatment Project (8 million m<sup>3</sup>/day) - Armed Forces Engineering Authority - Ministry of Defense.

Subcontracted by Project JV (Orascom-Arab Contractors, Hassan Allam & Metito) to prepare the Environmental Impact Assessment for New Delta Wastewater Treatment Project (8 million m<sup>3</sup>/day). Study is completed and approved by EEAA.

BAHR AL-BAQAR Wastewater Treatment Project (5 million m<sup>3</sup>/day) - Armed Forces Engineering Authority - Suez Canal – Port Said.

Subcontracted by Orascom-Arab Contractors JV to prepare the Environmental Impact Assessment for BAHR AL-BAQAR Wastewater Treatment Project (5 million m<sup>3</sup>/day). Study is completed and approved by EEAA.

AL-ARISH Sea Water Desalination Plant (250,000 m<sup>3</sup>/day) - Armed Forces Engineering Authority - North Sinai.

Subcontracted by Orascom-Metito to prepare the Environmental Impact Assessment for Al-Arish Sea Water Desalination Plant.

Preliminary Environmental Impact Assessment for 10<sup>th</sup> of Ramadan City DRY PORT AND LOGISTIC CENTRE – EIB funded project

Contracted by MTBS (The Netherlands) to prepare scoping environmental study. Report submitted and approved by EIB and General Authority of Land and Dry Ports.

Preliminary Environmental Impact Assessment for ALEXANDRIA PORT MUTLI-PURPOSE TERMINAL AND VALUE-ADDED LOGISTIC CENTRE – EIB funded project

Contracted by MTBS (The Netherlands) to prepare scoping environmental study. Report submitted and approved by EIB and Alexandria Port Authority.

AL-MAHSAMA WWTP Environmental and Social Impact Assessment (1 million m<sup>3</sup>/day) - Armed Forces Engineering Authority.

Subcontracted by METITO – Hassan Allam JV to prepare the Environmental Impact Assessment for AL-MAHSAMA WWTP. Study is completed and approved by EEAA.

NEW ALAMIEN CITY Strategic environmental assessment – North Coast – Egypt

Subcontracted by Ministry of Housing to prepare the Environmental Impact Assessment for New Alamien City. Study is completed and approved by EEAA & SPA.

RAS SUDR Sea Water Desalination Plant (30,000 m<sup>3</sup>/day) - Armed Forces Engineering Authority - Ministry of Defense.

Subcontracted by TAM to prepare the Environmental Impact Assessment for DABAA Sea Water Desalination Plant. Study is completed and approved by EEAA & SPA.

ABU ZENIMA Sea Water Desalination Plant (15,000 m<sup>3</sup>/day) - Armed Forces Engineering Authority, Ministry of Defense – Gulf of Suez.

Subcontracted by TAM to prepare the Environmental Impact Assessment for Abu Zenima Sea Water Desalination Plant. Study is completed and approved by EEAA & SPA.

DAHAB Sea Water Desalination Plant (20,000 m<sup>3</sup>/day) - Armed Forces Engineering Authority, Ministry of Defense - Gulf of Aqaba.

Subcontracted by TAM to prepare the Environmental Impact Assessment for DABAA Sea Water Desalination Plant. Study is completed and approved by EEAA & SPA.

DABAA Sea Water Desalination Plant (100,000 m<sup>3</sup>/day)- Armed Forces Engineering Authority - Ministry of Defense – Mediterranean Sea.

Subcontracted by TAM to prepare the Environmental Impact Assessment for DABAA Sea Water Desalination Plant. Study is completed and approved by EEAA & SPA.

**BAHR AL BAQAR Wastewater Treatment Project - Armed Forces Engineering Authority, Ministry of Defense - Suez Canal.**

Screening environmental report and initial impact assessment was done for Khatib & Alami as main project consultant for the Ministry of Defense. Study is completed.

**EAST PORT SAID Sea Water Desalination Plant (250,000 m<sup>3</sup>/day) - North Sinai, owned by Ministry of Defense.**

Subcontracted by Orascom-Metito JV to prepare the Environmental Impact Assessment for East Port Said Sea Water Desalination Plant. Study is completed and approved by EEAA & SPA.

**EAST PORT SAID LOGISTIC CENTER - Scoping Environmental – EIB project.**

Contracted by COWI/PPM to prepare scoping environmental study. Report submitted and approved by Port Said Economic Zone.

