

Egypt

Supporting the Egyptian Environmental Policy Program

In 1999, USAID and the Egyptian government launched the Egyptian Environmental Policy Program (EEPP) to address the country's most pressing environmental challenges. GreenCOM's role in EEPP was to provide strategic communication support to promote the program's policy objectives on Red Sea conservation, energy efficiency, and solid waste management.

This support took many forms including:

- Training in environmental education and communication topics for key professional groups (park rangers, teachers, journalists, engineers, and business people)
- Development of environmental education supplements for primary, secondary, and technical school instructors and students
- Informative television and radio programming for the general public
- Environmental awards programs to mobilize communities to take action on environmental issues



Red Sea Conservation

From 1999 to 2004, GreenCOM collaborated on Red Sea conservation initiatives with several government agencies including the Egyptian Environmental Affairs Agency (EEAA), the Tourism Development Authority (TDA), and the Red Sea Governorate, one of the country's 26 administrative divisions.

The Red Sea governorate is home to a series of complex ecosystems including mangroves, salt marshes, intertidal zones, islands, marine habitats, and desert. Each year thousands of tourists from Europe, North America, and the Middle East visit the Red Sea, but as the number of tourists increases, environmental threats such as

urbanization, pollution, and damage to coral reefs also multiply. To counteract these negative effects while still encouraging economic growth, the Egyptian government proposed a program to protect designated areas (land and sea) through establishment of nature reserves and to build the capacity of national and local government agencies to cope with the myriad challenges posed by a booming tourism industry.

GreenCOM was asked to provide communication assistance for this program by working with the EEAA and TDA on a comprehensive community-based campaign to promote compliance with Red Sea environmental policies. The primary objective of the campaign was to change the ways in which key groups utilized and managed the region's unique natural resources.

Campaign activities were launched in 1999 with a public information initiative on the biodiversity of the Red Sea region that targeted tourists, hotel managers, and boat operators with the message "Let's Keep It This Way." Interpretive signage explained dos and don'ts for visiting beaches and parks administered by the TDA.

Red Sea Rangers

As the campaign expanded, GreenCOM began working in depth with the Red Sea Rangers, a group of EEAA employees responsible for safeguarding the natural resources of the coastline and marine park protectorates. Because the Rangers' job is to promote best practices for marine and inland resource use and to ensure compliance with government regulations, they were uniquely positioned to interact with a wide variety of groups in addition to tourists.

GreenCOM organized a training practicum for the Rangers to strengthen their communication skills. Participants learned important "customer service" principles to help them interact with tourists and local stakeholders. They also developed skills to implement a social marketing program aimed at

boat operators, schoolchildren, local Bedouin communities, and hotel staff.

After the practicum, the Rangers recruited additional staff members to form a public awareness team to manage their social marketing activities. For each of the target audiences, the public awareness team developed a formative research plan, key messages, and a communication strategy to ensure that each group received accurate information tailored to its specific needs and designed to produce desired behavior change.

Some of the information products developed by the public awareness team with GreenCOM's assistance were fact sheets, a multilingual flip chart with marine regulations, and a children's activity booklet. The Rangers also received a language guide to help them communicate with dive boat operators and tourists of different nationalities during their routine coast patrols. Hotels posted coastal policy guidelines as an added reinforcement for tourists.



GreenCOM and the Rangers produced fact sheets on marine regulations.

