

RE and EE in the Arab Region



Prospects & challenges
for a regional EU-MENA
grid & market
integration

MENAREC

jamila.matar@las.int

www.lasportal.org

Organizational Chart of AMCE



**The Arab Ministerial Council
for Electricity**

**The
Secretariat**

**The Executive Bureau
of the AMCE**

**RE and EE Expert
Committee**

**Electricity Expert
Committee**

**Arab Solar
Vision WG**

**Energy
Efficiency
WG**

**Arab
Strategy for
RE WG**

Study SC

**Study
Team**

Secretariat of the Arab Ministerial Council for Electricity



The Arab Ministerial Council for Electricity

The Arab Ministerial Council for Electricity is one of the specialized Councils operating under the umbrella of the League of Arab States and is composed of Arab Ministers of Electricity.

The Council aims at enhancing the cooperation in the electricity sector and coordinating Arab policies in this field. The Council attaches great attention to Renewable Energy and Energy Efficiency. It has recently amended its statute accordingly by creating a dedicated expert committee for renewable energy and energy efficiency issues.

Most important achievements of the Council in the areas of RE & EE

- The Arab Strategy for promoting the utilization of Renewable Energy 2010-2030.
- The Arab Ministerial Declaration on the Arab vision to exploit Solar Energy.
- The Arab Energy Guideline for Improving Electricity Efficiency and Rationalizing its consumption at the End User.
- Preparing a "Directory on the Potential of Renewable Energy and Enhancing Energy Efficiency in the Arab States".
- Choosing ((May 21st)) of every year to celebrate the "Arab Day for Energy Efficiency".

www.lasportal.org

Email: energy.dept@las.int



المجلس الوزاري العربي للكهرباء

المجلس الوزاري العربي للكهرباء هو أحد المجالس الوزارية المتخصصة العاملة تحت مظلة الجامعة العربية، ويتألف من الوزراء المعنيين بشؤون الكهرباء في الدول العربية، وتتولى إدارة الطاقة بالأمانة العامة أمانته الفنية.

يهدف المجلس إلى الارتقاء بقطاع الكهرباء وتنسيق السياسات العربية في هذا المجال. وقد اهتم المجلس الوزاري العربي للكهرباء بموضوعي الطاقة المتجددة وكفاءة الطاقة، كما عدّل نظامه الأساسي وهيكله التنظيمي باستحداث لجنة من خبراء الطاقة المتجددة وكفاءة الطاقة تتولى متابعة موضوعات الطاقة المتجددة، كما تتابع موضوعات كفاءة إنتاج واستخدام الطاقة.

أهم إنجازات المجلس في مجالي الطاقة المتجددة وكفاءة الطاقة

- إعداد الإستراتيجية العربية لتطوير استخدامات الطاقة المتجددة 2010 - 2030.
- إصدار الإعلان الوزاري العربي حول الرؤية العربية لاستغلال الطاقة الشمسية.
- الإطّار الاسترشادي العربي لتحسين كفاءة الطاقة الكهربائية وترشيد استهلاكها لدى المستخدم النهائي.
- إعداد دليل حول إمكانات الدول العربية في مجالات الطاقة المتجددة ورفع كفاءة إنتاج واستهلاك الطاقة.
- تحديد يوم (21 مايو) من كل عام ليكون يوماً عربياً لكفاءة الطاقة.

www.lasportal.org

Email: energy.dept@las.int



ARAB FORUM FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY



23-24 April 2012, at the General Secretariat of the Arab League in Cairo

CO-ORGANIZED BY

MED-EMIP

Euro-Mediterranean
Energy Market Integration Project



MAIN SPONSORS

**Schneider
Electric**



CO-SPONSORS

SIEMENS

“BUILDING FINANCING PARTNERSHIPS”



www.arfree.net

The Pan Arab Strategy for RE



- To enhance energy security for producers and consumers of primary energy resources through diversification of energy resources.
- To utilize the abundance of renewable energy resources in the region and to overcome the scarcity of water resources.
- To meet the requirements of national and regional development.
- To promote Arab industrial potential.
- To contribute in resolving environmental issues.

