



The Egyptian Cabinet
Information and Decision Support Center
IDSC

EEU Perspectives towards more Sustainable Energy Sector in Egypt

Energy Efficiency Unit (EEU)

January 21, 2014

The Challenge

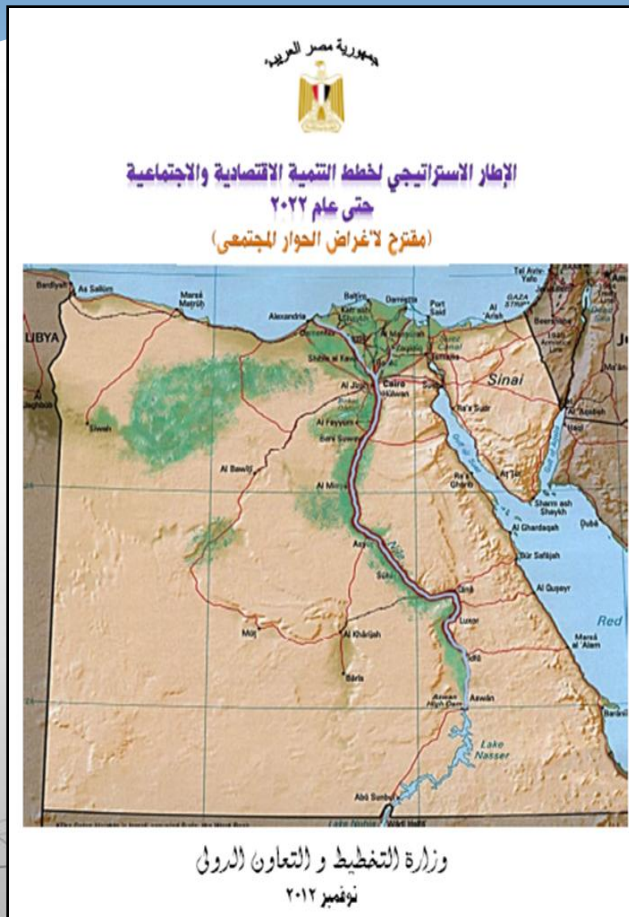
Energy Supply/Demand Deficit
is expected to reach (30-50) Mtoe
between (2022- 2030)
i.e., about 24% - 35% of the Demand

Aggressive Energy Policy Reform

to ensure the sector's contribution in achieving NSD

- **Enhancing exploration activities for fossil energy resources.**
- **Upgrading Energy Efficiency (EE) both in the supply & demand side sectors.**
- **Increasing the contribution of Renewable Energy (RE) resources.**
- **Developing an appropriate energy institutional and legislative frameworks.**
- **Abatement of the energy sector environmental impacts.**

EE & RE in the context of Egypt's Development Plans



- In November 2012 the Ministry of Planning issued the “**Strategic Framework for Economic & Social Development**” (SFESD) to year 2022 .
- Chapter 3 of the “SFESD” is devoted to **Natural Resources Management** including **a set of strategic objectives and targets on EE and RE.**

Energy Efficiency (EE) the plan calls for:

- Adopting Sectoral/National EE Strategies targeting **at least 10% savings** of the total end use energy consumption by 2022.
- Developing **10-year EE action plan(s)** mainly for:
 - Greening the **Industrial Sector**.
 - Promoting Sustainable **Transportation**.
 - Enhancing EE in the **Building Sector**.

Renewable Energy (RE) the plan calls for:

Updating the RE Strategy to target saving of 20% of the total end use primary energy consumption by 2022.

Four priority areas for achieving the set target:

1) RE Electricity Generation:

- **Implementing the planned MOEE Large Scale Wind and Solar plants.**
(NREA targets to build 2,500 MW of solar power plants; 2,800 MW CSP & 700 MW PV plants; out of which 67% is to be implemented by private sector).
- **Promoting PV distributed applications (2,000 Mw by 2022).**

Renewable Energy (RE)

the plan calls for: *(continued)*

2) SWH in the Housing and Tourism sectors:

- The use of SWH in 50% of the newly established buildings and **promoting local production.**
- Promoting market to reach 850,000 installed SWH by 2021/2022; expected to save 1.4 Mtoe and 3,000 GWh annually

3) Solar Industrial Process Heat Systems

- IPH consumes 35% of the industry energy consumption; 10-15% of it can be saved by low and medium solar heating systems.

4) Promoting Biomass Energy Systems

- Biogas for rural development - energy and fertilizers from urban and agriculture solid waste.