Sustainable Business Development

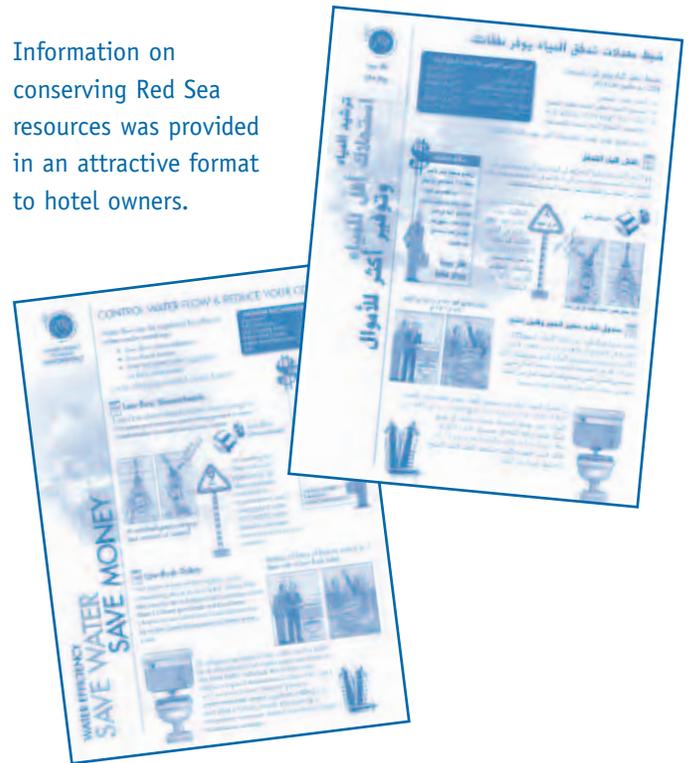
The Rangers identified important links in the tourism sector between hotel and boat operators and designed activities to build relationships between the two groups. With GreenCOM's support, they collaborated with the Red Sea Sustainable Tourism Initiative (sponsored by the TDA and USAID) to promote sustainable tourism as a sound economic choice and as a community development philosophy that also advances environmental conservation and responsible use of natural resources.

One activity involved general managers of Red Sea hotels, who were eager to comply with conservation policies because they understood that the Red Sea's natural resources were their primary "product." GreenCOM and project partners organized a training seminar to introduce hotel managers to water- and electricity-saving tools that would also save money, as well as environment-friendly solid waste management. The hotel managers received specially designed materials such as fact sheets and informative calendars that established a clear link between cost savings and the adoption of environmental best practices.

The Rangers and GreenCOM also convened a series of boat operator workshops to discuss environmental issues, seamanship, and rescue and first aid. More than 500 boat operators were certified to explain and enforce environmental best practices with divers on mooring, docking, anchoring, and first aid. This training built a sense of professional identity among the boat operators. As a result, they later developed a professional association to promote best practices.

GreenCOM also assisted in a workshop for the Red Sea Sustainable Tourism Initiative to increase cooperation among the various stakeholders described above—hotel managers, dive boat operators, Rangers, and environmental NGOs. The workshop provided a forum for the different groups to share their concerns with one another and agree

Information on conserving Red Sea resources was provided in an attractive format to hotel owners.



on solutions. For example, the hotel managers expressed their dislike of trash from dive boats that washed up on their property because there were no trash receptacles on the boat docks. The boat operators agreed to install receptacles on their docks and in return, the hotel managers arranged for the receptacles to be emptied regularly. The Red Sea Rangers distributed the trash receptacles and negotiated waste collection agreements between the boat operators and hotel managers.

Environmental Education

In addition to working with tourists and businesses, GreenCOM and the Rangers identified formal environmental education in local schools as a critical component of their social marketing strategy. GreenCOM worked with Egyptian educators from a variety of disciplines to develop a Red Sea learning supplement that featured a teacher's guide with classroom activities, an informative video called *The Natural Wonders of the Eastern Desert and Red Sea*; a video introducing the life of a Ranger called *Tales from the Desert Sea*; and brochures, posters, and an interactive CD to engage



Components of GreenCOM's Red Sea Learning Supplement

students and enhance their understanding and appreciation of natural resources and the need to protect them.

GreenCOM and the Rangers also facilitated teacher training workshops to build skills in interactive teaching methods. Participants came from elementary, preparatory, secondary, and technical schools throughout the Red Sea region to collaboratively determine ways to integrate the new materials most effectively across the various subjects or in extracurricular activities.

These formal education initiatives were supplemented by an environmental awards program designed by GreenCOM that connected schools and communities. The awards program brought together various groups—private sector businesses, educators, students, NGOs, government representatives, community leaders, Rangers—who entered environmental projects in a competition.

One example of a winning project came from students in Safaga who noticed that water was

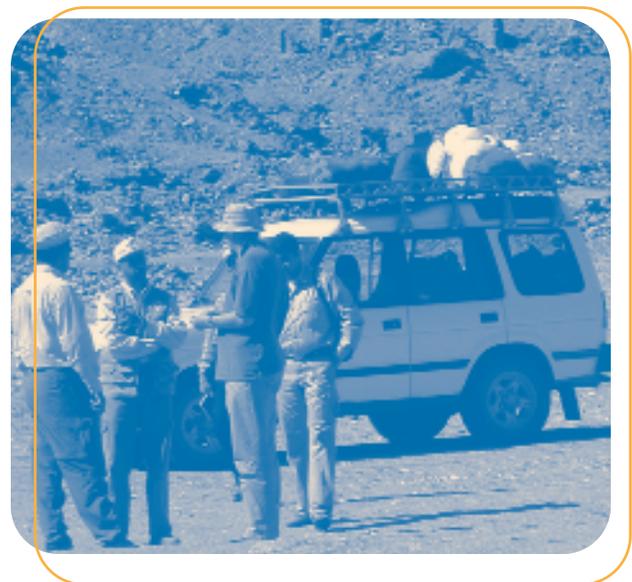
being wasted when their school water tanks were filled. They designed an alarm system to signal when the tanks were nearly full to prevent overflow.