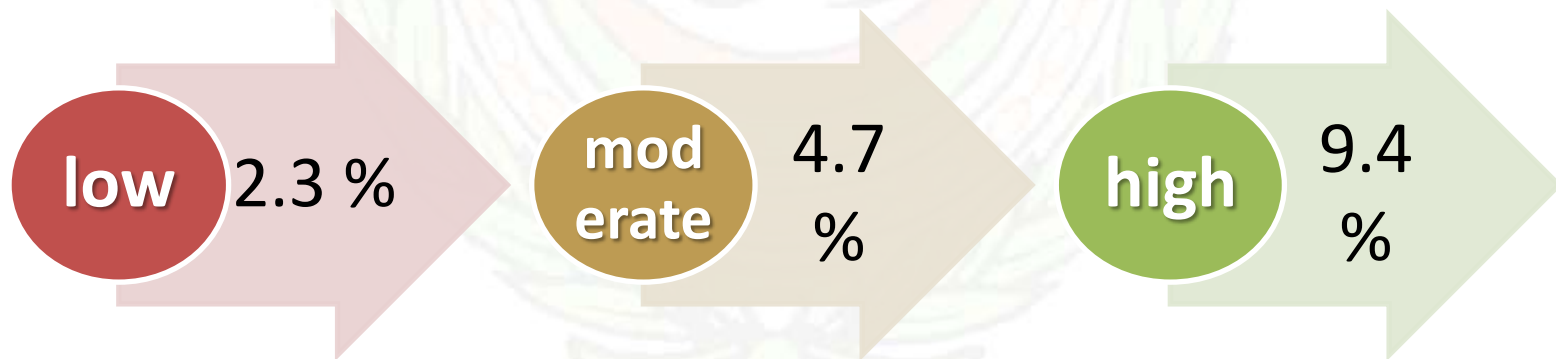
The Pan Arab Strategy for RE



Target : to increase the share of RE in the Energy mix

Time Frame: 2010 - 2030

Scenarios:



