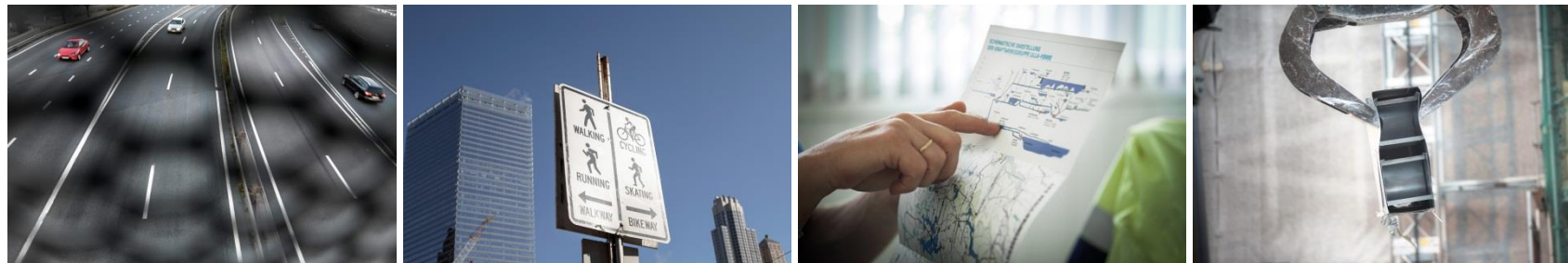


# How to deal with rising energy prices: financial compensation for all VS targeted energy efficiency and renewable energy measures for low-income households

Tilman Hesse et al., Oeko-Institut  
ECEEE Summer Study 2024

13<sup>th</sup> June 2024



## Co-authors

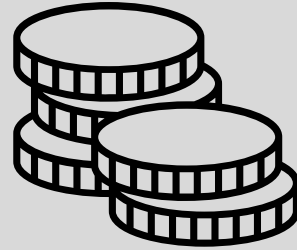
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Funding: European Climate Foundation

## Options to support low-income households when energy prices rise

### Direct support/ compensation



- Fast & easy implementation
- Only short-term effect
- Possibility of fossil lock-in

### Investment support for EE & RES measures



- Long-term energy cost reduction
- Long-term GHG emissions savings
- Increased independence/resilience
- Longer implementation times

- Both options: targeted support essential for efficient use of government money!

