

Partnership Session

Introductory Remarks on the
Environmental Business
Sector in Egypt

Mohamed Abdou
Professor and IPFR Director
UCLA

US-Egyptian Workshop on Environmental Technologies

Alexandria, September 8-11, 1996

Definition of the Environmental Business Sector

The environmental business sector includes companies that produce or sell products or services involved with:

- conserving natural resources or industrial materials
- preventing, reducing, and controlling pollution
- disposing of or recycling wastes and hazardous materials
- protecting water supplies
- conserving energy
- providing energy from alternative sources
- restoring the environment and its resources
- producing "environmentally safe" products
- companies that provide SUPPORT to the sector, including:
 - management consulting
 - advertising
 - public relations firms dealing with environmental issues
 - lawyers
 - financial institutions
 - accounting firms

General Remarks on the Environmental Business Sector in Egypt

- An environmental business sector does exist in Egypt
- Over 100 companies (Egyptian and foreign-owned) already provide some products or services in the environmental business
- Business is a Mix of Public and Private enterprises
 - Public: manufacture equipment
 - Private: mostly services
- A very small number of these companies are dedicated exclusively to providing environmental goods and services. They generally fall into one of the following categories:
 - large engineering and design companies (mostly private)
 - construction companies that build infrastructure, especially sewers (mix private & public)
 - agents/distributors of imported equipment (private)
 - public sector manufacturers of equipment for water supply needs (pipes, bricks, valves, pumps)
 - consultants: individuals, R&D institutes, private companies
- Foreign companies do business in Egypt's Environmental Sector mostly in two ways:
 - 1) Directly export equipment and supplies to Egypt (normally through agents and distributors who receive 5% commission)
 - 2) Contract directly with donor agencies or GOE

Other Observations on Foreign Firms Business in the Environmental Sector in Egypt

- No foreign firms have invested directly in manufacturing facilities in the environmental business sector in Egypt
- Licensing of Technologies has not been particularly popular with US companies in Egypt

Environmental Business Sector in Egypt: Market Size Estimates by Market Segment

Market Segment	1992 Estimate (in US\$ millions)	1997 Estimate (in US\$ millions)
Municipal Water and Wastewater Treatment	\$350 (US and donor assistance)	\$550 - \$700
Water Recycling Services and Equipment	\$5	\$8 - \$10
Industrial Wastewater Treatment	\$9	\$100 - \$150
Air pollution Control	no information available	\$100 - \$150
Water Purification Systems	\$30	\$50 - \$60
Municipal Solid Waste	no information available	no information available
Renewable Energy (mostly wind)	\$12	\$20
Mobile Source Air Pollution	\$0	\$10
Air and Water Monitoring and Testing	\$6	\$10
Environmental Consulting	\$15	\$40
Total Estimated Environmental Market	\$430	\$890 - \$1,150

Most Attractive Features of Enviornmental Business Segments

TYPES OF BUSINESS	<i>Fast Growth Expected</i>	<i>Opportunity for U.S. Business</i>	<i>Opportunity for Egyptian Private Sector</i>	<i>Near-Term Market</i>	<i>Long-Term Market</i>
Municipal water and wastewater	◐	●	●	●	●
Water recycling	◐	○	●	●	●
Industrial wastewater	●	●	●	●	●
Air pollution	●	◐	●	●	●
Water purification	●	●	●	●	●
Municipal solid waste	◐	●	●	●	●
Renewable energy	◐	●	●	●	●
Mobile source air pollution	○	○	●	○	●
Air & water monitoring and testing	◐	●	●	●	●
Enviornmental consulting	●	●	●	●	●

KEY

○ = Low

◐ = Moderate

● = Best

Five Best Near-Term Business Opportunities

Industrial Wastewater Treatment: Equipment, Design and Process Engineering

- › Great potential in industrial pollution prevention and materials recovery/recycling potential since it is often associated with cost recovery or increased profits
- › Rapid market growth if GOE increases enforcement
- › U.S. company opportunity to sell new technologies
- › Little local competition for Egyptian companies in this very new field

Air Pollution Control: Equipment and Design

- › Near-term opportunity if anticipated GOE programs to improve air quality are implemented
- › Donor funding for air pollution projects may become available
- › Good opportunity for Egyptian companies to sell design services
- › For foreign companies, an opportunity to sell equipment

Environmental Consulting Services

- › Fast growth (over 20% annually) expected
- › New business opportunities for Egyptian firms to work with donor agencies
- › Retention of foreign consultants for specific area of expertise