**EL-GALALAH Sea Water Desalination Plant (150,000 m<sup>3</sup>/day) owned by Ministry of Defense – Ain Sokhna**

Subcontracted by Orascom-Metito JV to prepare the Environmental Impact Assessment for El-Galalah Sea Water Desalination Plant. Study approved by EEAA & SPA.

**AI-TOR Sea Water Desalination Plant (30,000 m<sup>3</sup>/day)**

Subcontracted by Metito to prepare the Environmental Impact Assessment for El-TOR Sea Water Desalination Plant. Study approved by EEAA & SPA.

**ALAMAIN Sea Water Desalination Plant (150,000 m<sup>3</sup>/day) owned by Ministry of Defense**

Subcontracted by AQUALIA (Spain) to prepare the Environmental Impact Assessment for Alamein Sea Water Desalination Plant. Study approved by EEAA & SPA.

**DAMIETTA FURNITURE CITY**

Subcontracted by United Planning Consultants to prepare the Environmental and Social Impact Assessment for the planning and design of the Furniture City in East Damietta. Study approved by Ministry of Environment.



## 6 OCTOBER City POWER PLANT

Subcontracted by D'Appolonia to prepare the baseline sections and social impact assessment as well as Public Consultation for the ESIA for the extension of October Power Plant located in Abu Rawash, Giza. The ESIA was approved by the international funding source and the Egyptian Environmental Affairs Agency.

## Alexandria Coastal Zone Management Project, EEAA - Egypt

Prepared ESIA Framework for the Alexandria Coastal Zone Management Project (ACZM). The project is developed with assistance from the World Bank (through a grant from the Global Environment Facility (GEF)) in the amount of US\$7.15 million, to provide support to the Government of Egypt for improving its environmental management capabilities and to demonstrate the value added of an integrated and participatory approach to coastal zone management for sustainable development. The study was approved by the World Bank.

## SOHAR AIRPORT, Sultanate of Oman

Prepared a full EIA for Sohar International Airport in Sultanate of Oman. The airport is designed to serve about half million passengers annually and serves the development of Sohar city and the entire surrounding region. The EIA included review of the impacts of the planning and design phase as well as field investigations of the ecological setting. The assignment has been undertaken on the basis of sub-consultancy service to Hamza Associates.

## HADRAMOUT COMMERCIAL PORT, Yemen

Prepared full EIA for a new commercial port in Al-Mukalla, South East Republic of Yemen, as part of the development plans for Yemen international trade and marine transportation systems. The assignment has been undertaken on the basis of sub consultancy service to Hamza Associates.

## Upgrading of Greater Cairo Ring Road into international freeway standards – GARBLT - Egypt

Prepared an ESIA baseline study ESIA for the rehabilitation of Greater Cairo Ring Road to be upgraded to international freeway standards and introduction of a Mass Transit System in some sectors of the road. Studies included intensive social and environmental field work. The study was conducted for the General Authority for Roads, Bridges and Land Transport (GARBLT) and subcontracted through Iberensa and Hamza Associates.

## Upgrading Cairo – Alexandria – Matrouh desert road into international freeway standards – Iberensa/Hamza Associates - GARBLT - Egypt

A full ESIA study was conducted for the General Authority for Roads, Bridges and Land Transport (GARBLT) to study the Social and Environmental Impacts of the design and rehabilitation of Cairo – Alex – Matrouh road to be upgraded to

international freeway standards. Studies included extensive social and environmental field work in addition to close coordination with the engineering design team. The assignment has been undertaken on the basis of sub consultancy service to Hamza Associates.

#### Ring Road between Wilaya De Bouira and Zennouna - Algeria

Reviewed the environmental impact assessment conducted for the ring road connecting Wilaya De Bouira and Zennouna, Algeria. The road is passing through areas of significant environmental importance. The review resulted in recommending undertaking further studies concerning the potential impacts and proposing appropriate mitigation measures. The assignment has been undertaken on the basis of sub-consultancy service to Hamza Associates.

### Urban Development and Oil & Gas Projects

#### Qena Governorate Environmental Study

Conducted the environmental studies within the Strategic Urban Planning of Qena Governorate. The task included the preparation of an environmental profile of the Governorate, identifying the main environmental issues and the assessment of the impacts of the proposed urban planning and economic development projects. The assignment was a subcontract to Scale Group.