The Comprehensive Interconnection Study



Intercon
nections
of Elect.
Systems



World Bank

&
LAS

Institutional &
Regulatory
Framework



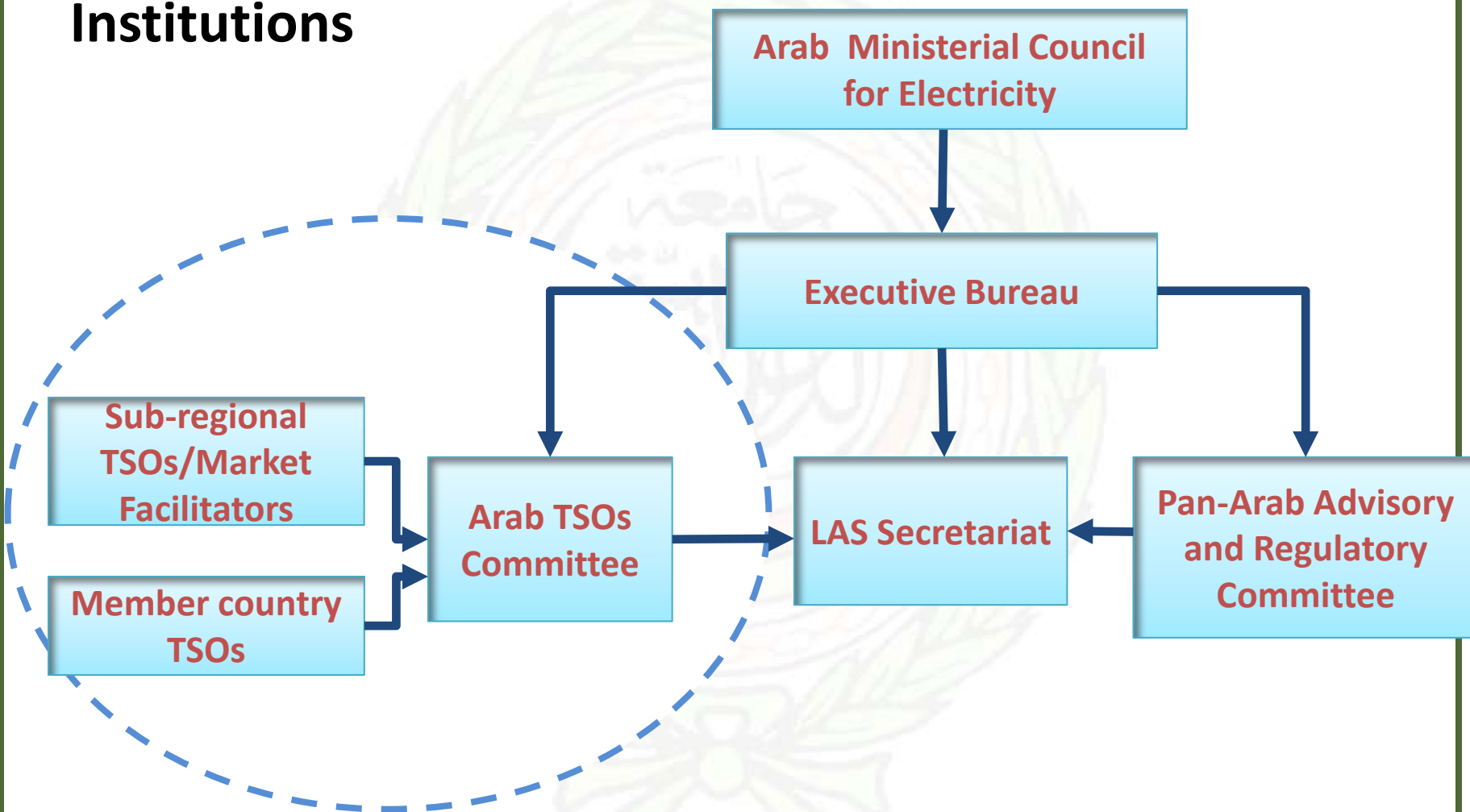
Pan-Arab
Interconnec
tion Study

Study of
Electricity-Gas
Trade

The Pan-Arab Electricity Market Structure



Institutions



The Pan-Arab Electricity Market Structure



MOU

- Commitment of Arab countries to Pan-Arab market integration
- Legal basis for Pan-Arab market and subsequent reforms
- Legal basis for Pan-Arab market institutions

GA

- Objectives of Pan-Arab electricity market
- Guiding principles for development of Pan-Arab market
- Formation of, and roles and responsibilities of PA market institutions

