

Regional Center for Renewable Energy and Energy Efficiency المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة



Organizational Profile

Supported by



المركز الاقليمي للطاقة المتحددة وكفاءة الطاقة

Who We Are

- Independent not-for-profit Policy Center
- Founded by 10 Arab States in 2008 with development support from Germany, Denmark and EC
- Regional qualified experts
- Headquartered in Cairo, Egypt
- Strong global partners network

Our Mission

"To enable a sustainable growth in Arab states' adoption of renewable energy and energy efficiency applications and initiatives through leading regional policy dialogues, learning, and research."

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Our Member States





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Our Partners Network







Implemented by:















Principal Organizational Structure

National Focal Points (13)

Board of Trustees

13 representatives (one from each Member State)

Executive Committee

5 representatives (3 Gov. and 2 Private Sector)

Secretariat

GIZ Advisory

Section

Executive Director and staff (11 staff and 8 Interns)



Our Results Framework

The energy systems in the Arab region are characterized by a significant share of renewable resources and a highly-efficient use of energy

Awareness of Stakeholders Institutional Capacities & Technical Standards

National Policies & Regulations Public & Private Investments

Facts & Figures

Institutions

People

Policies

Finance



Sample of Products

Facts and Figures

- Energy **Efficiency Indicators** study
- •RE&EE Country **Profiles**
- •RE&EE index
- •Solar-MED-Atlas (with DLR)

Institutions

- National Energy **Efficiency Actions Plans** (with LAS)
- •SWHs Certification and **Standardization** (with LAS)
- Models for Land **Use and Power Purchase** agreements
- Development of a Compliance Tool for **Building Energy Efficiency Code**

People

- Internships
- •30 training courses and experts workshops
- 4 Knowledge exchange missions
- RE&EE expert networks.

Policies

- Arab EE Guideline
- Arabian RE Strategy and **National Action** Plans (with LAS)
- •Impacts assessment of **RE & EE policies** in RCREEE MS
- RE resource assessment for policy making (with IRENA)
- Perspectives toward MSP and Desertec (with IRENA)

Finance

- New **Perspectives for Carbon Trading** for RE&EE **Projects**
- Arab RE&EE **Forum** (biannual with LAS)
- Market Demand Study of Sustainable Energy **Investment** Potential in Egypt



EE Country Profiles



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EE Targets and Designated Agency

- The National Energy Efficiency Action Plan (NEEAP) is adopted (2012-2015) with cumulative EE targets of 5%.
- No designated EE agency is responsible for formulating, promoting, and implementing energy efficiency measures and policies. There is an EE unit at the Council of Ministers secretariat that is identified as the mandated entity for developing and implementing NEEAP.

Regulatory Framework

- No general legal framework for EE measures. Draft electricity law contains a chapter on EE with provisions relating to cogeneration, standards, and labeling.
- Mandatory EE code for residential buildings (2006), EE code for commercial buildings (2009), and EE code for governmental buildings (2011) are adopted.
- Minimum energy performance standards with mandatory labeling schemes have been adopted for refrigerators, freezers, washing machines, air conditioners, CFLs, and electric water heaters.

Regulatory Framework EE Targets and Designated Agency Electricity Pricing Energy Service Providers Capacity Financial Incentives

Implementation Capacity

- By 2012, 750,000 m2 of Solar Water Heaters have been installed.
- No buildings are built according to EE building codes.
- No demonstration projects for energyefficient buildings are built.
- By 2012, 10.25 million Compact Fluorescent Lamps (CFLs) have been distributed.

Financial Incentives

- No internal tax benefits for EE projects.
- No EE fund is established for financing EE projects.
- Customs duty on importing Solar Water Heaters is 2.5%. Customs duty on importing Compact Florescent Lamps is 17%.

Electricity Pricing

- Fossil fuel subsidies are medium to large.
- No special tariffs for households encouraging a rational use of energy.
- Extra high voltage and high voltage customers (intensive industries only) are exposed to peak load pricing structure to shift their consumption from peak hours.

Energy Service Providers

- 40 Energy audits are conducted in the residential and tertiary sector.
- 268 Audits are conducted in the industrial sector.
- Around 10 Energy Service Companies (ESCOs) exist.

Electricity Tariffs

Voltage	Custo	Tariff (Egyptian Plasters/kWh)		
Extra High Voltage	Kema		4.7	
	Arab Petroleum Pipelines Company (SUMED) Intensive industries: steel, cement, aluminum, copper, and petrochemical.		27.7 (*)	
	Industries: flat glass, ceramic, and porcelain.		25.2	
	Other Industries		12.9 - 15.4 (**)	
High Voltage	Intensive Industries: steel, cement, aluminum, copper, and petrochemical.		30 (*)	
	Industries: flat glass, ceramic and porcelain.		25.2	
	Other Industries		15.7-18.6 (**)	
Medium Voltage	Industries	> 500 kW	From 25.5 to 35.8 (*)	
	Other subscribers	> 500 KW —	21.4	
	Agriculture and land reclamation	< 500 kW	11.2	
	Other subscribers		25	
Low Voltage	Commercial	> 1001 kWh	60	
		601 - 1000 kWh	58	
		251 - 600 kWh	46	
		101 - 250 kWh	36	
		< 100 kWh	24	
	Residential	> 1000 kWh	48	
		651 - 1000 kWh	39	
		351 - 650 kWh	24	
		201 - 350 kWh	16	
		51 - 200 kWh	11	
		< 50 kWh	5	

(*) Prices are 50% higher during the peak period (4 hours defined by the Ministry of Electricity and Energy).
(**) Prices vary according to the type of industry.