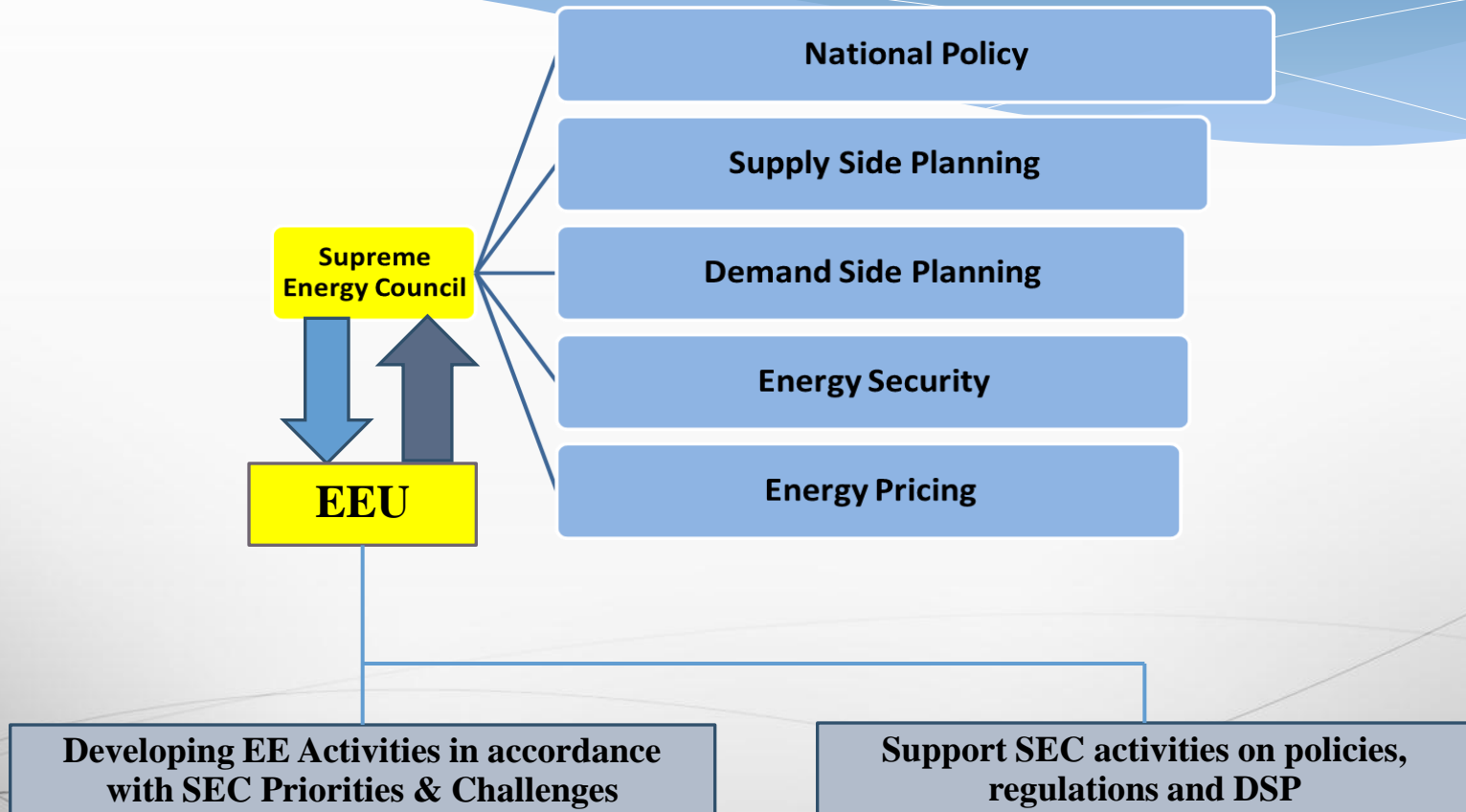
Current Major Policies and Measures

- **Efficient Lighting for residential and commercial sectors as well as street lighting.**
- **Energy Efficiency Labeling for appliances and with relevant standards were developed.**
- **Energy Efficiency Code in Buildings was issued but not implemented yet.**
- **SEC approved a RE target of 20% of produced electricity by 2020, including Hydro.**
- **12% of wind produced electricity by 2020 (7,200 MW), currently 540 MW in operation.**
- **COM approved the Solar generation plan targeting 3,500 MW by 2027.**