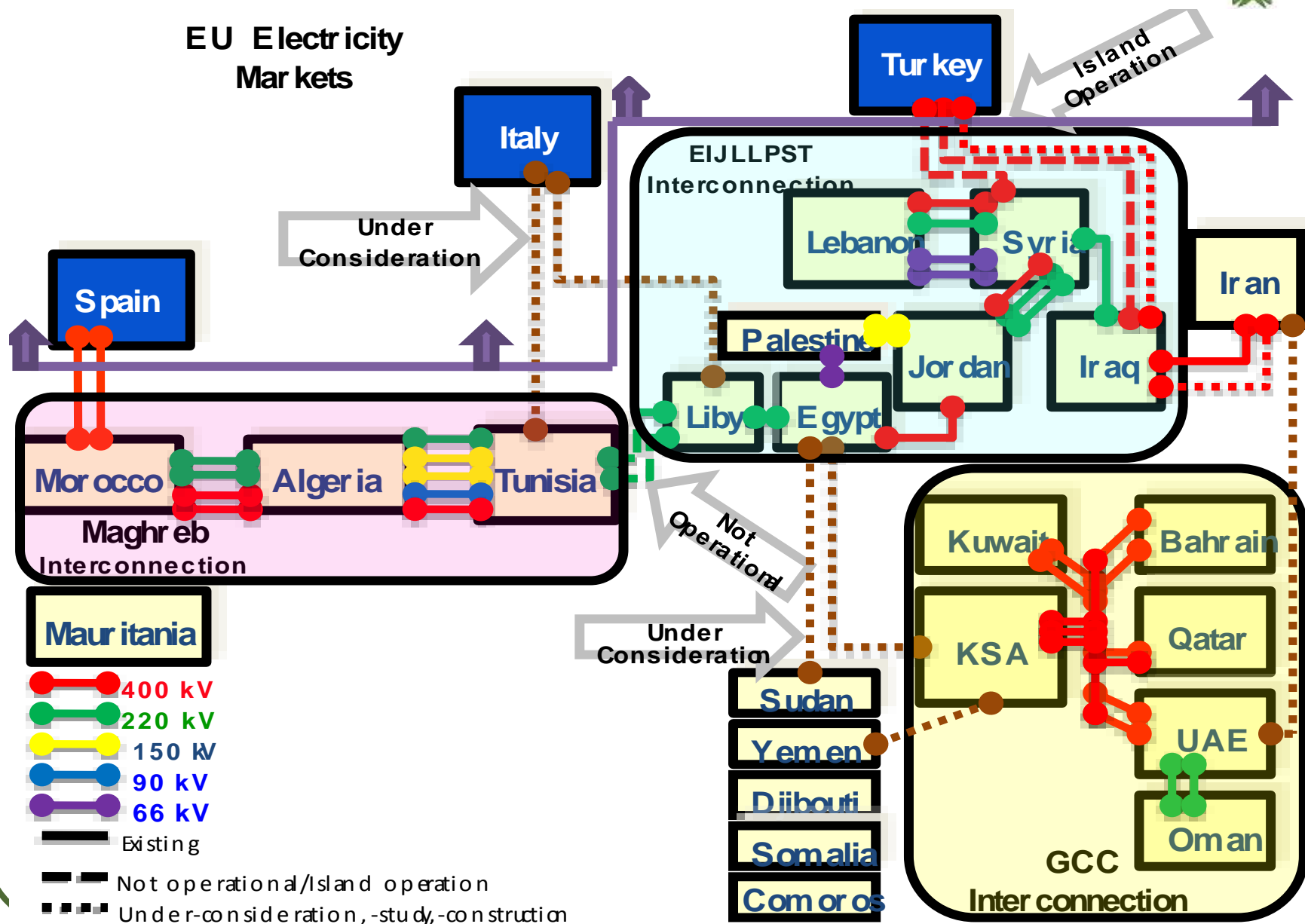
General P-A Electricity Market Agreement

- Commercial aspects of Pan-Arab market, including operation, participation and administration
- Roles and responsibilities
- Metering, billing and settlement

Arab Grid Code

- Minimum technical requirements for operation and planning national transmission networks & international interconnections
- Roles and responsibilities + Metering

Existing & Planned Interconnections



Task 1: The power sector in the Arab Countries – Present status and future trends
(see items 5.1, 5.2, 5.3, 5.4, 5.5. and 5.15-electrical interconnections)

Task 2: The gas sector in the Arab Countries – Potential available NG quantities and potential surplus for NG trading
(see items 5.6, 5.7, 5.8 and 5.15—NG pipelines)

Task 3: Scenarios and assessment of economic feasibility of different alternatives for energy/power exchanges
(see items 5.9, 5.10, 5.18 and 5.21)

Task 4: Feasibility of electrical energy trading and interconnection reinforcements
(see items 5.12, 5.13 and 5.16)

Task 5: Financial study of the selected alternative and electricity pricing
(see item 5.11)

Task 6: Bilateral and multilateral trade model for electricity and NG
(see item 5.14)

Task 7: Implementation plan of the proposed electrical and NG interconnections
(see items 5.17, 5.19 and 5.20)

Arab EE Guidelines .. Stages





AEE Guideline (purpose & means)