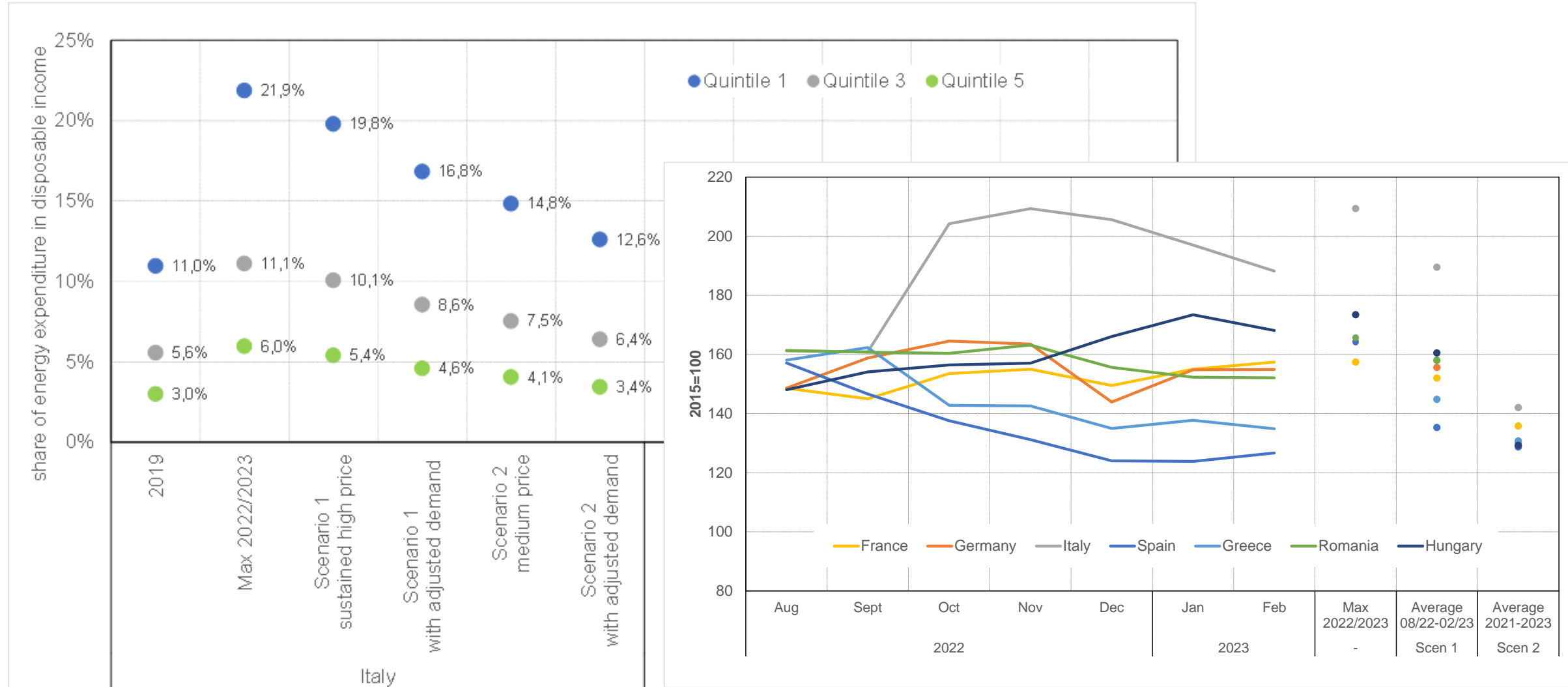
## Focus of the study – 3 parts

1. Overview of funding needs for direct compensatory measures in seven EU countries under different price projections
2. Country-specific sets of EE & RES measures and their impact on low-income households in seven EU countries. Estimates