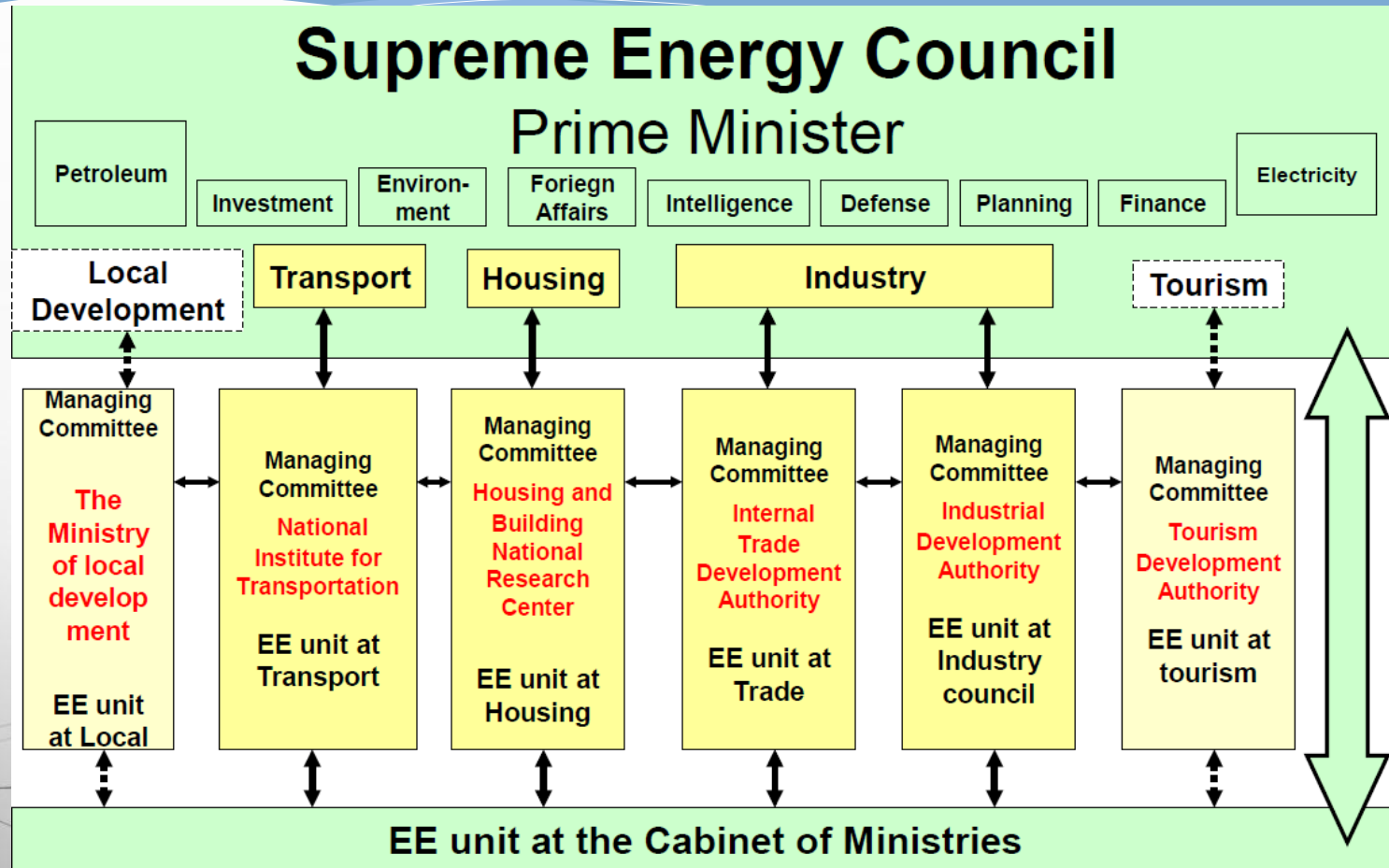
Issues Not Addressed

- **Efficiency legislation for the industrial and commercial sectors.**
- **Enforcement of efficiency codes in buildings.**
- **Restructuring the transportation system and Enhancing mass transport.**
- **Dissemination of distributed solar systems and biomass technologies.**

Energy Efficiency Unit (EEU)



Decentralized EEUs in key ministers



EEU Activities

1) In cooperation with International and Regional Partners:

- Energy Sector Policy Support Program, EU
- Climate Change Risks Reduction Management, UNDP
- Joint Egyptian-German Committee for EE, RE and Environmental Protection, JCEE/GIZ

2) Supporting SEC Activities:

- Coordination with and Support to Line Ministries
- Promotional and Awareness Activities

ESPSP: Technical Assistance Components

NATIONAL ENERGY STRATEGY Assistance in updating or modernising the Energy Strategy to 2035

GAS SECTOR Support for development of regulation of the Gas sector

ENERGY EFFICIENCY Support for strengthening the existing central Energy Efficiency Institutional System in two directions through reinforcement of the institutions and providing operational tools

22 months to Dec 2014

Combined Efficient Lighting & PV Systems Initiative for Governmental Buildings

- **SEC resolution for EE in government buildings:**
 - 5,977 GWH in 2010/2011 \approx 1100 MW
 - 6.8% annual growth
- A planned 8-years program **from January 2014 to 2022**, with progressive annual savings of 315 GWH in 2015/2016 to 4,240 GWH in 2020/2021

EEU Activities

EEU Planned Activities, 2013/2014

- **Energy Policy Improvement:**

Energy Efficiency Improvement Strategy in public buildings, Energy Consumption Indicators Evaluation Sector, the industrial sectors.

- **Initiatives for disseminating the use of EE and RE systems:**

- PV systems for public buildings.
- Solar Water Heaters in the housing/ industrial sectors.
- Bio-gas systems in rural areas.

The Way Forward

- * Further building an effective **institutional framework**.
- * Developing a national **energy efficiency strategy**.
- * Updating the exiting **RE targets and strategies**.
- * Developing **sector-specific EE** operating plans.
- * Implementing **market initiatives and policies** in targeted sectors.
- * Monitoring and **market development**.
- * Ensuring that an adequate and stable **financial support** is established.



Thank you
EEU/IDSC

