EUSEW - EPBD Next Steps

Setting Minimum EU Energy Performance Requirements

31 January 2008
Tapping the Potential
EU issues need EU solutions

• Many Member States have yet to take major steps to improve the level of performance of their buildings, either new or existing.

• Minimum Energy Performance Requirements at EU level will accelerate improvements and thus better “tap the Energy Efficiency potential” of the EU housing stock.

• Ensuring regular improvements in the minimum energy performance requirements can help develop an EU strategy for very-low-energy buildings.

• Taking into account:
  - An average 30 years renovation cycle time for buildings/dwellings
  - Revision cycle time of EU EPBD

“It’s now or never”
Almost all Member States are far from the optimum

Peak price - roof

![Graph showing U-values for roofs with different HDD values, indicating recommended and existing U-values for roofs.](image-url)
Why minimum requirements? Because we continue to damage our environment and drain our economies.

European Countries*
new constructed residential buildings
potential savings compared to existing level of performance

million Euro

<table>
<thead>
<tr>
<th>Time</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>925</td>
</tr>
<tr>
<td>10 years</td>
<td>50,894</td>
</tr>
<tr>
<td>20 years</td>
<td>194,322</td>
</tr>
<tr>
<td>30 years</td>
<td>430,284</td>
</tr>
</tbody>
</table>

US$ 70
Why minimum requirements? Because we continue to damage our environment and drain our economies.

European Countries*
new constructed residential buildings
potential savings compared to existing level of performance

million Euro

1 year 10 years 20 years 30 years

1.043 57.372 219.058 485.057

Why minimum requirements? Because we continue to damage our environment and drain our economies.
A revised EPBD: minimum performance requirements in their proper context

- minimum performance requirements ensure that *life cycle costs for energy consumption and energy investment are optimized* in buildings.

- *priority to the building envelope*: most cost-effective measures for maximum demand reduction.

- *individual minimum performance requirements for roofs, walls, floors and windows* are basic in the design for calculating total heating and cooling demand (kWh/M2/yr) requirements for buildings.

- minimum component and integrated building envelope requirements can be applied to *both new buildings and to renovations.*