Regional Progress Towards Efficient Lighting in the SEMED/Arab region

Energy Efficiency Policies for the SEMED/Arab Region

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Country Lighting Assessment

- Estimates the savings potential of a country from the phase-in of energy efficient lighting.
- These assessments consider savings potentials for
  - (1) the on-grid lighting market, encompassing the residential, commercial/industrial and outdoor lighting sectors, and
  - (2) the off-grid lighting market, in countries that have a high number of off-grid end users.
- 5% of global electricity consumption could be avoided through a transition to efficient lighting
- 490 Mt of CO_2 savings per year
  - Equivalent to the emissions of more than 122 million mid-size cars
  - Closing over 250 large coal-fired power plants
  - US $210 billion in avoided investment

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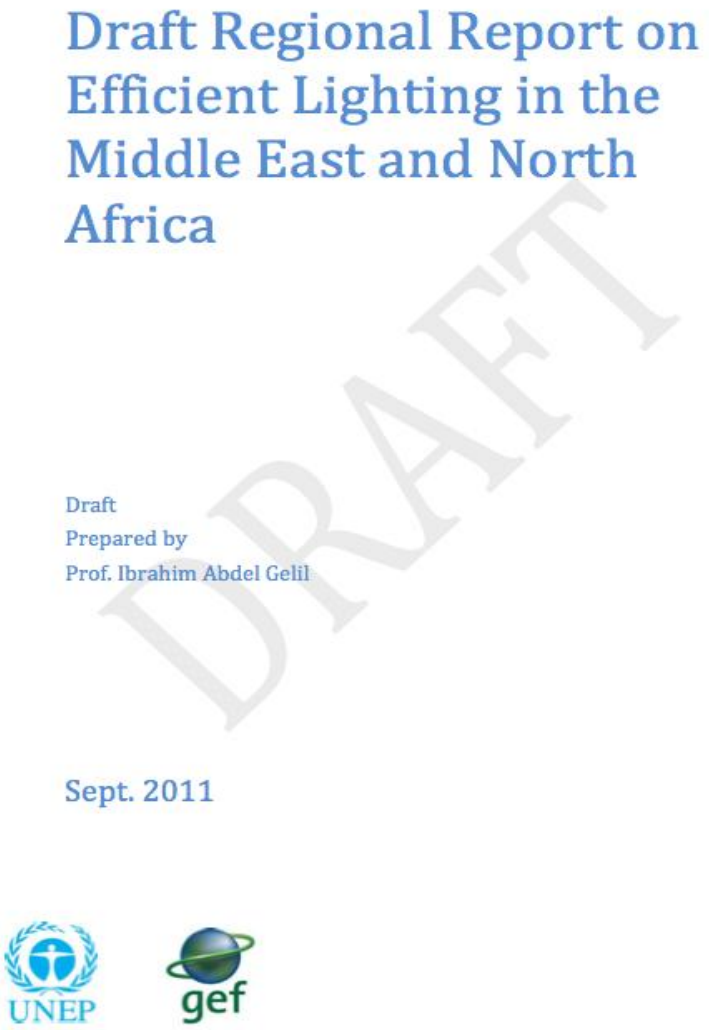
Benefits of Phasing out ILs in the Arab Region

- Out of the 130 countries analyzed by en.lighten18 are from the Arab region (on-Grid).
- Lighting represents about 34 % of the total electricity consumption in the Arab region
- Saudi Arabia and Egypt are the largest consumers of electricity and has the highest saving potential
- Lighting represents the highest percentage of electricity consumption in Algeria (41.3 % and Sudan (35.5%)
- Phasing out ILs in the region would save:
  - Nearly 37.8 Twh of electricity (an average of 5.8 % of the total consumption)
  - Nearly 24.8 Mt of CO_2

National Initiatives

	Government's commitment (million USD)	CFLs replaced (million)	Target date for phase out ILs
Egypt	18	17	2020
Lebanon	7	3	2012
Morocco	46.5	6	NA
UAE	NA	1	NA
Tunisia	NA	NA	2013
Total		27	



National Initiatives towards transition to EL: Regulations

http://www.enlighten-initiative.org/portal/CountrySupport/GlobalPolicyMap/tabid/104292/Default.aspx

- Minimum energy performance standards (MEPS)
  - Used in Egypt for CFLs
- Mandatory labeling and certification
  - Mandatory labels for CFLs exist only in Algeria and Egypt.
  - Voluntary labels for CFLs in Lebanon
- Building codes are evolving in the region
  - EL has not been included

National Initiatives towards transition to EL: Market-based instruments

- Fiscal Instruments and Incentives
  - Tax incentives offered in many countries for EE and RE projects (could be extended to CFLs)
  - Most countries with bulk distribution programs of CFLs have used direct subsidies
- Information, Communication and Voluntary Actions
  - Almost all countries are implementing public awareness campaigns to promote CFLs
  - Public leadership and reference projects exists in many countries (Egypt, UAE).
  - The UAE's "Make The Switch" campaign is pioneering.

End-of-life treatment of used lamps

- Mercury content of CFLs is a public health concern.
- New models of ENERGY STAR-rated CFLs have mercury content levels of 1-2 mg
- Sound management of used lamps at their end-of-life should be part of the E-Waste regulations
- Initiatives planned in Egypt, Lebanon, and Morocco

Monitoring Verification and Enforcement

- Many countries have national standardization bodies who are ISO members.
- National accreditation bodies exist in six countries.
- 6 countries have national institutions to accredit laboratories
- Qualified testing facilities for lamps are rare in the region
- MVE capacity needs to be strengthened

Manufacturing of Lamps

- Some production of ILs – need to transform production to CFLs
- The region has a limited capacity for the manufacturing of ELs.
- Mostly these facilities are in collaboration with international Lamps manufacturers

Regional strengths towards transition to EL

- Commitment to energy efficiency
- A number of pioneering initiatives on efficient lighting
- Capacity for standards development, testing, and certification
- Power sector and energy pricing reform policies are underway
- Evolving green building initiatives
- Capacity for local manufacturing of lighting products

Barriers and gaps to the transition to EL

- Limited political awareness about the benefits of EL in some countries.
- Lack of Minimum Energy Performance Standards
- Limited involvement of the private sector and other stakeholders
- Low level of public awareness
- Financial and cost barriers

Conclusions (1/2)

- Similar policy packages were used in the region
  - energy price reform,
  - a strengthened legislative and institutional framework
  - provision of fiscal incentives,
  - development of standards and labeling programs, and
  - public awareness programs
- Five countries in the region have already distributed about 27 million CFLs to consumers
- Three countries have announced target dates to phase out ILs.

Conclusions (2/2)

- Although S&L programs exist in the region, they are missing for CFLs
- Though green building initiatives are evolving, they don’t consider EL
- The region has some basic capacity for local manufacture of CFLs (need to be expanded)
- The region has some technical capabilities for MVE (need to be strengthened)
- Lack of sustainable end of life schemes for spent lamps

Policy Interventions : the Role of Governments (1/2)

Develop integrated strategies to promote transition to EL, through:

- Setting MEPS
- Using financing schemes and fiscal arrangements to lower initial high cost.
- Using labeling schemes to disseminate information and promote efficiency
- Leading by example by using only EL technologies in their own public buildings
- Subsidizing CFLs instead of subsidizing electricity

Policy Interventions : the Role of Governments (2/2)

- Development of regional EL mandatory testing and certification schemes
- Integrate sound management of EL products into E-Waste policies including take-back schemes.
- Join en.lighten Partnership Program to phase- out of ILs technologies (11 Arab countries have already joined)

THANK YOU

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