

Challenges with regard to the acceptance of energy-related refurbishments in Germany



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Mitigation as a joint mission

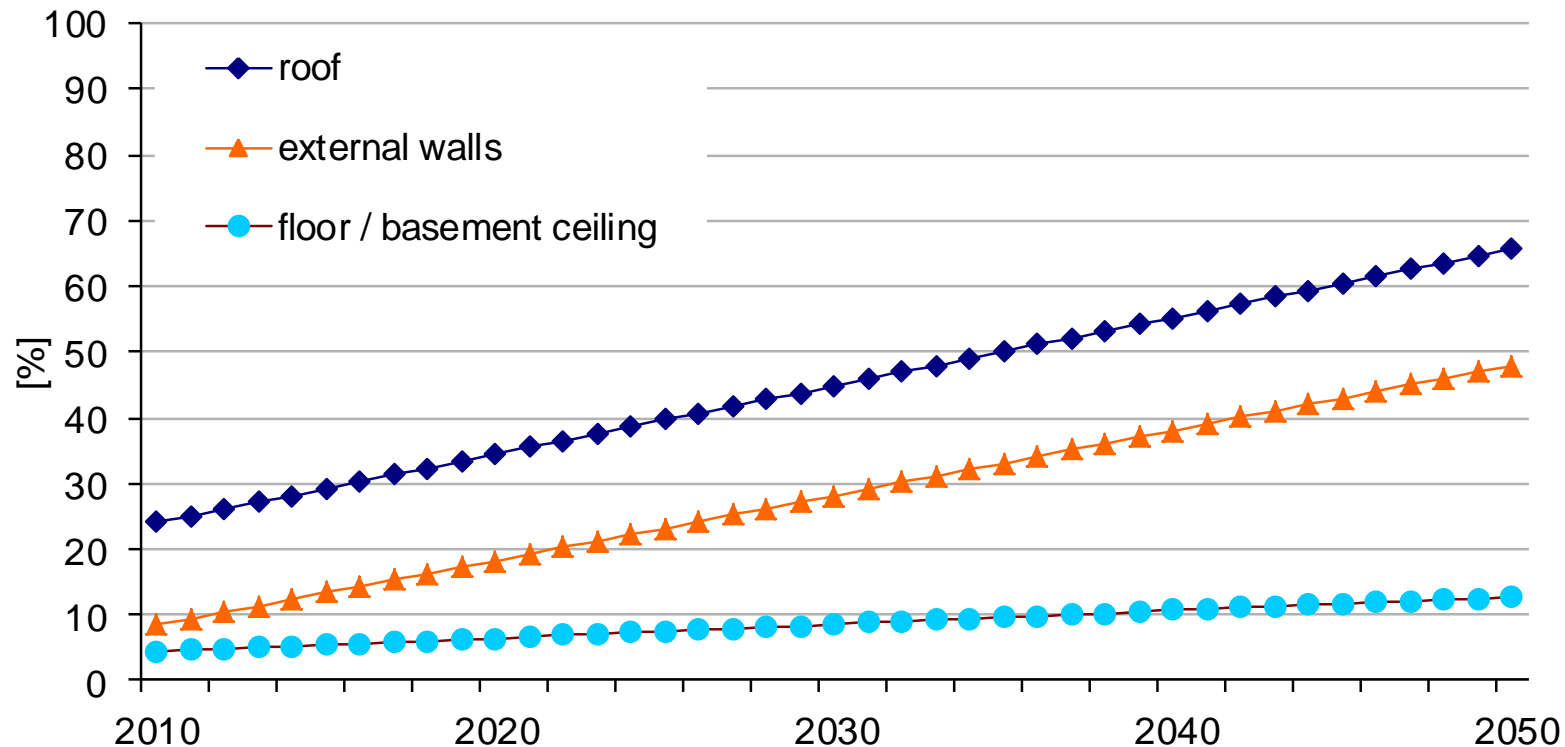


- **comprehensive energetic renovations of (almost) the entire building stock necessary by 2050**
 - switch to renewable energies plus reduction of energy consumption = renovation of building envelope
 - Renovation rate at least 2% by 2050 (currently around 1%)
- **achieving climate protection targets dependent on owners**
 - energy-saving measures prescribed for the renovation of individual components (EnEV/GEG) - but at a moderate level
 - buildings owned by a large number of owners who have to be motivated
 - many residential buildings in the hands of private owners

