GOOD PRACTICES

FOR ENERGY-EFFICIENT HOUSING IN THE UNECE REGION

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What to expect

A joint effort of UNECE, UN-Habitat and the City of Vienna, this report builds on existing work in the area, such as the Action Plan for Energy-Efficient Housing in the UNECE Region issued by UNECE in 2011.

The objective of this follow-up report is to provide practical examples on means of implementation.

Examples include case studies from the UN-Habitat Best Practices Centre for Central and Eastern Europe in Vienna and case studies specifically prepared for this publication. These case studies are practical, short and illustrative, with innovative ideas presented to facilitate the exchange of good practice.
Case studies in a nutshell

Legislative framework

• Energy saving and energy efficiency laws of the Russian Federation

• National plan for energy transformation in Germany

• Legislation framework for energy saving and energy efficiency enhancement in other countries of Eastern Europe

• Energy saving and energy efficiency enhancement in Central Asia and the Caucasus
Case studies in a nutshell

Building management

• Management and maintenance of the Slovak housing stock

• Developing energy efficiency traditions in the Estonian housing sector

• Energy-efficient housing pilot project in Lithuania

• Energy-efficiency enhancement as a result of professional residential property management in Latvia
Case studies in a nutshell

Financial mechanisms

• Allowances to low-income people to compensate renovation costs

• Subsidies for technical expert examination and energy audit of residential buildings

• Subsidies for apartment building renovation depending on level of energy savings

• Loans originated by state financial institutions
Also addressed...

- Technical measures

- Awareness raising and behavior change
Key messages and transfers for transition countries

Recommendations from the casebook address social, environmental, economic, legislative, financial and technical instructions in the view of attaining holistic sustainable development in developing countries.

For example, the casebook offers messages regarding:

- Political will and commitment
- Public awareness about energy consumption
- Residents control over their energy bills
- Renovation targets
- Alternative to building renovation
- Costs of energy efficiency
- Bankable investments
- Managing buildings
- Support measures at the transition period
Content design

- EU directives
- National legislative acts/laws
- National plans/programs
- Ministries, departments

- National standards for improving the energy efficiency of the existing housing stock
- National energy efficiency standards for new construction projects

- Renewable energy
- Energy efficiency
- Energy conservation
- Understanding energy consumption

- Renewable Options
- Windows
- Heating & Cooling
- Water Heating
- Insulation & Ventilation
- Appliances
- Air Sealing
- Lightning
- Low-Cost No-Cost
- Understanding

- General meeting
  - Nominates
  - Oversees
  - Executive board
  - Nominates
  - Oversees
  - Administrator
  - Nominates
  - Oversees
  - Auditors

- Complexity / Investment
  - Solar
  - Wind
  - Replacement
  - Furnaces with ECM
  - A/C
  - Heat Pumps
  - Heat Recovery
  - Solar Thermal
  - Drain Water
  - Attics
  - Walls
  - Crawl Spaces
  - Foundations
  - Refrigerators
  - Clothes Washers
  - Dishwasher
  - Sealing Bypasses in Attics, Walls, Foundations
  - Caulking and Weatherstripping
  - Windows, Doors
  - CFLs
  - LEDs
  - Fixtures
  - Temperature Setting
  - Turning Things Off
  - Appliances
  - Action Plan
  - Tips and Tools
  - Building Energy Audit
  - New Construction Design

- Understanding