

# Energy efficiency as a tool for reducing energy poverty

CENTER FOR CLIMATE CHANGE  
AND SUSTAINABLE ENERGY POLICY



CENTRAL EUROPEAN UNIVERSITY

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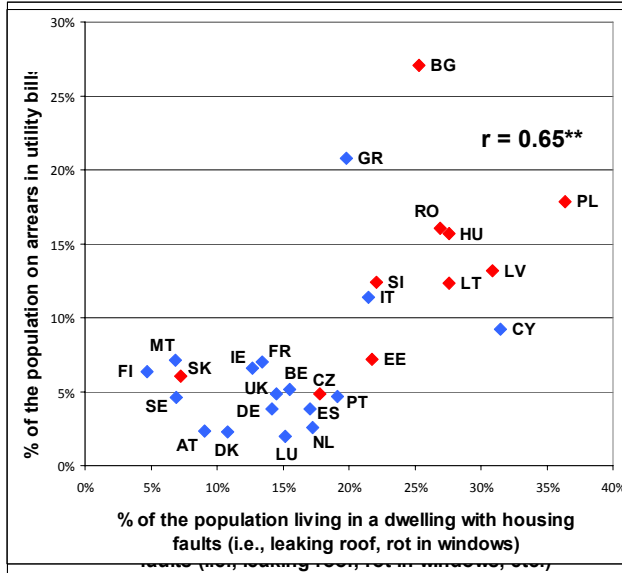
## What is energy (or fuel) poverty?

- ❖ Inability to **afford** an adequate provision of energy services (often **heating**)
- ❖ However, **reducing thermal comfort** is only one of the solutions adopted by affected households...
  - ❑ reducing the consumption of **other basic goods and services** (e.g., education or food);
  - ❑ reducing the fraction of the **floor area heated**;
  - ❑ **fuel switch** (e.g., from natural gas to firewood, a less convenient but cheaper fuel);
  - ❑ **payment arrears** and **increased indebtedness** with energy suppliers; and
  - ❑ **electricity theft** and **illegal firewood collection**

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## The energy performance of dwellings



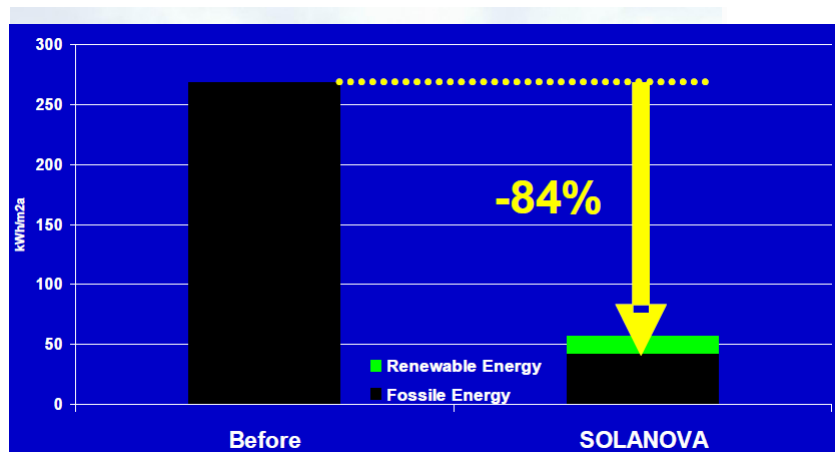
Inability to afford to keep the house adequately warm

Arrears in utility bills



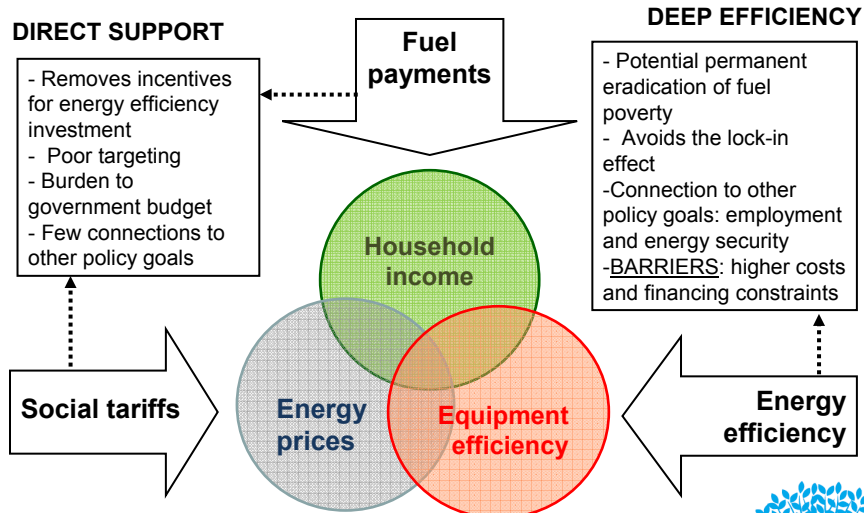
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## The SOLANOVA example



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## Policy approaches to EP alleviation



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## Conclusions

- ❖ **Deep EE retrofits are a key tool to jointly solve the energy poverty and climate change challenges**
  - ❑ Protection of vulnerable households from **further increases in real energy prices** (e.g., carbon tax)
- ❖ **Wider positive welfare and economic development impacts – CO-BENEFITS**
  - ❑ New markets, net employment, energy security
- ❖ **From financial analysis to social analysis**
  - ❑ **Pay-as-you-save** schemes + public support through **careful subsidies**

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# Thank you for your attention

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Find this presentation and additional material at...  
<http://3csep.ceu.hu/projects/fuel-poverty-in-hungary>