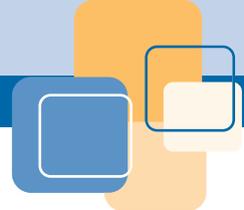
Another non-formal education intervention designed by GreenCOM involved *Bakkar*, a popular television cartoon series broadcast each year during Ramadan. The show focuses on the adventures of a young Nubian boy named Bakkar. During Ramadan, television viewing is at a high point and *Bakkar* is reported to have approximately 40 million adult and child viewers per episode. In 2002 and 2003, GreenCOM worked with the show's producers on special environmental theme episodes.

Surveys were conducted before and after the episodes to measure changes in environmental awareness among children. Results indicated that the episodes had a marked impact on 7- to 12-year-old viewers, raising their levels of awareness about the importance of Red Sea ecosystems and the Red Sea Rangers by more than 40 percent.

Wadi El Gemal Interpretive Materials

GreenCOM played an instrumental role in bringing together various stakeholders (the Tourism Development Authority, the Egyptian Environmental





Affairs Agency, and Red Sea Governorate officials) to discuss and agree upon the benefits of declaring Wadi El Gemal a natural protectorate. To support this new protected area, GreenCOM also collaborated with international interpretation experts and specialists in the history and ecology of the area to develop interpretive trails and signs for the new protectorate. The signs describe aspects of the protectorate's ecosystem such as plant and animal life, geological history, and marine and terrestrial ecology. Trails were designed to suit the needs of a variety of visitor groups.

At Port Ghalib, also in southern Egypt, GreenCOM collaborated with the TDA to design an interactive visitors' center called the Exploratorium that highlights the natural resources of the Red Sea and Eastern Desert. Exploratorium exhibits describe ancient ruins and trade routes, educate visitors about the biodiversity of the area, and describe coral reef and desert ecosystems. The Exploratorium is envisioned as a "living desert" and gateway to learning about the southern Red Sea. Bedouin tribes will build encampments at the facility to provide visitors with an introduction to tribal cultural traditions.

International Conference

In 2002, GreenCOM provided logistical support and produced materials for the First Egyptian-International Conference on Protected Areas and Sustainable Development, sponsored by the Ministry of State for Environmental Affairs. This event attracted government dignitaries from around the world, journalists, and a range of internationally recognized academics and experts in marine park and coral reef management and biodiversity. The conference, which was held in Sharm El Sheikh with close proximity to two of Egypt's protectorates, provided an opportunity for participants to share their work and discuss strategies for sustainable development of the world's protected areas.

Results

GreenCOM's contributions to EEPP activities in Red Sea conservation led to:

■ **Red Sea Rangers Professional Development**

Through professional training coordinated by GreenCOM, the Rangers received valuable instruction in communication skills. GreenCOM also helped them form a public awareness unit that has raised the Rangers' profile among tourists and the local population, thus making it easier for them to enforce regulations critical to maintaining the environmental health of Red Sea ecosystems.

■ **Increased Knowledge and Action Among Key Groups**

Stakeholder groups have demonstrated a positive response to the communication campaign organized by the Rangers and GreenCOM. Dive boat operators, for example, reacted with overwhelming support for the certification courses offered. More than 500 boat operators were certified as enforcing environmentally sound behavior in their operations, and they also formed a professional association to promote continued development of skills in this area.

The environmental awards program helped government agencies to better understand how increased public awareness can lead to greater action by key constituencies on environmentally sustainable activities. Mayors and other governorate officials have shown strong support for the awards program, which is key to sustaining it in the future.

Events such as the international conference on protected areas have brought Egyptian government agencies together to promote sound ecotourism policies in the region and

have helped to advance the country's image as a key international player in sustainable ecotourism. This conference also brought together key Egyptian decision makers and helped lead to the declaration of Wadi El Gemal as a national protected area.