Extrapolation of current energy-related refurbishment rates

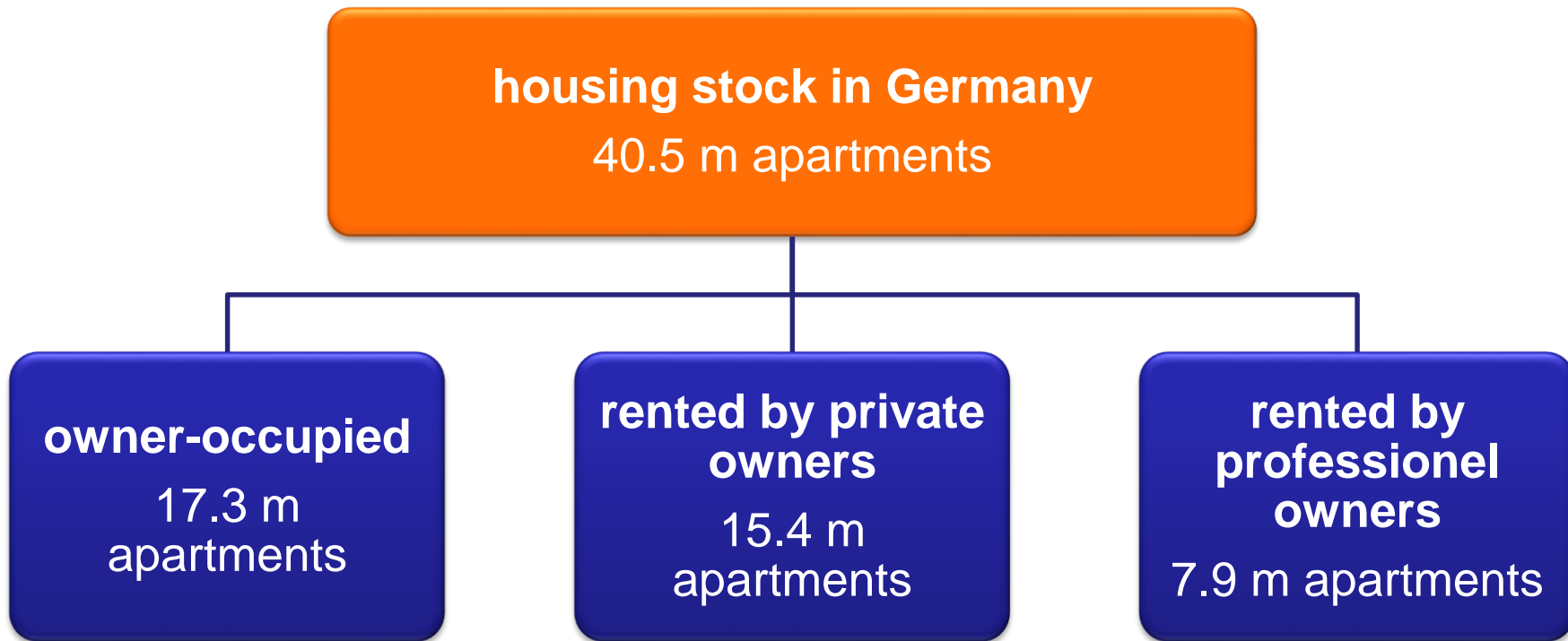


based on refurbishment rates of single-family houses in Germany



not only quantity but also quality inadequate (renovation level)

Partitioning of the housing stock regarding type of owners



ca. 19 m. in single-family homes and duplexes – mainly private owners

Acceptance of energy-efficiency refurbishments



- **acceptance of energy-related renovations - especially of insulation measures - is currently rather low in Germany**
 - aesthetic / architectural reasons: "Disfigurement of Cities"
 - perceived dangers of the insulating materials:,, mould, algae, fire hazards, poisons, "do not let the house breathe"
 - opinion insulation is in sum ecologically negative (grey energy, disposal) or unnecessary (change to RE is enough)
 - High costs - Is it worth it? And: Who bears the costs?

=> many people have negative attitudes or are insecure

Numerous critical contributions in media



*Schluss mit dem Dämmwahn!
Enough with the insulation madness (Die Zeit 28.10.2010)*

Die Burka fürs Haus

The Burka for the house (FASZ 14.11.2010)

Die große Lüge von der Wärmedämmung
The big lie of thermal insulation (Welt 29.03.2013)

Public dulling / insulation

Owner-occupied buildings: financial barriers



- **economic viability**

- additional benefits often not seen
- long payback periods via saved energy costs
- energy efficiency financially hardly relevant when buying real estate

=> uncertainty about the economic viability of the measures

- **financing**

- high costs both for insulation of house and RE
- often lack of capital and refusal of credit financing

- **financial barriers esp. a problem for elderly owners**

- more than half of owners of single-family homes over 60 years old

Rented apartments: financial and social barriers



- **landlord-tenant-dilemma:**
 - landlord finances measures, tenants benefit from savings
 - but: costs of modernization can be added to rent (8% of investment costs annually) - increase in monthly net rent often higher than subsequent reduction in energy costs
 - => cause of rent increase in controlled rental market
- **social problems and thus low acceptance of refurbishments esp. in cities with already rising rents and high number of low-income households, e.g. Berlin:**
 - more than 50% of households qualified for subsidized housing
 - housing cost 46% of income on an average
 - rents almost +100% in last 10 years

Socially acceptable refurbishments – target groups and possible measures



- **target group are tenants who can no longer afford an apartment after the energetic refurbishment.**
 - Transfer recipients (unemployment benefit, housing benefit)
 - other households with low to medium incomes
- **possible measures**
 - Increase in transfer payments and/or circle of recipients
 - Reduction of rent increase through energy-related refurbishment

Measures to reduce rent increase through energy-related refurbishment



- **good cost-benefit ratio - measures are largely refinanced through energy savings**
- **funding of energy-efficient refurbishment in general / especially for tenants with low incomes**
 - subsidy lowers modernization allocation
- **limitation of modernization allocation - reduction of amount, time, capping, hardship case control**
- **limitation of rent increase in general**
 - existing law on rent control in tense residential areas (“Mietpreisbremse”) excludes energy-related refurbishments
- **in milieu protection areas (“Milieuschutzgebiete”) only minimal energy efficiency measures allowed**

Many thanks for your attention!



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