#### Zohr Offshore Gas Field, East Mediterranean

Conducted Environmental studies in the following:

- Coastal Habitat Surveys
- Protected Areas, Historical and Cultural Heritage
- ESIA for Gas Processing Plant
- ESIA for gas pipeline

The assignment was subcontracted to D'Appolonia SAE/RINA.

#### BORG EL-ARAB CITY Environmental Study

Conducted the environmental studies section within the Strategic Urban Planning of New Borg El-Arab City. The task included the preparation of an environmental profile of the city, identifying the main environmental issues and the assessment of the impacts of the proposed urban planning and economic development projects. The assignment was a subcontract to Mahmoud Yossry and Associates in association with AECOM.

#### EL-SADAT CITY Environmental Study

Conducted the environmental studies section within the Strategic Urban Planning of El-Sadat City. The task included the preparation of an environmental profile of the city, identifying the main environmental issues and the assessment of the

impacts of the proposed urban planning and economic development projects. The assignment was a subcontract to Scale Group in association with Boston Consulting Group.

#### New Tiba Industrial Park

Conducted an Environmental Impact study for an industrial park to be established in the New Tiba city south of Egypt. The study was conducted for the New Communities Authority under the Ministry of Housing. The assignment included site visits, coordination of experts' activities, conducting environmental sampling and analysis, report writing, assessment of impacts and coordination of meetings with the client. The study was approved by the Egyptian Environmental Affairs Agency.

### Environmental Studies for Industrial Sector

#### Soda Ash Project – New Alamien - Egyptian Petrochemicals Holding Company – Ministry of Petroleum

Contracted to evaluate impact of project wastewater on New Alamien SWRO – project ongoing.

#### Uniboard Duplex Cardboard Factory

Conducted a complete study on the environmental and social impacts of the construction and operation of a duplex cardboard factory at El-Sadat City. The factory has an annual production capacity of 130000 tons of duplex cardboard. The study was approved by the International Finance Corporation (IFC) and the Egyptian Environmental Affairs Agency (EEAA).

#### El-Wadi Phosphate Factory, Upper Egypt

Conducted a complete study on the environmental and social impacts of the construction and operation of a Phosphate factory at El-Sadat City. The factory has an annual production capacity of 400000 tons of phosphates, 415,000 tons of sulfuric acid (Conc. 98%) and 300 tons of phosphoric acid. The study was approved by the International Finance Corporation (IFC) and the Egyptian Environmental Affairs Agency (EEAA).

#### 20 MW Power Plant for Cement Factory

Conducted a complete EIA study on the environmental impacts of a 20 MW power generation plant for South Valley Cement Production factory in the industrial zone of Beni-Sueif. The power plant was composed of 10 diesel generators, 12 transformer substations, control rooms, fuel storage tanks and administrative offices. The study was contracted to Taqa Arabia Group. The study was approved by EEAA.

### Desalination Plant for Cement Factory

Conducted a complete EIA study on the environmental impacts of a private desalination plant for Arabian Cement Company in the industrial zone of Ain Sokhna. The plant capacity is 3000 cubic meters per day of treated sub-surface brackish water. The study was approved by EEAA.

### Ras-Issran Oil Field, Gulf of Suez

Conducted a complete study on the environmental impacts of oil exploration and production activities in the Issran oil field in Ras-Ghareb on the Red Sea coast south of Suez City. The study was approved by EEAA.

### Power Generation Plant for Scimitar Ltd.

Conducted a complete study on the environmental impacts of a power generation plant based in the oil exploration and production activities in Issran oil field in Ras Ghareb on the Red Sea coast south of Suez City. The study was approved by EEAA.

## Sustainable Tourism Studies

### Marassi Environmental Monitoring, North Coast, Mediterranean Sea

Contracted by Emaar Misr to carry-out environmental monitoring for Sidi AbdelRahman Bay.

### Port Ghalib Artificial Lagoon, Red Sea, Egypt

Full EIA is prepared for AL-KHARAFI Group (Kuwait) for the largest artificial lagoon along the Egyptian Red Sea coast.

### Renaissance Sharm Golden View Resort

A full EIA conducted for a 5-Star international brand resort located in Sharm El-Sheikh. The study was submitted to South Sinai Governorate, EEAA and currently under review.

