

Standards, Regulations, Permits and Labelling for Buildings

MED-ENEC Capacity Building Workshop
“Political and Economic Framework Conditions for Energy
Efficiency and Renewable Energies in Buildings”
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- Building energy standards are organized by sub-system
 - building envelope
 - heating, air conditioning, ventilation, hot water systems
 - lighting
- Prescriptive standards for components
 - K/U-values, energy efficiency for boilers, air conditioning, etc.
- Performance standards
 - based on calculated energy performance for building as a whole
 - use of reference building design

- Energy Performance for Buildings Directive (EPBD), scope of Implementation:

- Development of totally new products (building components)
- Development of new software tools
- Public-Private-Partnership (PPP) system for implementation:
 - data base
 - quality assurance
 - administration
 - integration (R&D support, normative labelling, updating of prescriptive standards for U-values of components, etc.)

- Development needs:

- Development of software tools for integrated calculations
 - national agency finances development of single software
 - market develops software that is approved by national authority
- Testing methods for establishing compliance with building standards upon inspection after construction (blow door test)
- New building designs + design manuals
- Establishment of advisory service to respond by email and by phone to questions by engineers and architects
- New products and components (private sector)

- Capacity building needs:

- architects and engineers in use of compliance software
- inspectors
- code officials
- project developers / construction companies
- construction workers

• Compliance:

- inspection of building after construction
- inspection assisted by short list
- “blower-door test” to check tightness of building
- energy certificate is required for building authority’s permission for use

- Energy labelling and energy certificate:
 - how do you establish the right trade-off between keeping down the costs of transaction by house sales and getting quality reports?
 - certified energy consultants
 - monitoring reports on consumer satisfaction
 - how can you get building owners to undertake the whole package of recommended EE-investments when they invest in major renovation of building?
 - renovations need to use components that fulfil the EE norms and standards of the building code
 - try to make approval of applications for permission to undertake renovations dependent on implementation of minimum package of measures
 - incentive instrument: VAT reductions