include the impact on energy consumption and greenhouse gas emissions
3. Overview of funding schemes at EU level and in selected Member States to finance the above-mentioned measures

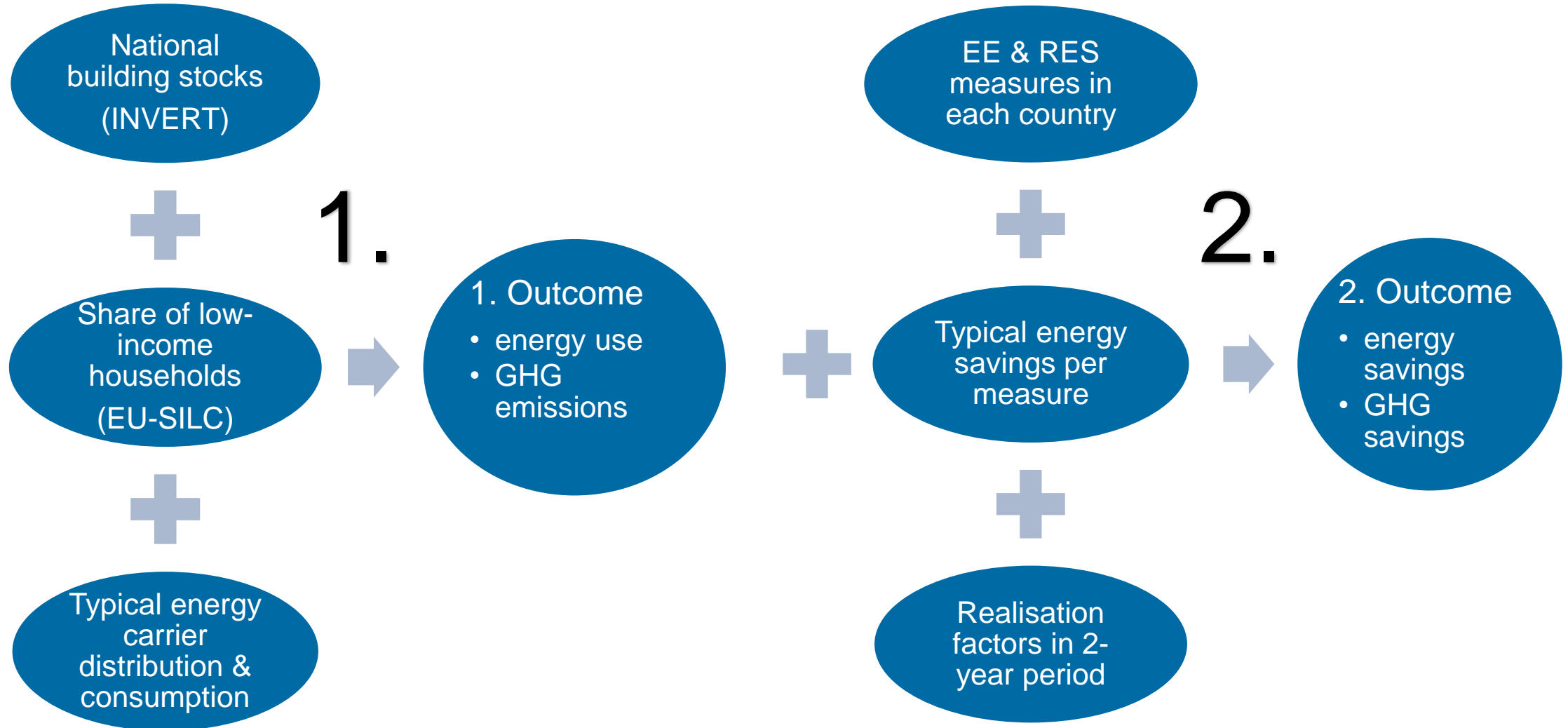
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# Direct compensation