Design and Installation of Desalination Units

- › Consideration of privately-owned desalination units by tourism developers along the Red Sea
- › Major project opportunities for U.S. suppliers of desalination units

Plastic Recycling

- › Demand for more sophisticated recycling equipment
- › Recycling industry already exists in Egypt
- › Expectation that demand for and supply of plastic will increase steadily

United States - ASIA Environmental Partnership

- Started as a Presidential Initiative when President Clinton announced it in 1992 during his visit to Singapore
- Led by the United States Agency for International Development (USAID), the United States - ASIA Environmental Partnership is a catalyst for practical public-private initiatives to sustain development and protect the environment
- US -AEP matches Asian environmental needs with US environmental experience, technology, and practice
 - » Individual activities seek practical solutions to local problems
 - » Cumulative efforts positively affect global environmental issues
 - » Partnership, leveraging, and synergy among activities drive strategies and strengthen programs and environmental impact

United States - ASIA Environmental Partnership

Organization:

- Ten-year initiative begun in 1992
- Works with 35 Asian/Pacific nations and territories
- Partners with
 - 25 US federal departments and agencies,
 - state and local entities,
 - environmental businesses, nongovernmental organizations, and
 - Asian counterparts
- Receives USAID core-funding
- Leverages cash/in-kind contributions from partners

Activities focus on:

- stemming biodiversity loss,
- controlling and preventing industrial pollution
- assisting in the development of urban environmental infrastructure, and
- improving energy efficiency and the use of renewable energy technologies

Implementation strategies include:

- developing networks and long-term relationships,
- stimulating direct technology transfer,
- creating innovative financial access, and
- disseminating information

[Each office has 3 people: 1) Environmental Sales Engineer, 2) Program Person, 3) Clerk]

US-AEP OFFICES IN ASIA

US-AEP FIELD DIRECTOR'S OFFICE

Mr Dennis Zvinakis
US-AEP Field Director
18th Floor, RMC Building
1680 Roxas Boulevard
Ermita 1000 Manila, Philippines
Tel 632-522-4411 ext 4454
Fax 632-522-4411 (then ask for or
dial ext 4466 for dedicated fax)
Internet dzvinakis@usaid.gov

OFFICES OF TECHNOLOGY COOPERATION

US-AEP/Hong Kong
Mr Gerald A Sanders, Director
21/F St John's Building
13 Garden Road
Central Hong Kong
Tel 852-2522-6078
Fax 852-2801-6036
Internet usacp@hk.net

US-AEP/India

Mr Vinay Gadkari, Deputy Director
American Center
4 New Marine Lines
Bombay, 400 020-09 India
Tel 91-22-265-2511
Fax 91-22-262-3850
Internet vinayusacp@access.net.in

US-AEP/Indonesia

Mr Harlow Russell, Director
Wisma Metropolitan II, 3rd Floor
Jalan Jend Sudirman Kav 29-31
Jakarta 12920 Indonesia
Tel 62-21-526-2844
Fax 62-21-526-2846

US-AEP/Korea

Mr Chi-Sun Lee, Director
Icema Building, Suite 424
146-1, Susong-dong, Chongro-ku
Seoul, Korea 110-140
Tel 822-734-6558
Fax 822-734-6559
Internet USAEP@los.cnm

US-AEP/Malaysia

Ms Catherine Fuselier, Director
Suite 2002, Menara Tan and Tan
207 Jalan Tun Razak
Kuala Lumpur, Malaysia 50400
Tel 60-3-264-0018
Fax 60-3-264-0026
Internet 694-0980@mcimail.com

US-AEP/Philippines

Mr. Rene C Saludes, Director
Thomas Jefferson Cultural Center
2nd Floor
395 Sen Gil J Puyat Avenue
Makati Metro Manila, Philippines
Tel 63-2-896-5128/2877
Fax 63-2-890-9361
Internet 695-0981@mcimail.com

US-AEP/Singapore

Mr Sarath Kumar Menon,
Director
One Colombo Court #04-07A
Singapore, 0617
Tel: 65-334-3141 Fax: 65-334-1757
Internet usaep@singnet.com.sg

US-AEP/Sri Lanka

(Director to be announced)
One Spathodea Avenue
Thimbirigasyaya Road
Colombo 5, Sri Lanka
Tel: 94-1-508-860/1 or 583-690
Fax 94-1-508-860

US-AEP/Taiwan

Mr Robert Barnes, Acting Director
AIT Commercial Section
Suite 3207, 32/F
333 Keelung Road Section 1
Taipei, Taiwan
Tel 886-2-720-1550 ext 343
Fax 886-2-757-7086
Internet RBarnes@doc.gov