### Aroma Residence Resort

A full EIA conducted for a 5-Star resort located in Ain-Sokhna. The study was submitted to the Tourism Development Authority, EEAA and currently under review.

### Nubia Sharm Resort

A full EIA conducted for a 4-Star resort located in Sharm El-Sheikh. The study was submitted to the Tourism Development Authority and currently under review.

### Mirabelle Walkway

A scoped EIA for a walkway at Mirabelle Resort located in Sharm El-Sheikh. The EIA included assessment of impacts of the design, construction and operation of the walkway as well as conducting marine ecological surveys.

### Jazz Crystal Resort

A full EIA conducted for a 5-Star resort located in Mersa Matrouh. The study was submitted to the Tourism Development Authority and currently under review.

### Aqua Marine Resort

A full EIA conducted for a 5-Star resort located in Taba. The EIA was approved by EEAA.

### Mirabelle Blue Resort

A full EIA conducted for a 5-Star resort located in Sharm El-Sheikh which belongs to TRAVCO Group. The EIA was approved by EEAA

### Bab El-Shams Resort

A full EIA conducted for a 5-Star resort located in Sharm El-Sheikh which belongs to TRAVCO Group. The EIA was approved by EEAA

### City Stars Sharm El-Sheikh

A full EIA is conducted to assess the impacts of developing an integrated tourism center in Sharm El-Sheikh. The environmental study covers the following project components: Golf Course, Accommodation Facilities, and Jetty, Utilities (power, water, and wastewater).

### Kalawy Beach Resort

A scoped EIA for beach facilities at Kalawy tourism center located south of Hurghada. The EIA included assessment of impacts of the construction and operation of different beach facilities. The study was conducted to Travco Group and approved by EEAA.

### Fruit Sea Resort

A full EIA conducted for a 5-Star resort and a walkway located in Ras Trombi tourism center north of Marsa Alam. The study was submitted to the Tourism Development Authority and currently under review.

### Medica Tours

A full EIA conducted for a 5-Star resort and spa located in Soma Bay south of Hurghada. The study was approved by the Tourism Development Authority and the Egyptian Environmental Affairs Agency.

### Algerian Tourism Destinations – Scoping Phase

Sub-consultant to Hamza Associates to conduct Environmental Impact Studies, Scoping Phase, for 5 tourism destinations in Algeria (Madagh, Mostaghmem, Tamanrasset, Tadlest and Moscarda). Three destinations are on the Mediterranean Sea and two in the southern desert. The studies included analysis of the potential impacts of developing the tourism destinations on the natural and social environments. The studies were approved and accepted by the client.

### Light House Resort

Conducted a complete study on the environmental impacts of constructing a new commercial and tourist resort in the town of Marsa Alam on the Red Sea Coast for Light House for Tourism Investment. The study included examination of project components, types of equipment used, impacts during construction and operation as well as proposing environmental best practices to be incorporated during the design, construction and operation.

### Oriental Coast Yachting Marina

Prepared an EIA for a touristic yachting Marina within an integrated tourism development site near Marsa Alam city on the Red Sea coast of Egypt. The study included ecological marine surveys, analysis of impacts of land and marine structures as well as proposing mitigation measures during design, construction and operation of the marina.

## Cleaner Production and Environmental Management Systems

### Johnson Wax, Qalyoubia, Egypt

Assisted the company in:

- Cleaner Production auditing and diagnostic Assessment
- Establishing their Environmental Register according to the Egyptian Law for the Environment (Law 4/1994).
- Establishing a full Environmental Management System according to ISO 14001 standards

### Oberoi Hotels and Resorts, Sharm El-Sheikh, Egypt

Conducted a full marine and coastal survey to assist in identifying tourism development potential in the selected site.

### Sunflowers Fun Park, Hurghada, Red Sea, Egypt

Conducted complete studies on:

- Water and sanitation requirements for the project
- Power generation and utilization
- Environmental Requirements

#### Garden Beach Resort, Red Sea, Egypt

- Establishing Environmental Register according to the Egyptian Environmental Law
- Establishing an Environmental Management System according to Green Globe 21 international standards.