General awareness of Red Sea ecosystems and conservation needs has also increased through activities such as the *Bakkar* cartoon series. Pre- and post-broadcast surveys showed that 7- to 12-year-olds' level of awareness about Red Sea protectorates increased from seven to seventy-three percent as a result of the environmental theme episodes GreenCOM helped to produce. Cairo Cartoon, which produces *Bakkar*, has committed to developing more environmental episodes in 2004.

■ Policy Development

GreenCOM's development of the Red Sea learning supplement and teacher training

workshops resulted in a new Red Sea Governorate policy on environmental education that mandates one environmental education class session per week for all public schools. In addition, the Red Sea Rangers were granted permission to make educational presentations in public schools.



©Cairo Cartoon

Energy Efficiency

In addition to Red Sea conservation, another focus of the Egyptian Environmental Policy Program was increased energy efficiency in the industrial sector and policy development to support energy efficient industrial measures. A consortium of public and private organizations called the Energy Efficiency Council had been formed to address the issue by:

- Reducing Egypt's dependence on crude oil by exploring alternative sources of energy such as natural gas
- Stimulating the economy by promoting cost-saving investment in energy efficient production

- Cutting air pollution by decreasing greenhouse gas emissions through adoption of clean production technologies

Capacity Building for the Energy Efficiency Council

In 2000, USAID asked GreenCOM to help the Energy Efficiency Council develop communication strategies to position itself as a reputable organization and thus gain credibility in the business community. The first step was to generate media coverage for a council meeting held in early 2000. GreenCOM placed several articles on energy efficiency and the council in major newspapers and

produced announcements of the event that were aired by radio and television stations. This coverage resulted in an unprecedented level of participation at the meeting.

Research commissioned by GreenCOM also provided insight into public knowledge and attitudes about energy efficiency and the perceptions that government and business officials held about the issue and the role of the council. Based on this formative research, GreenCOM developed a number of public awareness and communication products to help the council advance its objectives.

■ Educational Products

GreenCOM supported the Energy Efficiency Council by producing a short educational video called *Energy: The Story of Energy Efficiency is the Story of Human Innovation* for distribution to schools, NGOs, and business leaders. The project also provided technical assistance on *Global Climate Change: Egypt Faces the Challenge*, an informational booklet published by the Ministry of State for Environmental Affairs.

■ Energy Efficiency Council Materials

GreenCOM provided technical assistance in the design of an Arabic-English informational booklet about the council. This product, distributed internationally, outlines the process for developing a national energy efficiency strategy for Egypt. It garnered extensive media coverage on topics such as costs and benefits of energy efficiency and investment in energy efficient industry.

■ EESBA Public Awareness Strategy

The Egyptian Energy Service Business Association (EESBA) is an NGO established to support the business interests of entities offering energy efficiency solutions to Egyptian companies. To support EESBA's mission, GreenCOM and Nexant, an international energy consulting firm, developed a public awareness strategy to position EESBA as a premier resource

GreenCOM helped design a public awareness strategy for the Egyptian Energy Service Business Association.



on energy efficiency. The core message of this strategy was that businesses could reduce their costs by adopting energy efficient technologies and increasing their use of natural gas rather than oil.

As part of this strategy, GreenCOM and Nexant developed a corporate award program whereby companies that were recognized for adopting environmental best practices could send employees to an EESBA-sponsored training course to become certified energy managers. The course is based on an internationally recognized program trademarked by the Association of Energy Engineers (AEE) in the United States. Students study in Egypt and receive a three-year certification from AEE.

Another product that emerged from the strategy was a marketing brochure. EESBA members use this Arabic-English brochure, *Business People for an Energy-Efficient Economy*, to disseminate information about the association to potential new members, policymakers, and other interested parties. It presents facts and figures about energy consumption and the state of Egypt's energy services sector.

■ Briefings, Workshops, and Roundtables

GreenCOM and the Energy Efficiency Council coordinated or contributed to a number of events to share information on energy efficiency with key stakeholders. Those events included:

- *The Benefits of Efficient Use of Energy*, a briefing for 80 academics, engineers, energy experts, and technicians interested in energy issues.
- *The Future of the Natural Gas Industry and Economic Interests*, a roundtable for prominent energy executives on the economic aspects of energy use held at the Second World Conference on Technology Advances for Sustainable Development in 2001. Nexant and AED also sponsored an exhibit at the conference.
- An executive seminar for more than 100 participants from industry, the financial sector, and academia led by three government ministers. The event was a milestone in demonstrating government support for the Egyptian Environmental Policy Program's measures on energy efficiency. The newspaper *Al-Ahram* gave the seminar front-page coverage and also printed a four-page section with Arabic and English proceedings.
- Several roundtables for journalists on how the media can play a larger role in increasing public awareness on basic energy efficiency practices and issues.

