

Energy efficiency as a tool for reducing energy poverty

CENTER FOR CLIMATE CHANGE
AND SUSTAINABLE ENERGY POLICY



CENTRAL EUROPEAN UNIVERSITY

Sergio Tirado Herrero

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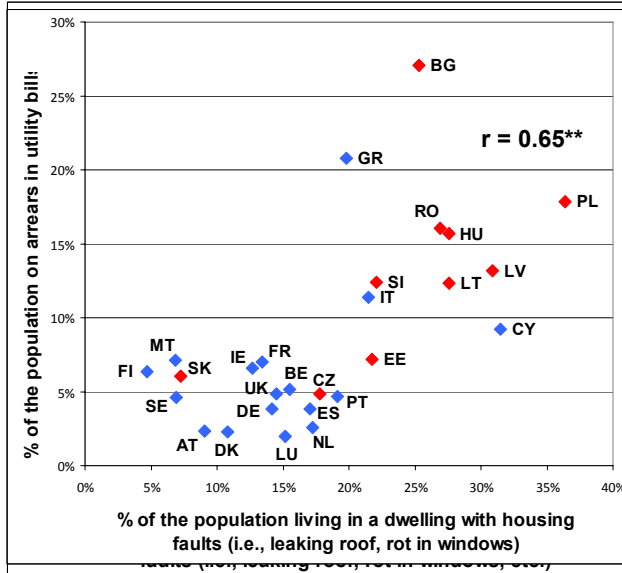
What is energy (or fuel) poverty?

- ❖ 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



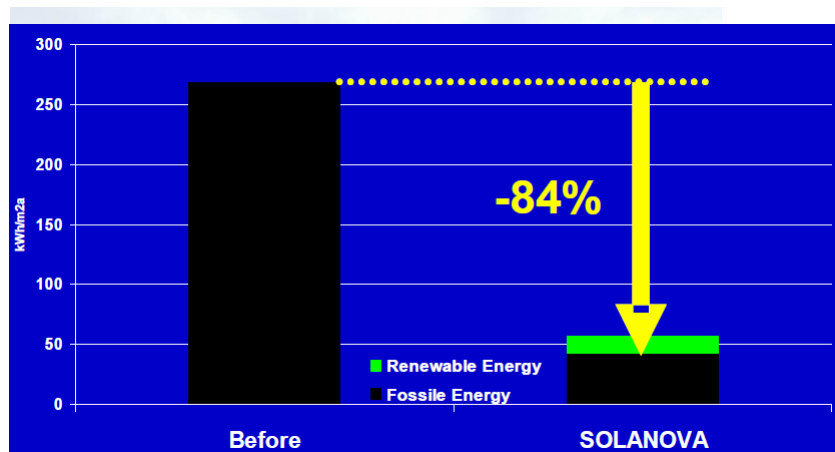
Inability to afford to keep the house adequately warm

Arrears in utility bills



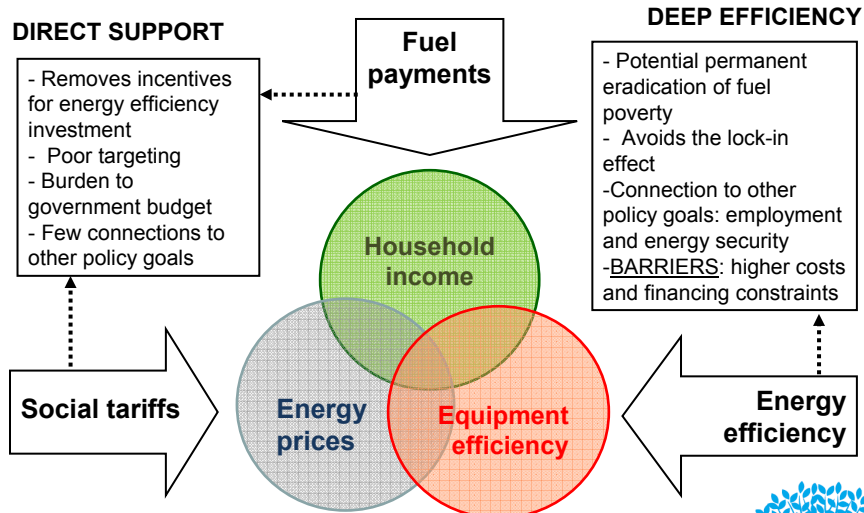
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The SOLANOVA example



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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>