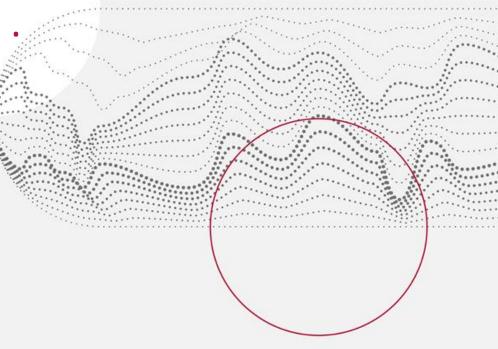


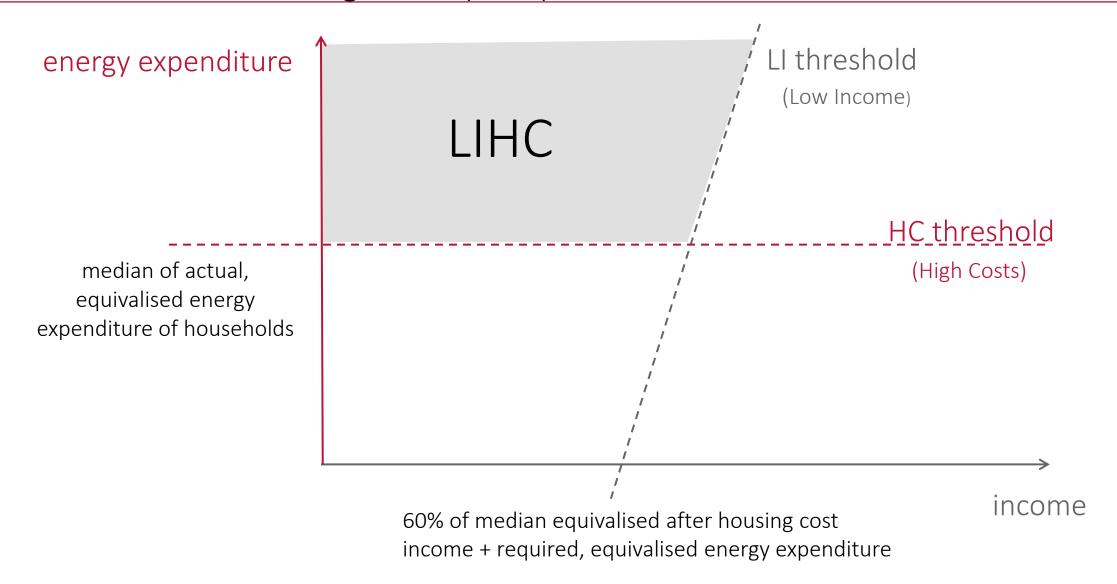
Energy Poverty in Poland Measurement and implications for energy efficiency

Piotr Lewandowski Katarzyna Sałach



## We have household data (incomes and expenditures) and use Low Income High Cost (LIHC) indicator

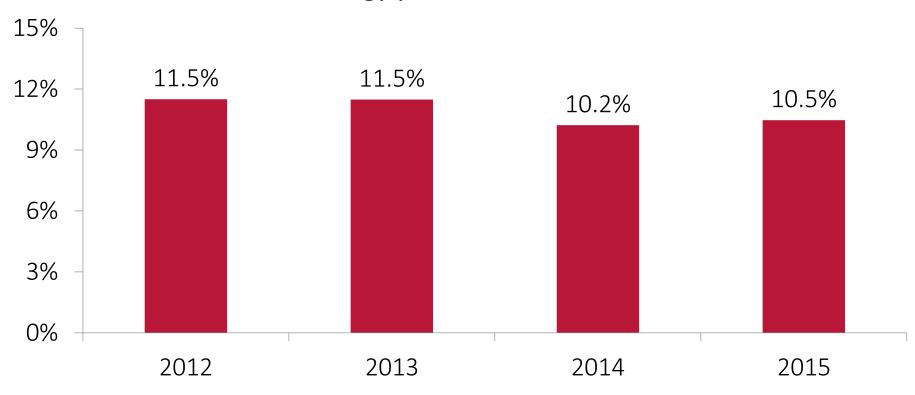




# Energy poverty in Poland is fairly stable over time and affects almost 4.5 million people



#### Share of energy poor households in Poland

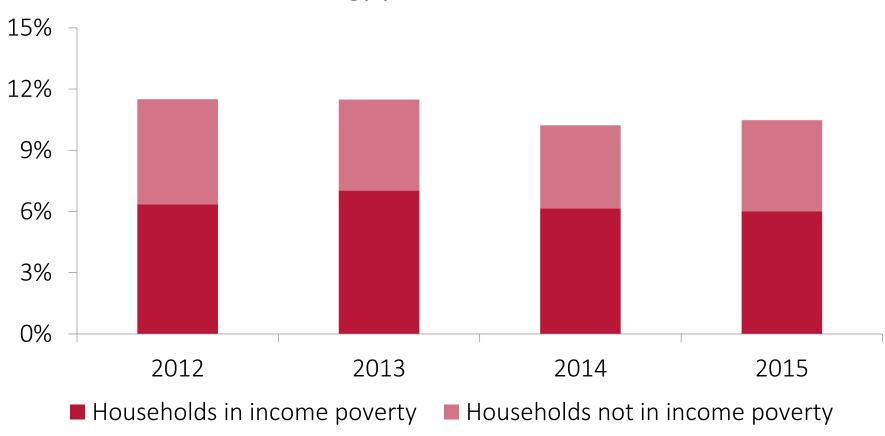


Source: Own elaboration based on Polish Households' Budgets Surveys 2012-2015.

