ENERGY EFFICIENCY IN HOUSING SECTOR OF UKRAINE

Natalia Oliynyk
Director of Department for Strategy in Reforming and Development of Housing and Communal Economy

GENEVA, 2014
Heat energy loss

In residential housing stock up to 60%

Boiler-houses Up to 15 %

External pipelines 15-25 %

Boiler-house

IHP

Residential apartment house
Characteristics of the housing stock (by year)

- **Areas of priority:**
  - Construction of new energy efficient housing
  - Retrofitting of old housing stock

- **Near-term outlook:**
  - Complete sanation (renovation) of the existing housing stock
  - Gradual transition to "passive" houses.
Following recommendations of Directive 2010/31/EU, Ukraine has adopted and put into force the following documents:

<table>
<thead>
<tr>
<th>ГСТУ Б A.2.2-8:2010</th>
<th>&quot;Designing. Section &quot;Energy efficiency&quot; in documentation designed for construction.&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>ГСН В.1.2-11:2008</td>
<td>&quot;Basic requirements for buildings and facilities. Saving energy&quot;</td>
</tr>
<tr>
<td>ГСН В.2.6-31:2006</td>
<td>&quot;Thermal insulation of buildings&quot;</td>
</tr>
<tr>
<td>ГСН В.2.5-67:2013</td>
<td>&quot;Heating, ventilation and air conditioning.&quot;</td>
</tr>
</tbody>
</table>

ГСТУ – Industry-specified Standard of Ukraine
ГСН – State Construction Norms
"On energy efficiency of residential and public buildings"

- Ensure conditions for rational use of energy resources in residential and public buildings;

- Adjust relations in area of the resource supply and consumption in buildings, promote the use of alternative energy sources for creation of optimal microclimatic conditions in premises;

- Create investment climate favorable for the development of the construction industry and regional economics to ensure energy efficiency of buildings.

Following recommendations of Directive 2010/31/EU, Ukraine has developed draft of the law:
Following recommendations of Directive 2010/31/EU, Ukraine has adopted and put into force the following documents:

**System of norms and standards effective in the field of energy efficiency of buildings:**

- ГСТУ-Н Б А.2.2-5:2007 (Energy Performance Certificate)
- ГСТУ Б В EN 7730:2012 (Ergonomics of thermal environments)
- ГСТУ Б В EN15261:2012 (Calculated parameters of microclimate)
- ГСТУ Б В EN 13790:2013 (Energy rating)
- ГСТУ Б В EN15217:2012 (Energy certification)
- ГСТУ Б В EN 13790:2012 (Calculation of energy consumption)

**Drafts of the standards and norms**

- ГСТУ-Н Б А.2.2-xxx:201x "Guideline on method for energy assessment and energy certification of buildings";

- ГСТУ – Н Б А.2.2-xxx:201x "Energy efficiency in buildings. National method of energy consumption calculation for heating, cooling, ventilation, lighting and hot water supply."
Infrastructure
Vinnitsa Municipality

Networked by optical fibre:
- 9 buildings;
- 34 units of the Municipality and 19 municipal enterprises;
- 1200 personal computers
Internal portal

- It is used to save working documentation

Consists of:

- Sites of the departments
- Electronic archive
- Database
- Reports centre
- Informational services
## HOUSING STOCK IN UKRAINE

<table>
<thead>
<tr>
<th>Existing system</th>
<th>Prospective system</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formation, supply, tariff</strong>&lt;br&gt;Local self-government body&lt;br&gt;Designation of services provider&lt;br&gt;Housing maintenance enterprise&lt;br&gt;Owners of apartment</td>
<td><strong>Mode of stewardship</strong>&lt;br&gt;- Direct self-stewardship by co-owners&lt;br&gt;- HOA&lt;br&gt;- House Manager (Steward)&lt;br&gt;<strong>Direct self-stewardship</strong>&lt;br&gt;<strong>Owners (co-owners)</strong>&lt;br&gt;<strong>House owners association</strong>&lt;br&gt;<strong>House Manager (Steward)</strong></td>
</tr>
</tbody>
</table>

### The system bottlenecks

- **Absence of customer** capable to select (monopolization of the demand for house stewardship and maintenance services)
- **Absence of competition** (monopolization of the supply of house stewardship and maintenance services), what leads to low quality of services
- **Financing** of capital repairs of multiapartment houses by their co-owners is not envisaged
- **Absence of effective mechanisms** for financing of the measures improving energy efficiency

### Advantages of the suggested system

- **Demonopolization of demand** - provides co-owners (consumers) with opportunity to personally decide about the most appropriate for them mode of their house stewardship and maintenance
- **Demonopolization of supply** - formation of a competitive market of multiapartment house stewardship services in consequence of the negotiable prices for those services
- **State acts as affiliate** - provides support through implementation of “easing of credits” and “cost sharing” programs
- Compulsory participation of co-owners in financing of capital repairs and realization of the measures improving energy efficiency of their houses
Improvement of housing legislation

Draft Law of Ukraine "On peculiarities of ownership in multiapartment house"

The option in taking of common decisions

Opening of the market for new entities

Policy for provision of services

and "On amendments to some legal acts to improve relations in the sphere of housing and communal services."
FREE SELECTION OF A STEWARDSHIP MODE

**Stewardship by apartment house co-owners**

Direct:
by the co-owners through taking decisions by a majority vote
(so called “nominal association” without registration of a legal entity)

**Stewardship services provided by professional House manager**

Through a professional House manager:
selection and hiring of a House manager by the co-owners or designation of a House manager by body of local self-government in case if the co-owners failed to decide about the mode of stewardship

In case if co-owners during one year failed to decide about the mode for their house stewardship, BLSG shall designate them House manager.

Co-owners may reject the designated House manager and take decision about the mode of their house management and maintenance.
AWARENESS CAMPAIGN

- Provide citizens with legal information required for understanding of their own rights and responsibilities in management of common property in apartment house
- Raise awareness of mass media, state officials and public servants, mayors and activists of the co-owners associations
IMPROVEMENT OF HOUSE ENERGY EFFICIENCY

STATE

- Legislation
- Social protection
- Supporting programs

ESCO mechanism

- Introduction of new technologies
- Initial contribution
- Taking decisions
- Initial contribution

Credit resources

- Works for improvement of energy saving

Co-owners
THANK YOU FOR YOUR ATTENTION!

Natalia Oliinyk

Director of Department for Strategy in Reforming and Development of Housing and Communal Economy

MINISTRY OF REGIONAL DEVELOPMENT, CONSTRUCTION, HOUSING AND COMMUNAL ECONOMY OF UKRAINE

E-mail: nataliyao888@gmail.com
Tel. +38(050)-351-22-11
+38(044) -207-17-00