Promoting sustainable buildings in the ECE region

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Building sector: statistics

- 30% of total final energy consumption
- 50% of global electricity demand
- 30% of energy-related GHG emissions
- 12% of global fresh water use
- 40% of waste
- 5-10% employees at national level
Geneva UN Charter on Sustainable Housing

**Main purpose:** to ensure a high quality of life to their citizens through the provision of adequate, safe, healthy housing and sustainable cities.

UNECE endorsed the Geneva UN Charter in **April 2015**
Standards on Energy Efficiency in Buildings

March 2015

Survey on building standards and regulations

Q14. Main challenges in developing or updating building standards and regulations

- Lack of knowledge: 3.36
- Lack of information: 3.32
- Lack of experts/expertise: 3.15
- Lack of awareness: 2.82
- Lack of funds: 2.81

Q16. Priority areas

- Thermal performance of buildings and building components: 24.3%
- Construction materials: 53.7%
- Minimum habitable standards for a healthy and safe living: 51.9%
- Heating and water-based cooling systems in buildings: 42.6%
- Lighting: 27.8%
- Other: 27.8%
- Electrical appliances: 20.4%

April 2015

Expert Consultation on EE standards in buildings

Joint Task Force on EE Standards in Buildings

Committee on Housing and Land Management, Committee on Sustainable Energy and WP 6

- Mapping EE standards for buildings and preparing gap analyses
- Developing and organizing training programmes
- Mapping existing technologies and technology foresight
- Establishing a database of experts
- Preparing guidance materials
- Promoting partnerships
Framework guidelines for EE standards in buildings

A holistic, systems approach to building design, delivery, and operation

Guidance on 4 components:

• Strategic approach - how buildings must be
• Design and Construction – how their conception/ delivery must be
• Management – maintenance – how they must be maintained over life-cycle
• Implementation steps

Endorsed by the Committee on Sustainable Energy on 26 September 2017
Endorsed by the Committee on Housing and Land Management on 8 November 2017
Next steps: Joint Task Force

HOUSING AND LAND MANAGEMENT

October 2017

1st Meeting of the Joint Task Force

Sep. 2017  Dec. 2018

Activities:
- Mapping of EE standards in buildings
- Mapping of technologies for EE
- Online database of experts
- Best practices compendium
- Gap analysis and roadmap
- Action plan implementation of Framework Guidelines
Thank you!

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