

Energy efficiency as a tool for reducing energy poverty

CENTER FOR CLIMATE CHANGE
AND SUSTAINABLE ENERGY POLICY



CENTRAL EUROPEAN UNIVERSITY

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Regional GFSE conference

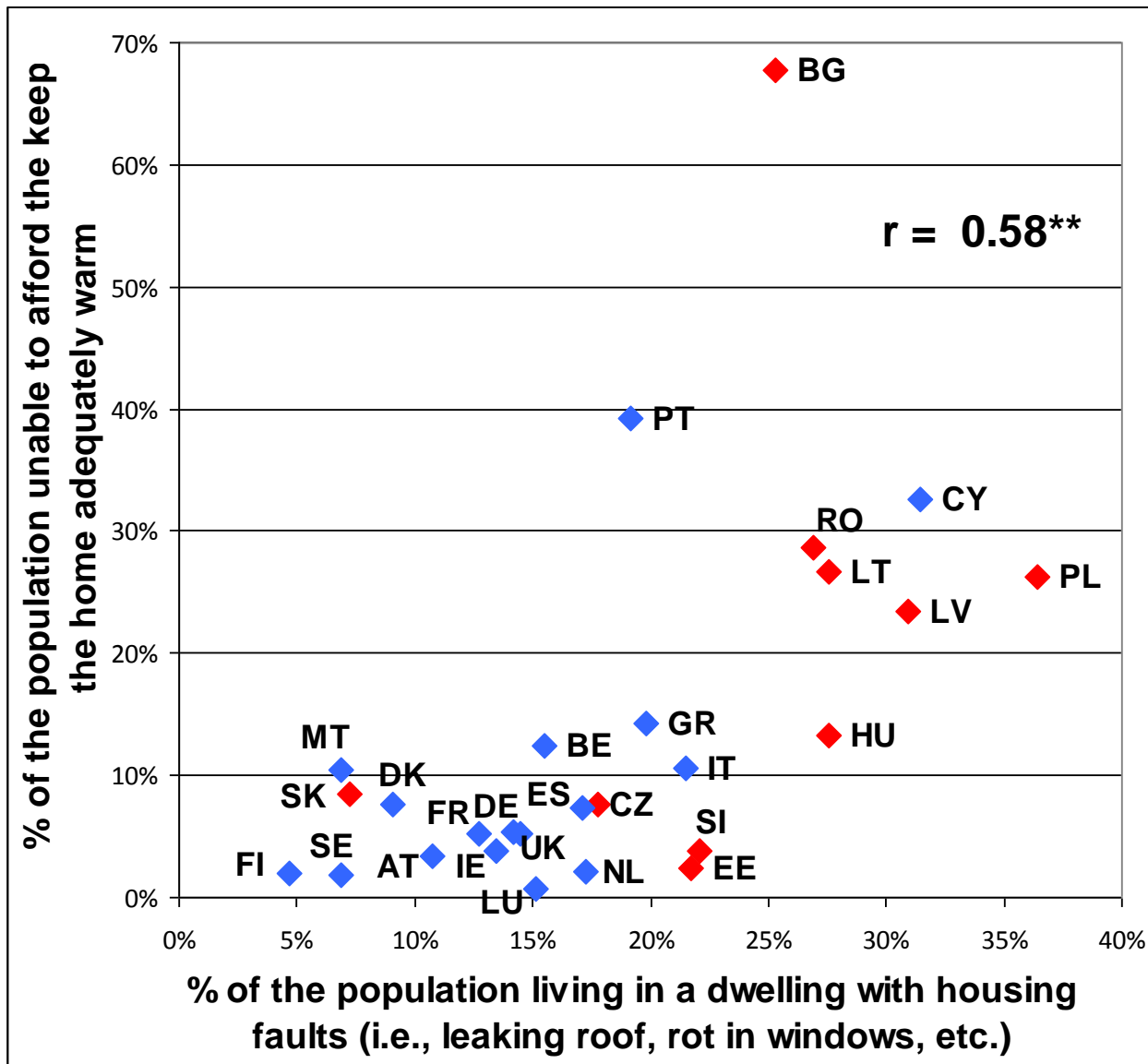
Vienna, April 28-29, 2011

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**



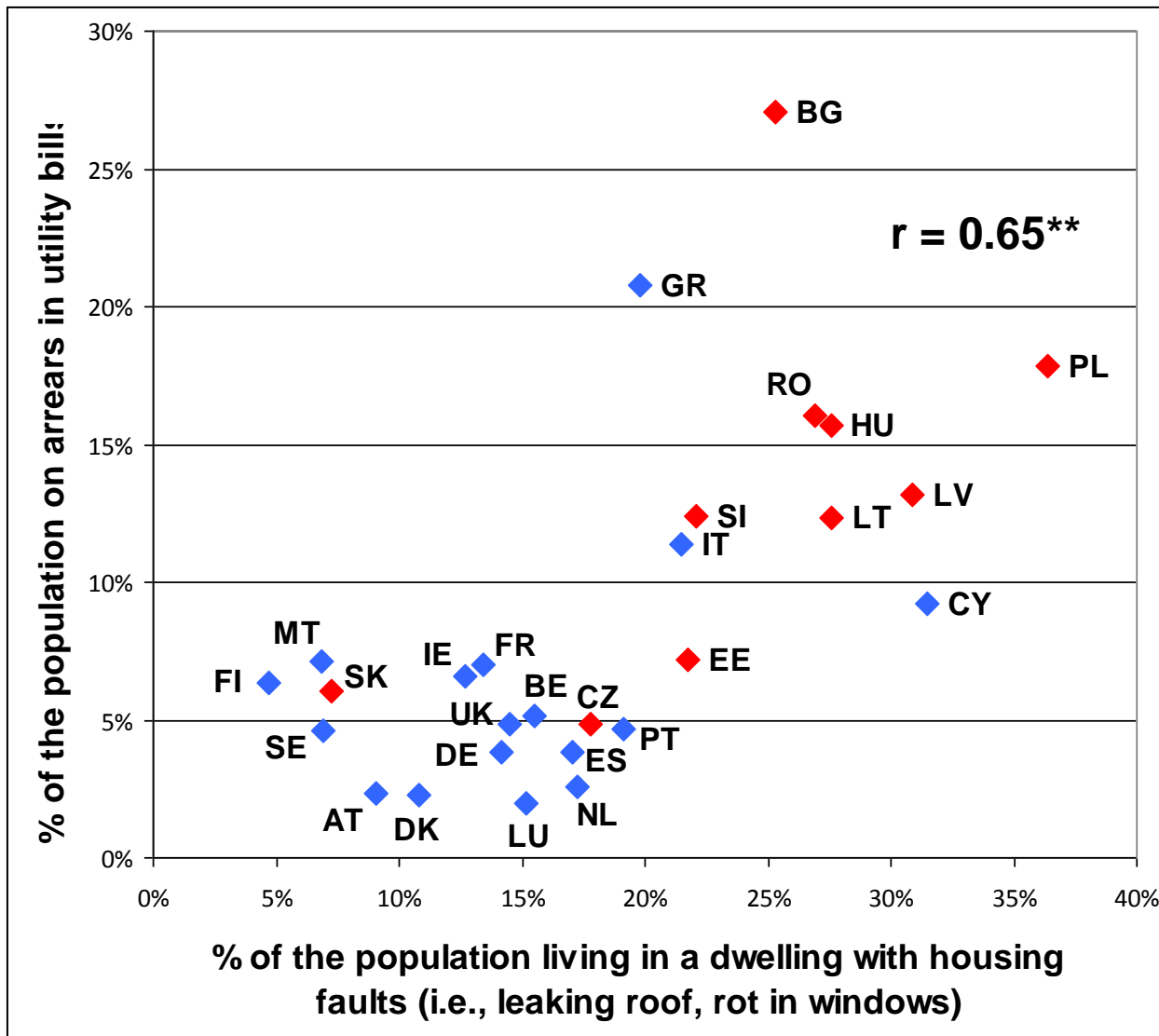
The energy performance of dwellings