#### Royal Makadi Resort, Red Sea, Egypt

- Establishing Environmental Register according to the Egyptian Environmental Law
- Establishing an Environmental Management System according to Green Globe 21 international standards.
- Environmental Training

#### El-Palacio Beach Resort, Hurghada, Red Sea, Egypt

- Energy auditing
- Environmental Training
- Establishing Environmental Register according to the Egyptian Environmental Law

#### Palma Resort, Hurghada, Red Sea, Egypt

- Energy auditing
- Environmental Training
- Environmental Register according to the Egyptian Environmental Law

#### Holidays Resort, Hurghada, Red Sea, Egypt

- Environmental Training
- Establishing Environmental Register according to the Egyptian Environmental Law

### Energy Efficiency and Auditing

#### Evaluation of the Egypt National Energy Efficiency in Street Lighting Program, IEEL&A/UNDP Project#75645

The main objective of this assignment was to assist the Egyptian Government in assessing the performance of the programme to date, diagnose the challenges faced, in light of which recommend mechanisms to expedite the successful implementation of the Energy Efficient Street Lighting Programme by 2020. The tasks included in this assignment were as follows:

- Devise and conduct a field survey of street lighting Cairo and Giza Governorates:

- Prepare technical report assessing the progress and impact of the Energy Efficient Street Lighting Programme since inception, and providing recommendations based on findings for successful implementation of the Project by 2020. The report should cover the project as implemented in all five governorates and should include the components highlighted in the scope of work in addition to the following:

**a.** Assessment of the energy efficient street lighting programme: progress since project commencement, challenges and barriers, effectiveness in terms of energy and cost savings, sustainability, capacities of involved parties, etc.

**b.** Situational Analysis of the existing regulatory, legislative, technical, organizational, procurement, operation and maintenance frameworks governing street lighting, including identification of gaps, opportunities for saving electricity.

**c.** Stakeholder analysis: Identification of primary stakeholders, assessment of their roles and responsibilities in implementation of the project. Capacity, financial and HR gaps that may pose as barriers to successful implementation. Identify and recommend capacity building and trainings that may be needed.

**d.** Case studies of energy efficient street lighting programmes implemented globally that could be applied in Egypt.

**e.** Detailed recommendations on any alterations and re-designing of project implementation plan based on global examples as captured in the case studies, survey findings, stakeholder analysis, and assessment of existing project. The recommendations should also cover:

**i.** Measures for legislative, regulatory, institutional reforms, innovative financial mechanisms, capacity building needs, etc.

**ii.** A procurement guiding framework for municipalities to facilitate purchase of energy efficient street lighting systems in accordance to Egyptian government laws and regulations and based on best practices in similar projects in other countries.

**iii.** A proposal for collection and recycling system for the removed inefficient lamps.

**f.** The results and analysis of the findings of the field survey.

**CONDUCT MARKET ASSESSMENT FOR SUSTAINABLE ENERGY FINANCE,**



## ECONOLER/EBRD

The consultant involvement in this mandate consisted in providing support for activities executions and completion of the following scope of work:

### 1. Market opportunities and segmentation:

- Energy and water efficiency opportunities in industrial, agriculture, commercial and residential sectors
- Current status and trends of energy and water consumption in these sectors, benchmarking against Middle East and North Africa ("MENA") region and/or other regions if possible;
- Sources of energy & water supplies to these sectors;
- Energy and water tariff status and trends;
- Overall status of energy/water equipment & technology in use by these sectors;
- Opportunities for energy and water efficiency improvements in these sectors: % of possible improvements, typical investments with typical payback periods and internal rate of return ("IRR") ranges in each sector;
- Market size estimation: Technical potential market, economically viable potential market, ready-to invest market (over the next 3 years);
- Ranking of sectors/sub-sectors (from Low to High) based on: i) economic viability of EE and water efficiency options; ii) technology availability; and iii) end-user readiness (willingness to borrow).

### 2. Technical capabilities in the market for energy and water efficiency:

- Leading auditors/engineering consulting firms that can serve the identified sectors (brief profiles with contacts and their project examples if available);
- Leading ESCOs operating in the country/region (brief profiles with contacts and their project examples if available);
- Leading vendors operating in the country/region (brief profiles with contacts and their equipment supplies);

- Technical capacity and financial capacity of these auditors, ESCOs, vendors.

### 3. Suitability of framework conditions

- A general description of components required for a systematic approach to create demand for EE and RE projects in accordance to policy, regulatory, legal and institutional framework;
- A review of international best practices to become reference for suitable local application or local market adaptation.