# Investment support for EE & RES measures – methodology



# Housing type and share of low-income households

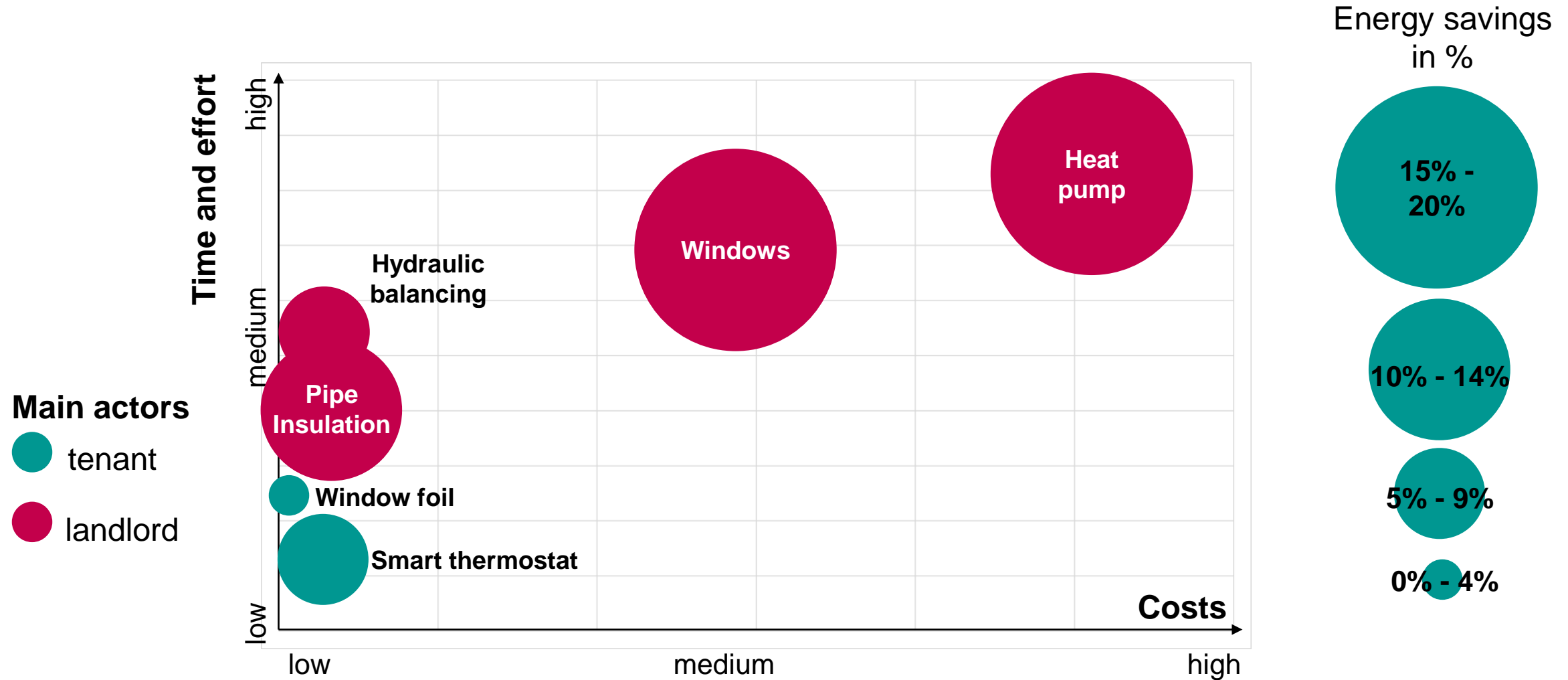
## Share of low-income households

	House	flat
Germany	11%	19%
Greece	24%	16%
Spain	22%	21%
France	10%	23%
Italy	20%	20%
Hungary	13%	11%
Romania	32%	5%

- Definition low-income in this graph (following EU-SILC): Households income of below 60% of median household income in each country
- Germany and France: High share of low-income households in MFH
- Greece and Romania: High share of low-income households in SFH