US-AEP/Thailand

Mr J D Murphy, Director
US & Foreign Commercial Service
American Embassy
Diethelm towers, Tower A
15th floor
93/1 Wireless Road
Bangkok 10330, Thailand
Tel. 66-2-651-5782/4
Fax 66-2-254-2838
Internet 693-0992@mcimail.com

URBAN INFRASTRUCTURE OFFICES

Indonesia
Ms Mary Boomgard
Urban Infrastructure Representative
US-AEP Indonesia
Wisma Metropolitan II, 3rd Floor
Jalan Jend Sudirman Kav. 29-31
Jakarta 12920 Indonesia
Tel. 62-21-526-2844
Fax. 62-21-526-2846
Internet 695-0978@mcimail.com

Thailand

Ms. Wanda Srichai
Urban Infrastructure Representative
c/o US-Thailand Development
Partnership
2nd Floor, Zone D, Room 201/2
Queen Sirikit National
Convention Center
60 New Rachadapisek Rd., Klungtoey
Bangkok 10110, Thailand
Tel 66-2-229-3128/3136
Fax. 66-2-229-3130
Internet george@chulkn.chula.ac.th

ASIAN DEVELOPMENT BANK

Ms Lisa Kircher Lumbao
Commercial/Environment Specialist
FCS/Asian Development Bank
Liaison Office
Thomas Jefferson Cultural Center
395 Sen Gil Puyat Avenue
Makati, Metro Manila, Philippines
Tel 632-890-9364
Fax 632-890-9713
Internet llumbao@adb.gov

BIODIVERSITY

CONSERVATION NETWORK
Mr Frank Hicks
Regional Representative
Biodiversity Conservation Network
151B Gonzales Street
Loyola Heights
Quezon City, Metro Manila
Philippines
Tel 632-992-017
Fax 632-984-997
Internet 696-4548@mcimail.com

USAID MISSION LIAISON, SRI LANKA

Mr Thiruchelvam Mookiah
USAID/US-AEP Liaison
USAID Mission/Sri Lanka
356 Galle Road
Colombo 3 Sri Lanka
Tel: 94-1-574-333
Fax 94-1-574-264/500
Internet mthiruchelvam@usaid.gov

ASEAN ENVIRONMENTAL IMPROVEMENT PROJECT

Mr. Richard Stevenson
Project Manager
Sagittarius Building, 12th Floor
11V dela Costa Street, Salcedo VII
1227 Makati, Philippines
Tel. 632-816-6576/2934
Fax 632-818-6470
Internet aseaneip@moz.com.com

United States - ASIA Environmental Partnership

Mutually beneficial consequences 1992 - 94:

- Nine hundred Asians and Americans participated in training, exchanges, and fellowships, matching Asia's environmental problems with the appropriate US environmental experience, technology, and practice to solve them
- More than 1,100 trade leads generated by US-AEP technology representatives in Asia have been matched with the more than 3,000 UYS environmental firms in US-AEP's expanding Environmental Technology Network for Asia data base
- Approximately \$420 million worth of US private sector environmental equipment and services have been transferred to the Asian public and private sectors
 - \$234 million resulted from 104 US-AEP Environmental/Energy Technology Fund matching grants, which took small - and medium-sized firms to Asia
 - \$186 million has been generated by environmental trade leads, exchanges, fellowships, training, and other US-AEP initiatives combined
- More than 3,400 US jobs were created

For general US-AEP information, contact:

Environmental Technology Network for Asia, CTIS
515 22nd Street, NW, SA-2 Room 100
Washington, DC 2-523-0229
Tel: 1-800-818-9911
Fax: 202-663-2760

Recommendation

- Further examine the US-Asia Environmental Partnership (US-AEP) Program to see if a similar program in Egypt (i.e. US-Egypt Environmental Partnership) and the Middle East can be an effective mechanism for enhancing US-Egypt business partnership in the environmental sector

Note

- Need an Agency in the US to become interested enough to take the lead (e.g. USAID) and coordinate an “InterAgency” program
- Initiation can be much faster and more effective if there is an initiative on the highest governmental level (e.g. Presidential or Vice President)

Example of Questions

- 1) How to make Egyptian private business firms more interested in the environmental problems?
- 2) How to enhance the capabilities of the Egyptian companies in the environmental business?
- 3) How to make US companies better informed of the opportunities in the business sector in Egypt?
- 4) How to facilitate the creation of joint ventures and other forms of business partnership between Egyptian and US firms.
- 5) Mechanisms for financing?
- 6) Roles of
 - GOE
 - Donors
 - R&D Institutes