

# Case Study: Energy Efficiency Legislation in Morocco

Regulatory and Institutional Framework of  
Morocco's EE Building Code Initiative

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- Absence of EE Standards in Construction Sector Contributes to National Energy Deficit
  - Morocco imports 97% of its energy, with the building and service sectors accounting for 25% of overall energy demand
  - National electricity consumption is growing by 8-9% a year
  - Several EE initiatives in housing sector (e.g., solar water heaters), but otherwise few EE standards for building design and construction
  - Three key sectors are being targeted:
    - Social housing: 100,000 new units built each year
    - Health: on-going renovation of 120 public hospitals
    - Tourism: 10 million tourists planned by 2010

- Policy Objectives of Moroccan Government
  - Gradual introduction of EE standards and practices in construction sector through:
    - Definition and adoption of uniform standards
    - Communication, outreach and training
    - Public-private sector cooperation
    - Voluntary industry initiatives
    - Public investment programmes
    - Regulation (e.g., EE building code) and enforcement
  - Target is to reduce energy consumption in buildings by up to 15%

- **New EE/RE Law Provides Regulatory Framework**
  - Minimum EE standards for housing, health, educational, cultural, administrative and office buildings, including:
    - Technical specifications (insulation, ventilation, heating, cooling, and hot water production, etc)
    - Energy performance standards for buildings
    - Objectives for solar energy and other renewable energies
    - Climate zone-specific standards
  - Standards and labels for building materials and equipment
  - Auditing and verification measures

- New Law Provides Institutional Framework
  - Mandate of CDER, Morocco's RE agency, expanded to cover EE
  - CDER to ensure that builders conform to EE regulations by:
    - Issuing EE building standards through the Ministry of Housing
    - Publishing and disseminating technical information
    - Certifying energy inspection firms
    - Ensuring that penalties are applied for non-compliance
  - CDER to develop three EE programmes for:
    - New construction
    - Public sector buildings (new construction and renovations)
    - Social housing

- Close Partnership with Public and Private Stakeholders
  - National Steering Committee
    - Forum for representatives from key ministries and professional associations to jointly set priorities for CDER's EE programme
  - Ministerial Coordination Council
    - Forum for key ministries (Housing, Health, Tourism, Finance, Interior, etc.) to coordinate EE implementation in govt programmes
  - Professional associations (Nat'l Order of Architects, Nat'l Building Association, etc.) to relay information to members
  - Architecture and engineering schools to strengthen EE curriculum

- Estimated Benefits of Morocco's EE Building Initiative in the Social Housing Sector

	<u>Over first 15 years</u>
Social housing construction	100,000 units/year
Oil import savings (at \$60/barrel)	\$1,100 million
Cost of EE measures	<u>-\$600 million</u>
Net savings for Morocco's economy	\$500 million