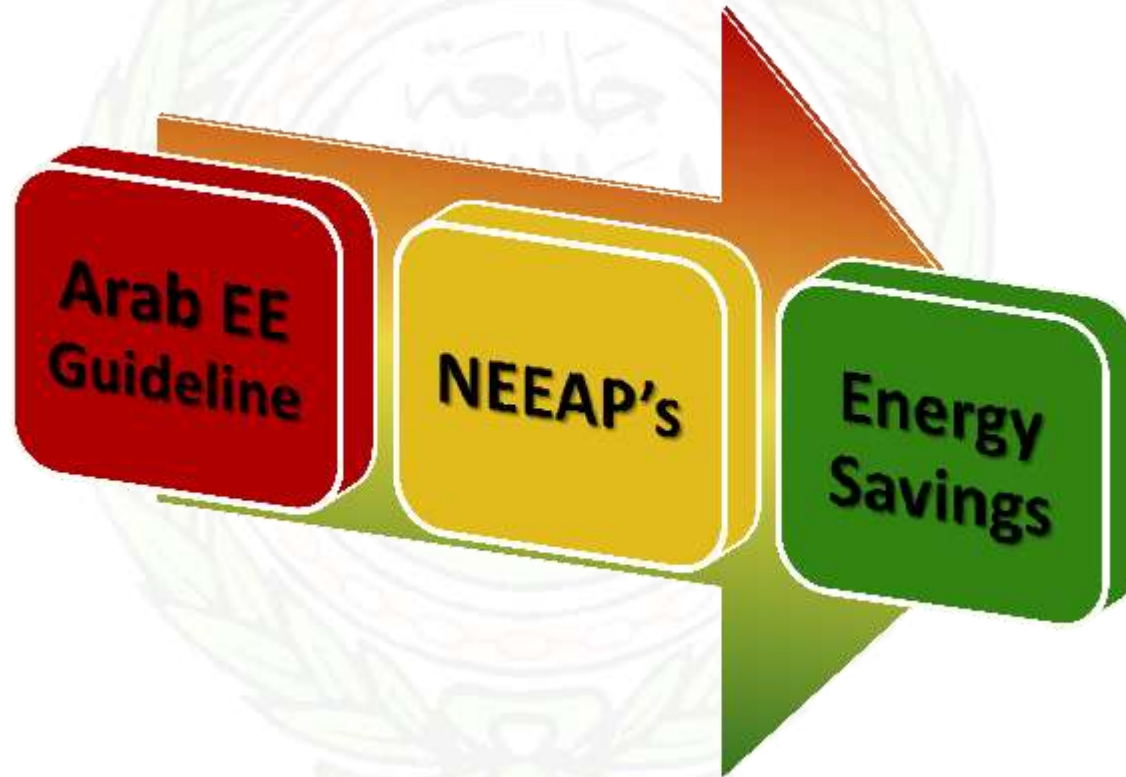
Purpose:

To foster and improve electricity efficiency and rationalization of it's consumption at the end user.