### 4. Identification of major market barriers.

- Major reasons, perceived or real, that prevent, or may prevent, implementation or financing of EE and/or RE projects (i.e., identify which components in market development are missing and for what reasons);
- Appropriate actions will be recommended to bridge the gap and overcome identified bottlenecks
- Suitable criteria will be defined which will be pre-conditions for engaging financing of EE and RE projects within the FI markets (including commercial banks, leasing companies and MFIs) in Egypt.

### 5. Other programs in the markets:

- Any current government/donor T A programs supporting EE and/or water efficiency in the market (Brief description, Contacts, Lessons learnt from them if available);
- Any financing schemes for EE and water efficiency in the market (either from commercial banks, donors, or government) - (Brief description, Contacts, Lessons learnt from them if available).

### 6. Financial sector's readiness:

- FIs' attitude toward sustainable energy financing/climate financing, and their willingness to test various segments of SEF market;

- Leading lenders (commercial banks, leasing companies, microfinance institutions) in the market that could be interested in SEF business, and should be targeted by IFC SEF program;
- Prioritized support needed for these FIs to enter SEF business.

## CONDUCTING RESEARCH ON CDM POTENTIAL IN EGYPT: DEUTSCHE GESELLSCHAFT FÜR INTERNATIONALE ZUSAMMENARBEIT (GIZ) GMBH

Contracted by the Joint Committee for Renewable Energy, Energy Efficiency and Environmental Protection under the German Technical Cooperation (GTZ).to develop a worksheet-based detailed assessment of Renewable Energy and Energy Efficiency potentials and respective CDM potentials in Egypt. The assignment tasks included:

- Collect and compile secondary data concerning Egypt's energy consumption data
- Forecast growth trends of energy consumptions according to guided estimates by economic sector
- Assess fossil fuel reduction potentials by RE and EE as well as fuel switching options in each sector, estimate incremental cost of RE and EE option
- Transform energy consumption data to equivalent CO<sub>2</sub> emissions according to CDM approved methodologies, where applicable
- Perform the above operation within an excel worksheet
- Estimate the CDM potential in Egypt according to documented secondary information sources and the analysis that will be conducted.
- Develop a graph of RE, EE and fuel switching technologies and their incremental unit cost and quantitative fossil fuel reduction
- Develop a graph of RE, EE and fuel switching technologies and their incremental cost and quantitative potential of CO<sub>2</sub> reduction
- Communicate the outcomes of these tasks in a written report with a matrix that shows each sector and the possible RE and EE options

## GREEN HOUSE GASES INVENTORY FOR THE CERAMICS INDUSTRY UNDER THE KYOTO CLEAN DEVELOPMENT MECHANISM

Conducted a complete study on the Green House Gases emissions from the Ceramics industry in Egypt. The purpose of the study was to propose energy efficiency projects to reduce GHG emissions and qualify the projects to be implemented under the Clean Development Mechanism under the Kyoto

Protocol. The study was approved and submitted to the client: Tabbin Institute for Metallurgical Studies

## Industrial and Commercial Energy Efficiency Auditing

EcoBusiness was contracted by the Industrial Modernization Program to conduct energy efficiency audits at different Egyptian industrial and commercial establishments. Through this Energy Efficiency program, EcoBusiness has completed over. The following is a list of the audited establishments:

- Access Paints and Chemicals
- Ahram Plastics
- Al-Alameya for Wires
- Alfarid Cotton
- Al-Jazeera for Milling
- Al-Motaheda for Mills
- Al-Rahman for Bricks
- Al-Rehab for Home Tools Fabrication
- Al-Safe Medical Cotton
- Amoun for Car Glass
- Awlad Dawood Melad for Tiles
- Badawy Hydraulics
- B-Tech
- EG-Plast
- El-Romany for Plastics
- El-Swedy – SEDCO
- Fairouz for Dairy Production Company
- Maghrabi Optics
- Mereet for Food Products
- Misr International Plastics Co. (MIPCO)
- Misr Stone for Marble and Granite
- MN Factory
- Monginis
- Sehely Textile
- Sharkeya Textile
- Sima Food Industries
- Specjeco Cement
- StarChem
- Tagareed Company for Developing poultry Fortune
- Techno Marble
- Tiba Food Company
- United Modern Raai Co. for Plastic - Nemsawy
- VIS for Lighting and Electrical Instruments





# EcoBusiness

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