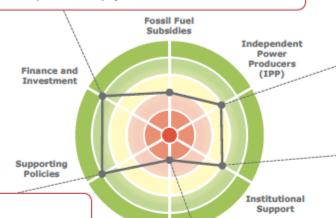
RE Country Profiles



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Finance and Investment

- In June 2012, the cabinet approved establishing RE fund for financing RE projects. Clear determination of sources of financing and procedures for disbursement of funds to RE projects are still under discussions.
- On 26 July 2009, the Supreme Council of Energy approved a policy to obtain financial guarantee to secure payments under power purchase agreements.
- According to the decision of cabinet of 26 May 2010, RE projects enjoy customs duty exemption. Investors have to apply to NREA with the list of equipment that needs to be imported. NREA certifies equipment as eligible for customs duty exemption.
- No internal tax benefits are provided to RE projects.



Supporting Policies

- Public competitive bidding for the development of large-scale private RE projects (2500 MW).
- Cabinet decision of 26 May (2010) ensures signing long-term (20-25 years) power purchase agreements.
- Feed-in Tariffs are under preparation.
- Net-metering policy for small-scale grid connected RE projects: In January 2013, EgyptERA adopted a netmetering policy that allows small-scale RE projects to feed in electricity to the grid. Generated surplus electricity will be discounted from the balance through the net-metering process.

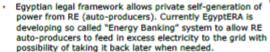
Grid Access

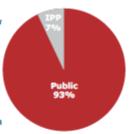
Grid Access

- No priority access to RE is granted by law, however the Egyptian Electricity Transmission Company (EETC) purchases all existing RE currently.
- Renewable energy grid code is under preparation.
- No detailed grid map for designated renewable energy sites.

Independent Power Producers (IPP)

- · Private generation of electricity has been authorized by law No 100 (1996). Total generation capacity of conventional electricity by IPPs constitutes 2049 MW.
- No IPPs producing RE exist yet. The first private wind project (250 MW) is currently under public competitive bidding process.





- No RE auto-producers in practice. The first wind auto-producer project (120 MW wind farm) is under construction.
- New Renewable Energy Authority (NREA) announced the availability of six parcels of land for RE auto-producer projects, each consisting of approximately 15 km2 in the Gulf of Suez. Each parcel of land is sufficient for establishing a 100 MW wind farm, and will be granted based on an auction system.
- An usufruct and land use agreements with the winning developers will be signed against payment equivalent to at least 2% of the annual energy generated from the project or its value.

Institutional Support

- · New Renewable Energy Authority (NREA) is responsible for promoting and supporting RE in Egypt.
- Egypt published three wind atlases: two for the Gulf of Suez area, and one for the whole Egypt which was published in 2005. Based on Egypt Wind Atlas, three areas were identified for potential wind projects: Gulf of el Zayt, East Nile, and West Nile.
- More than 7600 km2 of desert lands are allocated to NREA by presidential decrees to host public and private wind farms. NREA reserved 600 MW from this land for RE auto-
- No detailed solar atlas published vet.
- Land for large-scale solar projects is not allocated yet for private development.

Grid Interconnections

Country	Length (km)	Voltage (KV)	Capacity (MW)	Status
Jordan	13	400	550	In operation
Lebanon		400	100	In operation
Libya	180	220	240	In operation





Challenge

 Lack of regional/national approaches for improving energy efficiency and exchange of best practice

RCREEE Interventions

- Support introduction of the Arab EE Guideline
- Draft template for NEEAPs
- Support NEEAP creations and implementation (NEEAPs adopted in Lebanon, Palestine, Sudan and Egypt. NEEAPs are in different phases of preparations in Algeria, Jordan, Syria, Libya, Bahrain and Yemen)
- Monitoring the progress in the region









Challenge

 Lack of regional (partly also national) quality standards and certification systems for SWHs

RCREEE Interventions

- A certification network established and endorsed by LAS Arab Ministerial Council of Electricity (AMCE).
- A standardization and Regional certification model for the Arab region to be applied on a national level.



*SWH = Solar Water Heater





Arabian RE Strategy and National Action Plans (With LAS)

Challenge

 Lack of regional/national approaches for planning and implementation of RE to reach national targets.

RCREEE Interventions

- Support developing the Arab RE Strategy
- Draft template for Arab RE Framework (AREF) and National RE action Plans.
- AMCE approved circulating the AREF and NREAP to Arab countries for comments.

Annual Progress Report

National Renewable Energy Action Plan (NREAP)

Arab Renewable Energy Framework (AREF)

Arab Renewable Energy Strategy





Capacity Development

Challenge

Lack of competencies in the fields of RE and EE.

RCREEE Interventions

- Internships for young professionals
- Training courses and experts workshops in different aspects.
- On demand knowledge exchange missions among Arab countries
- RE&EE expert networks.







RCREEE Secretariat

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