### Most of energy poor are not income poor -> homes matter







Source: Own elaboration based on Polish Households' Budgets Surveys 2012-2015.

Families with children living in big detached houses in rural areas or towns

Single elderly persons living in big detached houses in rural areas

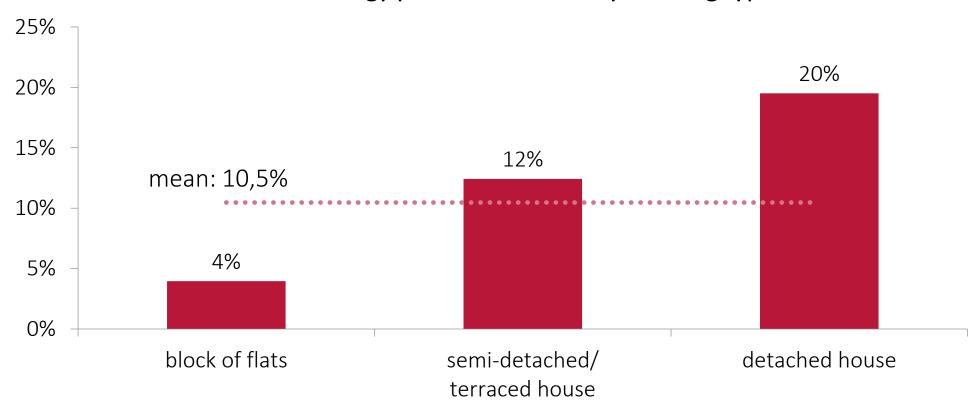
Income poor inhabitants of old, pre-war tenement houses

Income poor inhabitants of old detached houses located in rural areas

### Detached houses' inhabitants are mostly in need



#### Share of energy poor households by building type

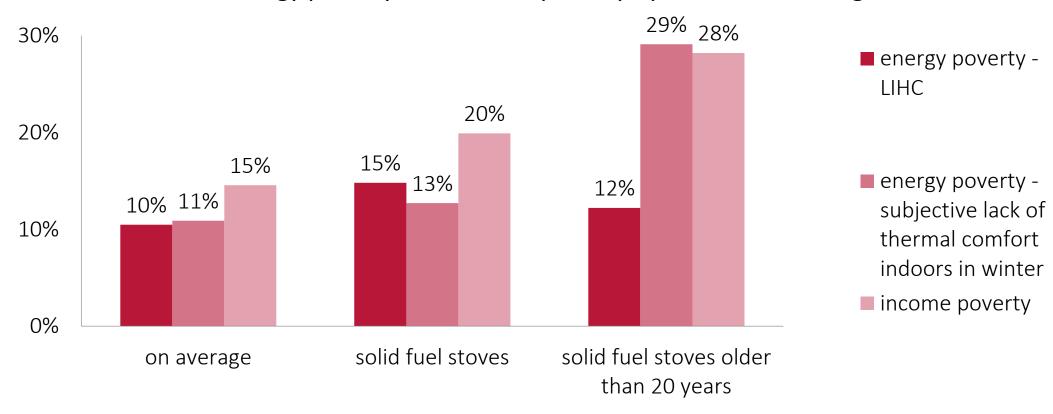


Source: Own elaboration based on Polish Households' Budgets Survey 2015.

## Source of heating matters – energy poverty is especially high among households using old solid fuel stoves



#### Energy poverty and income poverty by source of heating



Source: Own elaboration based on Polish Households' Budgets Survey 2015 and HBS module "Survey on fuel and energy usage in households".

## The issue is acknowledged but policy challenges remain



The current policies are not sufficient:

- Energy supplements are low and poorly addressed
- Anti-smog resolutions in some voivodeships (enacted in two, discussed in more)
- Stoves' quality standards introduced by the Ministry of Development

## The issue is acknowledged but policy challenges remain



The current policies are not sufficient:

- Energy supplements are low and poorly addressed
- Anti-smog resolutions in some voivodeships (enacted in two, discussed in more)
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Measures to reduce energy poverty and improve energy efficiency:

- Resolution on solid fuel standards (coal sold for individual use)
- Higher incomes alone may increase household energy use and spending
- Replacing stoves with no other action would raise heating costs
- Building retrofit is unaffordable for many households who should be subsidised?



## Thanks for listening

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