# Retrofitting measures: costs and energy savings

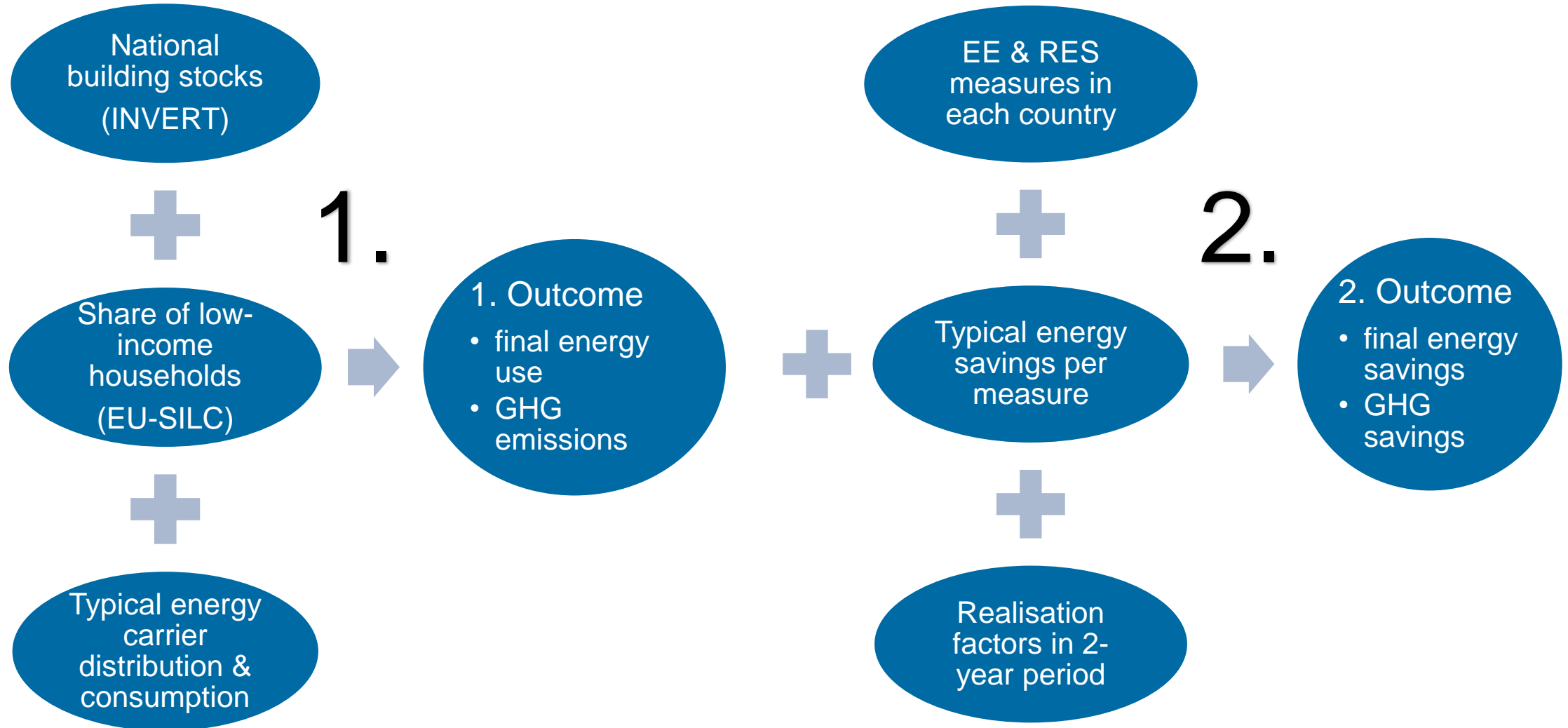


## List of measures

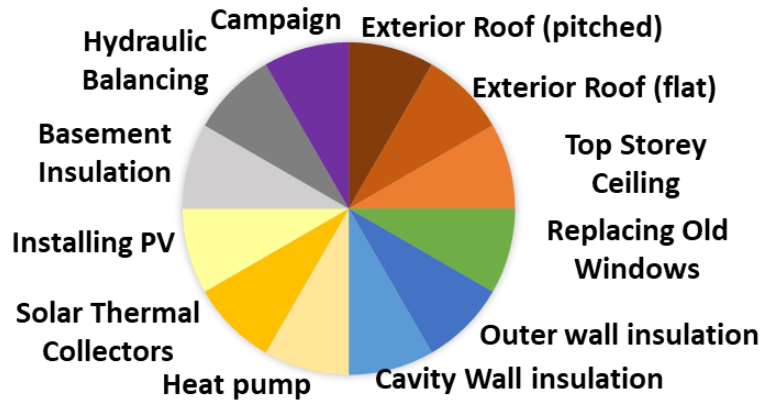
- Building envelope
  - Outer wall / cavity wall insulation
  - Roof / attic insulation
  - Replacing old windows
