

Energy Efficiency in Buildings in Egypt

Roadblocks Against Implementation
and Enforcement,
Required Actions

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- 1- Road Blocks Limiting Energy Efficiency in Buildings in Egypt**
- 2- Factors to Consider for Energy Efficiency in Buildings in Egypt**
- 3- Factors Needed for Energy Efficiency Success in Buildings in Egypt**
- 4- Energy Efficiency in Buildings - Egyptian Examples**

1- Road Blocks Limiting Energy Efficiency in Buildings in Egypt

a- Little Awareness and understanding of potentials of EE and RE.

E resources in nature
Energy efficiency concepts
Cost & value of Energy used
Envi Impacts of irrational use of energy

b- Limited incentives for EE and RE programmes.

c- Subsidies for conventional energies.

d- High price for RE appliances

5- High import duties on renewable energy systems.

6- Absence of overall strategy in spite of intensive ongoing activities .

Only sector interests of ministries.

2- Factors to Consider for Energy Efficiency in Buildings in Egypt

a- Integral Energy efficiency and renewable energy design should constitute the main approach to buildings design.

b- Natural and ecologically green friendly building materials should be used along with minimum use of synthetic materials

C- The design should consider the building in terms of the integral environmental system.

d- The design should incorporate energy efficient systems aiming at zero energy building.

e- The main environmental forces should shape the buildings, the orientation and air intakes.

f- Maximum reduction of toxic emissions.

g- Data on the composition of air, soil, radiation and noise and vibration should form elements of the design.

h- Use of natural and ecological building materials minimal use of synthetic materials.

i- The design should optimize the use of energy and satisfy internal comfort.

j- Natural lighting and good colour sense should be employed.

k- Natural lighting and good colour sense should be employed.

1- The building should be insulated from noise and vibration.

m - Fresh air ventilation should be ensured.

n- Establish Egyptian Technical Advisory Group

3- Factors Needed for Energy Efficiency Success in Buildings in Egypt

Roadblocks Against Implementation and Enforcement, Required Actions

a-Awareness raising , technical assistance and capacity building.

b-Market preparation and market assessment.

c-Improving legal and macroeconomic framework conditions for EE and renewable energy technologies.

d-Expanding development partnerships with the private sector (especially Banks).

e-Research and development of higher education in energy efficiency and renewable energy. (Advanced Curriculum on Energy Efficiency and Renewable Energy in Buildings).

f- Financial incentives in forms of grants, loans, tax reduction and recognition certification (Star system).

g- Establishing certified accredited laboratories.

h- High profile demonstration pilot projects are necessary to propel the community.

g- Establishing data base on locally available natural and ecological building materials .

i- The creation of a network of associations of manufacturers, small enterprises, importers and consumers related to the chamber of commerce and industry of each city.

THANK YOU

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