Inability to afford to keep the house adequately warm



The energy performance of dwellings



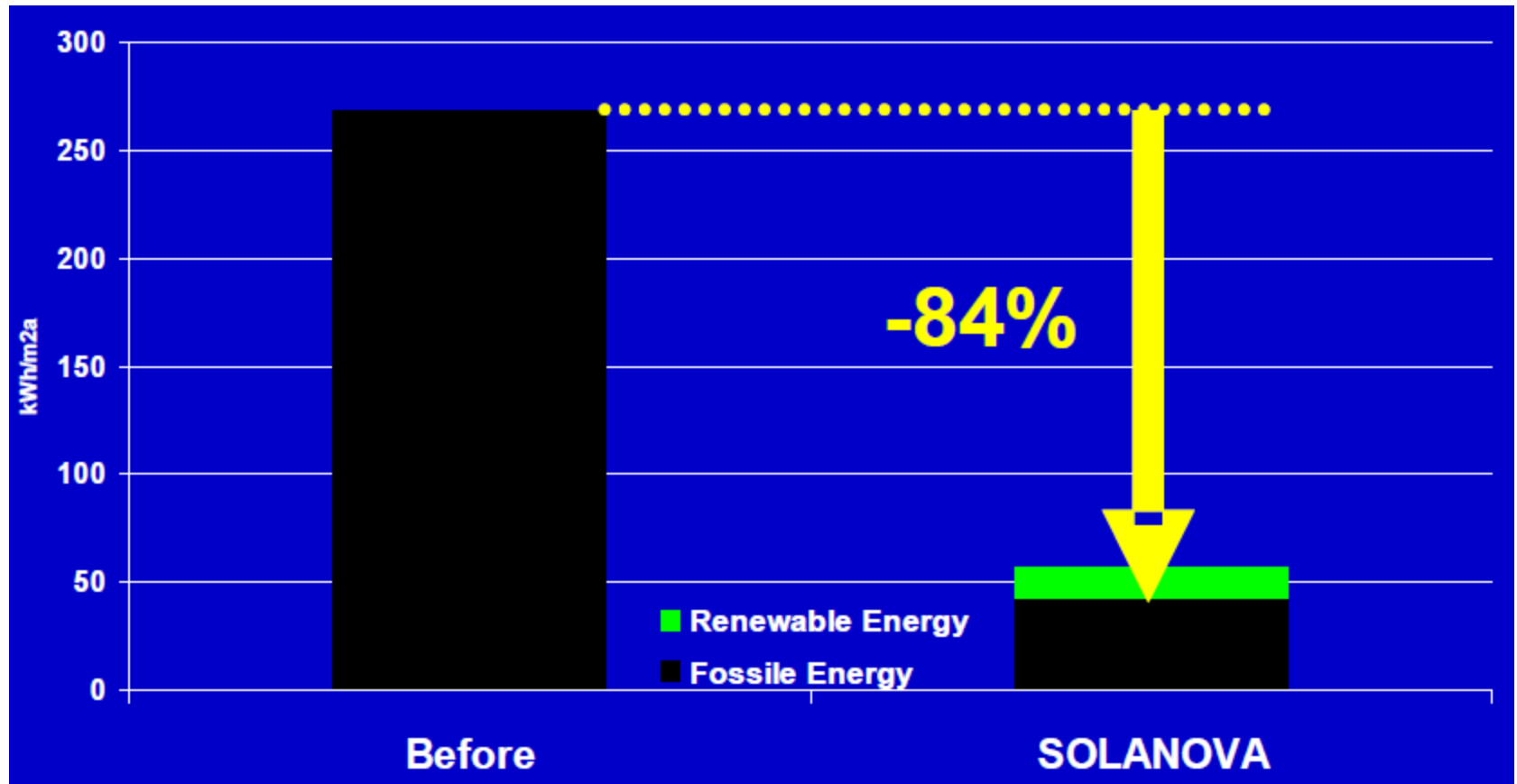
Arrears in utility bills



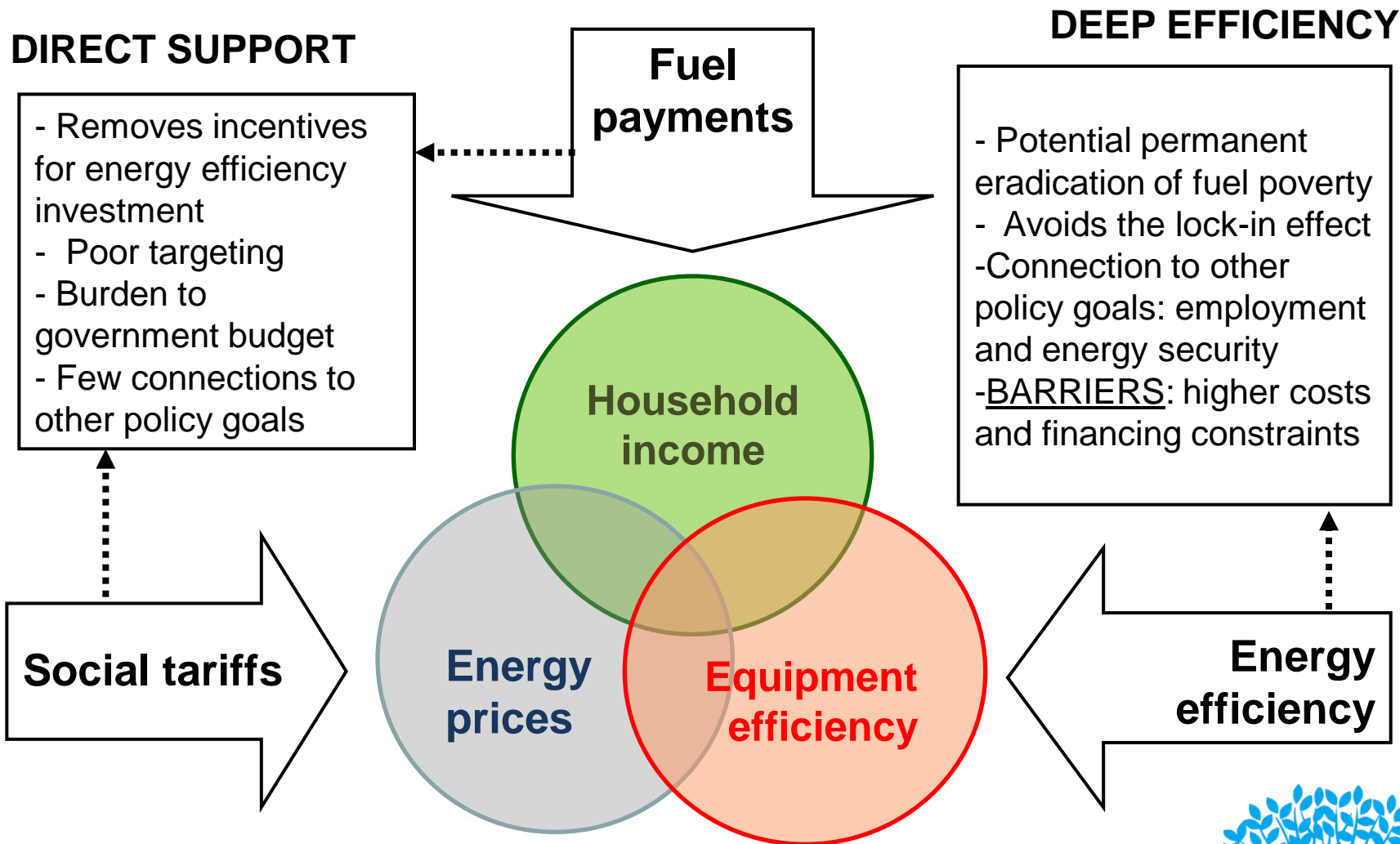
The SOLANOVA example



The SOLANOVA example



Policy approaches to EP alleviation



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**



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>