- Heating system / hot water
  - Installing heat pumps
  - Installing solar thermal collectors
  - Hydraulic balancing
- Electricity
  - Installing PV
- Campaign



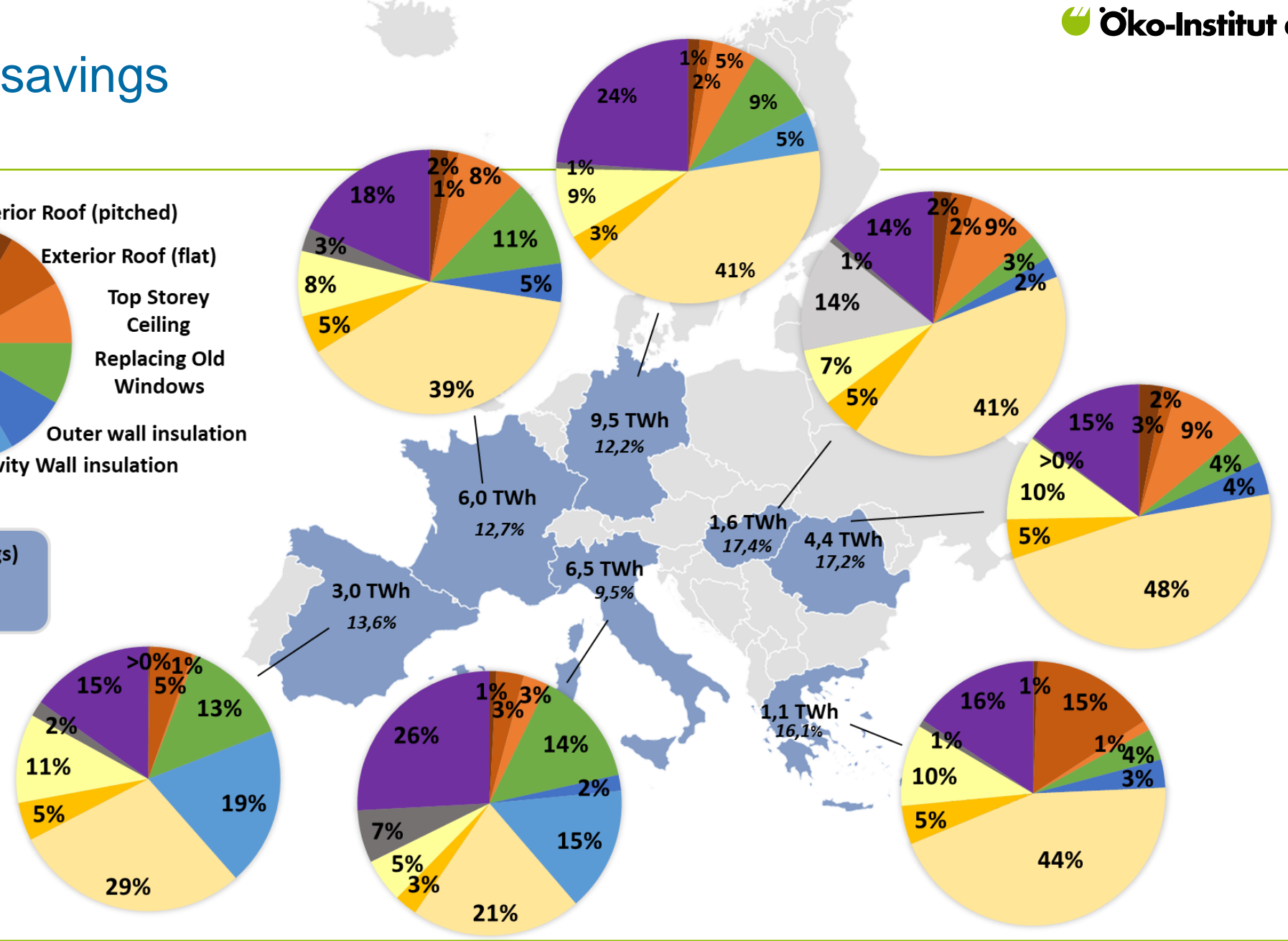
# Investment support for EE & RES measures – methodology