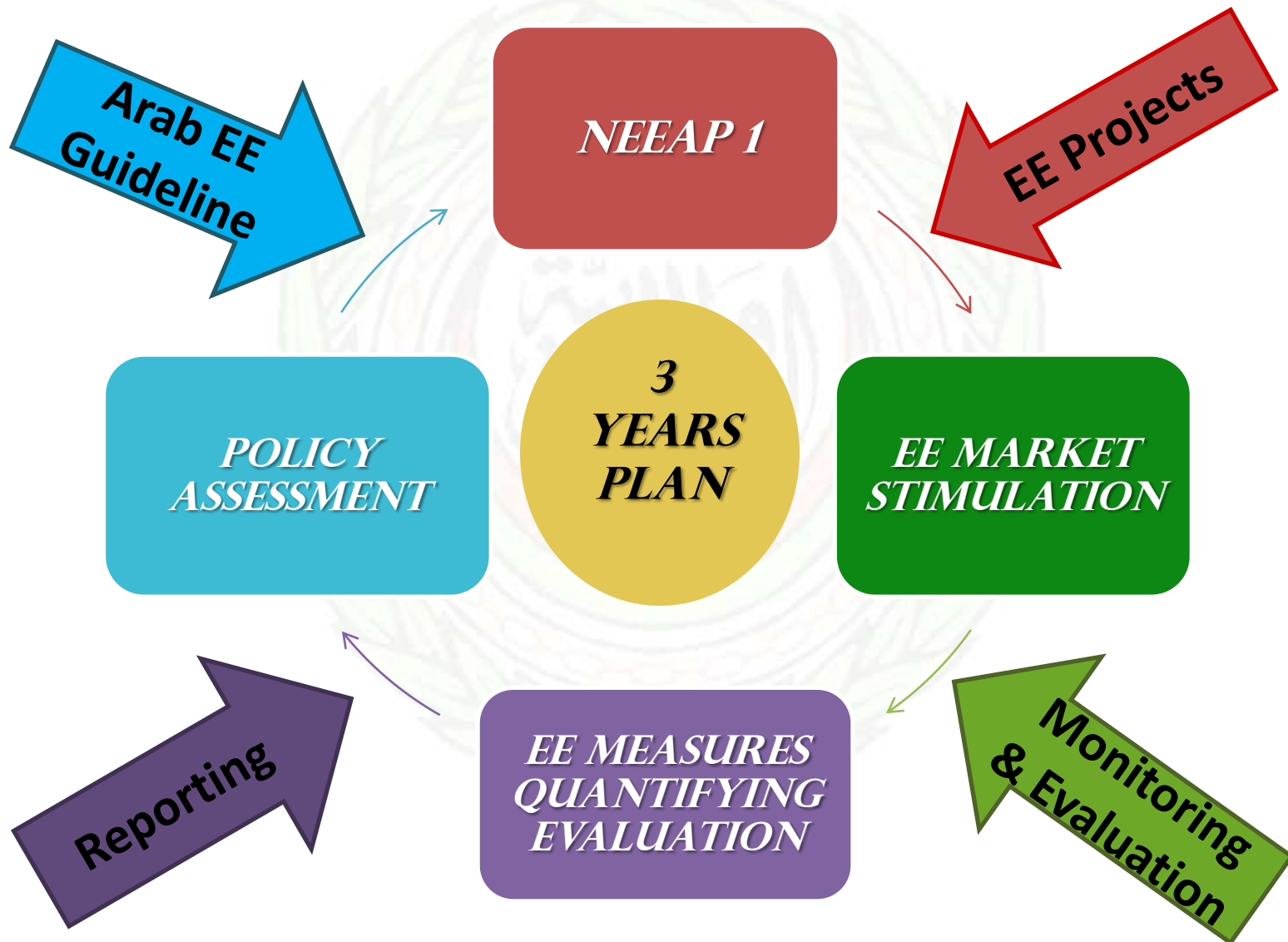
Through:

-  The provision of indicative targets, as well as mechanisms, incentives and institutional frameworks and financial and legal measures required to remove the barriers and flaws existing in the market which impede the efficient end-use of energy.
-  Creating the appropriate conditions for the development and promotion of a market for energy services in addition to the delivery of other necessary measures to improve energy efficiency to end-users.

Policy Cycle within the AEE Guideline



Effective EE Policy Dynamics





القطاع الاقتصادي
إدارة الطاقة
أمانة المجلس الوزاري العربي للكهرباء

الإطار الاسترشادي العربي
لتحسين كفاءة الطاقة
الكهربائية وترشيد استهلاكها
لدى المستخدم النهائي



مارس 2011

طبع بمطبعة جامعة الدول العربية



Economic Sector
Energy Department
Secretariat of the Arab Ministerial
Council for Electricity

The Arab Guideline for Improving Electricity Efficiency and Rationalizing its Consumption at The End User



Translation and Printing supported by





LIGUE DES ETATS ARABES
Secteur Economique
Département de l'Energie
Secrétariat du Conseil des
Ministres Arabes en Charge de
l'Electricité

**Cadre arabe d'orientation pour
l'amélioration de l'efficacité énergétique
de l'électricité et la rationalisation de
sa consommation par l'utilisateur final**



La traduction et l'impression ont été soutenue par

Energy Efficiency in the Construction
Sector in the Mediterranean

MED-EMIP

Euro-Mediterranean
Energy Market Integration Project

NEEAPs Development in Arab States

