UNECE HLM workshop “Energy efficiency for sustainable housing”

Doris Andoni
General Director, National Housing Agency
Albania
Continent: Europe
Subregion: Southeast Europe
Geographic coordinates: 41°00′N 20°00′E
Area: 28,748 km² (11,100 sq mi)
Coastline: 611 km (380 mi)
Land boundaries: 720 km (450 mi)

Climate: Mild temperate to cool
Natural resources: petroleum, natural gas, bauxite, chromite, copper, iron ore, nickel, salt, timber, hydropower
Natural hazards: earthquakes, tsunamis, floods, drought
Environmental issues: deforestation, soil erosion, water pollution
## Some data

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>3 069 275</td>
<td>2 831 741</td>
</tr>
<tr>
<td>Urban population</td>
<td>1 294 196</td>
<td>1 498 508</td>
</tr>
<tr>
<td>Rural population</td>
<td>1 775 079</td>
<td>1 301 630</td>
</tr>
<tr>
<td>Households</td>
<td>726 895</td>
<td>740 256</td>
</tr>
<tr>
<td>Dwellings</td>
<td>785 515</td>
<td>1 075 881</td>
</tr>
<tr>
<td>Dwellings in urban areas</td>
<td>364 181</td>
<td>582 253</td>
</tr>
<tr>
<td>Dwellings in rural areas</td>
<td>421,334</td>
<td>493 628</td>
</tr>
<tr>
<td>Inhabited dwellings</td>
<td>696 977</td>
<td>722 481</td>
</tr>
<tr>
<td>Vacant dwellings</td>
<td>88 538</td>
<td>353 400</td>
</tr>
</tbody>
</table>
A variety of different type and age of buildings

- Buildings with 16+ apartments
- Buildings with 9-15 apartments
- Buildings with 5-8 apartments
- Buildings with 3-4 apartments
- Two family buildings
- Single family buildings

Year of construction

- Before 1960
- 1961-80
- 1981-90
- 1991-2000
- 2001-05
- 2006-11
- Not known
### Albania potential for energy efficiency (EE) in residential sector

#### Basic info about the sector

- The housing sector in Albania consume **49%** of all electricity available.

- The price of electricity is increased by **66%** in 2003-2010.

- The **energy market** will be further liberalized in 2015.

- 20% of the electric energy is stolen and 20% looses in the network.

- National Energy Efficiency Action Plan (NEEAP) goal of **9% energy savings by 2018**.

#### Residential EE potential

- **€ 600 million**— estimate Investments for Energy Efficiency of Residential sector.

- **30%-50%**— energy saving potential of Residential sector.

- **3-7 years** – average payback period for Residential EE investments.

- **More than 50%** of the buildings are constructed before 1990 and require EE renovation.

---

Source: B. Sefa, IFC, 2014
Stated-owned, self-sufficient enterprise
Ensures affordable adequate and energy-efficient housing for low and medium-income population
PROJECTS ON ENERGY EFFICIENCY
1- New project

- 40 apartments
- Thermo insulation
- Double glazing
- Building envelope

Inside

Outside

1. Plaster
2. Hole bricks
3. Styrofoam
2- National competition on energy efficient and low-cost houses

Challenges to provide energy efficient housing

**Technical**

- What is an energy efficient house?
- What standards should we use?
- How we will make sure that the project complies with our targets?
- What methods shall we use to calculate the energy efficiency?
- Who will ensure

**Socio-economic**

- Will the costs increase?
- How much cost increase is feasible?
- Will low and medium income families afford?
- Will they be able to take a loan?
- Can the loan be paid through savings from energy bills?
3- Workshop on Energy Efficiency
Workshop objectives

• To raise awareness
• Analyse the role of interested
• Identify the main challenges
• Establish a network of experts
• Highlight the importance of condominium management
Challenges of EE in Albania

Challenges

- Regulatory framework
- Lack of gov. incentives to EE investments
- Lack of sectorial capacities (agencies, Auditors)
- Sector not aware of the market potential
- Banking sector lack of capacity and funds to be allocated for new products

Source: B. Sefa, IFC, 2014
Conclusions

• Lack of information
• Lack of an efficient action plan
• Lack of building standards
• Energy price
• Lack of qualified specialists
• Lack of successful examples
Conclusions

• Understanding the benefits of EE
• Increasing social awareness
• Providing the state of the art
• Providing the know how
• Developing building standards