■ Mass Media Coverage

GreenCOM arranged coverage of the Energy Efficiency Council's mission in variety of media outlets primarily targeting the general public, including:

- Placement of newspaper and magazine ads with efficiency tips for households and small businesses.

- Daily radio competitions on energy efficiency on the Youth and Sport Radio Network during the month of Ramadan in 2000. The competitions had an estimated audience of five to six million listeners.
- A television station in Alexandria produced episodes on energy efficiency for two of its science and environmental programs. GreenCOM was featured in one of the programs, and the other included the energy efficiency video produced by GreenCOM and described below.

Energy Efficiency Education

In cooperation with Nexant, EESBA, and the Egyptian Environmental Affairs Agency, the project produced the Energy Efficiency Learning Supplement (EELS), which introduces preparatory students to the different forms and uses of energy and energy efficiency concepts and emphasizes energy conservation through personal actions.

The EELS consists of a teachers' guide with hands-on environmental activities, fact sheets, background papers, and a video focusing on three areas of energy efficiency—the built environment, transportation, and industry with an emphasis on alternative technology. GreenCOM organized four workshops in Cairo and the Red Sea region to train teachers on using the supplement and to test the activities before they were implemented in schools. Approximately 185 teachers took part in the training workshops. Copies of the supplement were distributed to schools in various governorates by the Ministry of Education and assorted NGOs that had taken part in the training workshop and were prepared to offer additional teacher training.

Results

GreenCOM's energy efficiency activities resulted in:

■ Capacity Building

GreenCOM played a significant role in strengthening the Energy Efficiency Council's position as a prime source of information on energy efficiency for Egyptian businesses. This was accomplished through technical briefings and workshops, increased media coverage, and production of promotional and educational materials for the council to distribute among its target audiences.

■ Increased Knowledge on Key Issues

The Energy Efficiency Learning Supplement developed by GreenCOM provides students with necessary information to make responsible decisions on personal energy use.



Materials from the Energy Efficiency Learning Supplement

Solid Waste Management

To support EPPP's policy objective for improved efficiency and performance of solid waste management systems, GreenCOM collaborated with the Ministry of State for Environmental Affairs and the Egyptian Environmental Affairs Agency on a strategic public awareness campaign concentrated primarily in Alexandria and Cairo, two governorates where solid waste management was being privatized.

Alexandria Privatization Campaign

■ Signage

During the first year of privatization, GreenCOM produced and placed 78 lighted street signs and 12 billboards conveying messages on best practices for solid waste management.

■ Training Monitors

GreenCOM helped to train 160 environmental service specialists to monitor the company hired to manage Alexandria's waste management services.

■ Educational Television and Video

To document the privatization process in Alexandria, GreenCOM and a partner firm produced a video that featured interviews with local residents, government officials, representatives of local environmental NGOs, and employees of the private waste management firm. The project also collaborated with an Alexandrian television station on a 16-episode series to educate the public about the



benefits and responsibilities associated with privatization. This series provided general information about waste management as well as more specific details for target groups such as teachers.

SWM Incentives in Cairo

After converting to a private solid waste management system in Alexandria, the Egyptian government undertook a similar program in the Cairo Governorate. GreenCOM supported this expansion by working with an Egyptian firm to conduct research on solid waste practices with several target groups (small business owners, 10- to 12-year-old children, household heads, and industrial laborers) in southern Cairo. Based on research results, GreenCOM and project partners developed a multifaceted social marketing campaign to promote community compliance with new waste management practices required by privatization. Campaign components included:

- **Materials development**

GreenCOM developed a number of informational materials—fact sheets for schoolchildren, stickers for garbage containers, and posters—that were used widely in schools, business establishments, and other organizations.