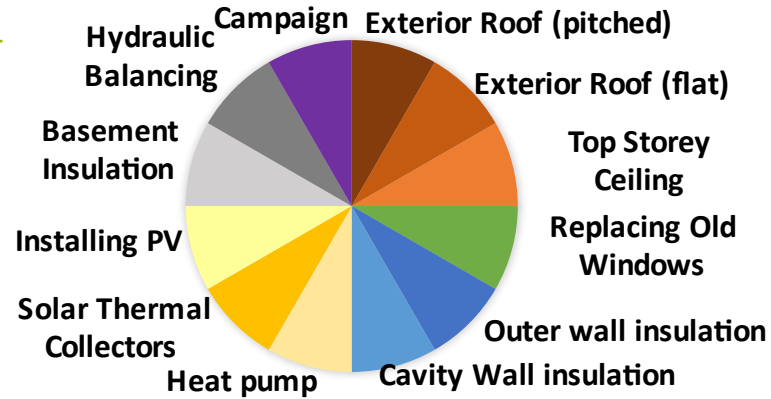
# Final energy savings



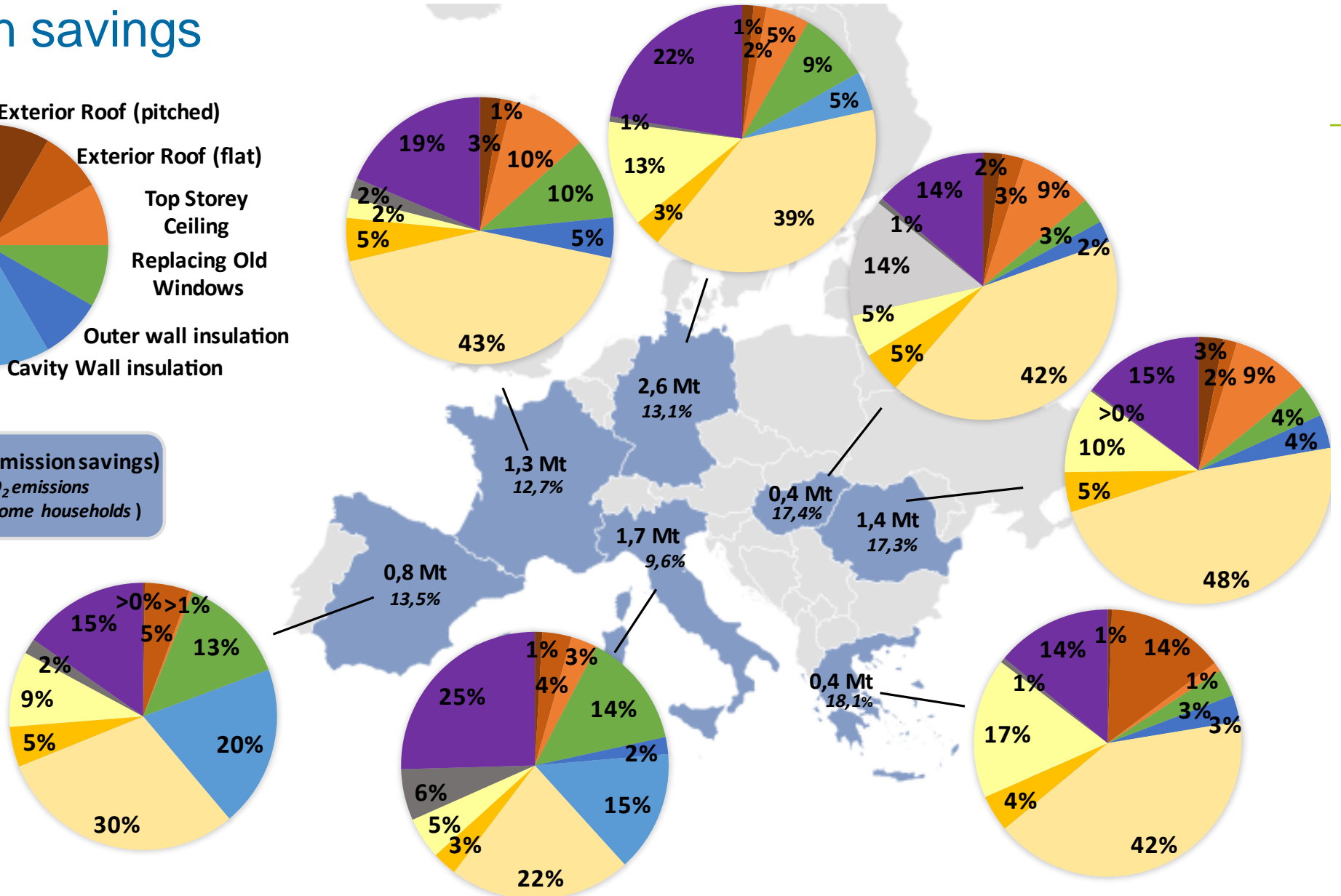
x TWh (total Energy savings)  
 x% (Share of FED low income households)



# GHG emission savings



X Mt (total CO<sub>2</sub> emission savings)  
 X% (reduction of CO<sub>2</sub> emissions achieved in low-income households)



# Supporting Low-Income Households – Good Practices

	<b>Stromsparcheck (Electricity Savings Check) (Germany)</b>	<b>Light for Romania (Romania)</b>
<b>Target group</b>	Recipients of social benefits	Vulnerable households
<b>Key actors</b>	Caritas Germany and the Organization of Agencies for Energy and Climate Protection Germany (eaD) Supported by the Federal Federal Ministry for Economic Affairs and Climate Action	Charity, commercial organisation, crowdfunding, media, NGO and private company
<b>Financing</b>	Funded through the National Climate Initiative (NKI) which is funded via EU ETS revenues	Private funds, Banks and Companies
<b>Description</b>	→ Trained electricity-saving assistants advise households in their homes on energy-saving options for electricity, water, and heat: → “emergency aid” (e.g. plug strips, LEDs, energy-saving shower heads) are directly installed	→ Supports families who do not have access to electricity. → The project installs PV systems that provide free electricity

## Conclusions

Direct financial support is a useful short-term solution, but should be targeted at low-income households only



Lower risk of energy poverty

Support for structural EE & RES measures enables long-term energy and GHG emissions savings



Lower risk of energy poverty

Reduced fossil fuel import dependency

Higher resilience to future energy price shocks

Framework for targeted support needed both for owner-occupied and rented buildings

[https://www.oeko.de/fileadmin/oekodoc/Targeted\\_measures\\_final\\_report\\_web.pdf](https://www.oeko.de/fileadmin/oekodoc/Targeted_measures_final_report_web.pdf)

# Contact

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