- **Environmental Awards Program**

In Cairo, GreenCOM used an environmental

awards program to encourage schools to develop a School Environmental Strategy and Action Plan (SESAP), which is a statement of intentions and principles for improving the school's educational and environmental performance. The particular elements of each school's SESAP come from a process in which students audit environmental compliance in their school and come up with their own strategy for implementing environmental best practices. The awards program helped the education ministry strengthen its institutional commitment to environmental issues and contributed to the larger strategic marketing campaign for SWM privatization by mobilizing community support. Egypt's education minister enthusiastically supported the Cairo EAP and considered expanding it to the national level.

Other SWM Initiatives

- **Learning Supplement**

As part of the Gore-Mubarak Partnership for Economic Growth and Development, GreenCOM worked with Egyptian educators to develop a solid waste management learning supplement for secondary technical schools. The supplement includes a teachers guide filled with hands-on student activities, background papers, fact sheets, colored overhead transparencies, a video, and a CD-ROM. Supplements were distributed to approximately 1,000 secondary level technical schools for students studying to work in industry, hotels, and agriculture. GreenCOM coordinated a series of workshops that trained more than 420 teachers to use and incorporate the supplement in their classes. Several environmental NGOs are also using the SWM learning supplement in their community-based projects.

- **Plastic Recycling Workshop**

To promote plastic recycling, GreenCOM and project partners sponsored a two-day workshop called *National Codes, Standards, and Legislation for Plastic Recycling*. The event



Components of the Solid Waste Management Learning Supplement.

focused on general principles of solid waste management, plastics as a solid waste issue, methods of plastic recycling, development of environmental legislation, and promotion of national goals, standards, and legislation for plastic recycling. Speakers came from Egypt, Europe, and the United States and shared their experiences with approximately 150 industry representatives, legislators, academics, and journalists.

■ ISO 14001

In 2001, EEPP hosted an implementation workshop for Egyptian companies interested in adopting an ISO (International Organization for Standardization) 14001 Environmental Management System. Companies that adopt this system agree to incorporate certain environmental best practices in their business plans. GreenCOM provided media coverage for the workshop and organized a special press conference afterward that featured representatives of several ISO 14001-compliant firms. The project also edited and published the *Egyptian Environmental Directory*, developed by the EEPP's Program Support Unit.

Results

GreenCOM's contributions to EEPP activities in solid waste management include:

■ Policy Implementation

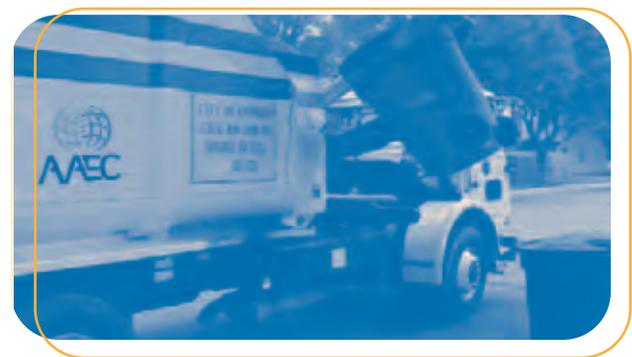
GreenCOM's multifaceted public awareness strategies in Alexandria and Cairo helped to smooth the adoption of private solid waste management systems by promoting efficiency and consumer responsibility.

■ Hazardous Waste Law

GreenCOM supported the implementation of a law on hazardous waste management by producing a boxed set of guides on the various regulatory areas covered by the law such as on-site storage and treatment and disposal of hazardous waste.

■ Youth Mobilization

GreenCOM's solid waste management learning supplement was distributed to all secondary-level technical schools in Egypt, thus reaching approximately 60 percent of the country's secondary school students with information on best practices.



Selected Publications and Products

GreenCOM Project. *Egyptian Energy Services Business Association: Public Awareness Strategy*. Cairo, Academy for Educational Development (AED), 2002.

———. *Energy Efficiency Learning Supplement*. Cairo: AED, 2003.

———. *Environmental Management Systems, Energy Efficiency, and Waste Management: A Cross-Sectoral KAP Study of Egyptian Firms*. Cairo: AED, 2000.

———. *Red Sea Learning Supplement*. Cairo: AED, 2002.

———. *Solid Waste Learning Supplement*. Cairo: AED, 2000.

GreenCOM Project, Nexant, and Egyptian Energy Services Business Association (EESBA). *Business People for an Energy-Efficient Economy*. Cairo: EESBA, 2000.

Social Planning, Analysis, and Administration Consultants. *Audience Formative Research: Report on Banks and Energy Efficiency Economy*, Cairo: EESBA, 2000.



GreenCOM

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