

Combating fuel poverty: The role of utility obligation schemes

Fuel Poverty National Roundtable

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Outline of presentation

- (Re)Defining fuel poverty
- Utility obligation schemes – overview of experiences in EU member states
- Evolution of utility obligations in the UK and their role in combating fuel poverty – from EESoP to ECO

What is fuel poverty?

- First defined in 1979 – households that spend more than twice the median share of income on energy
- This definition was adopted by Boardman (1991) – at that time, twice the median share of income was 10%
- Boardman adopted a ‘need to spend’ metric based on indoor temperature of 21°C / 18°C
- Boardman’s definition was in turn adopted in the UK Fuel Poverty Strategy of 2001 – but the 10% threshold became fixed
- Other ‘consensual’ definitions have been proposed e.g. Healy (2004), who defined fuel poverty as the absence of a number of ‘socially perceived necessities’ (e.g. roof, windows and doors in good state of repair; an adequate heating system)

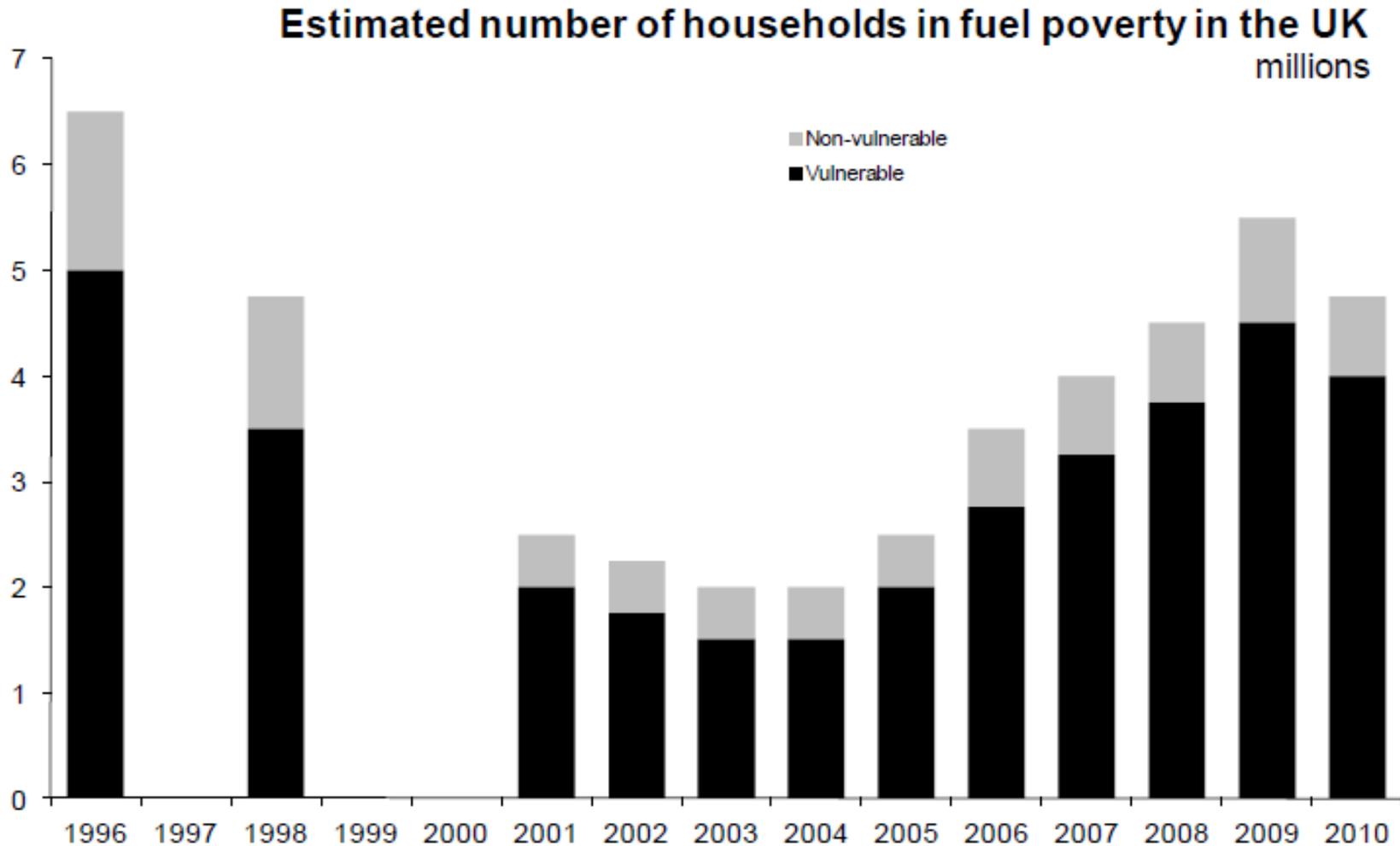
Expenditure-based definition: strengths and weaknesses

- ✓ Simple to understand
- ✓ Easy to apply – uses readily available data
- ~ Fixed threshold does not reflect changes in the circumstances of average households
- ✗ Overly sensitive to energy price changes
- ✗ Does not make a clear distinction between fuel poverty and general poverty

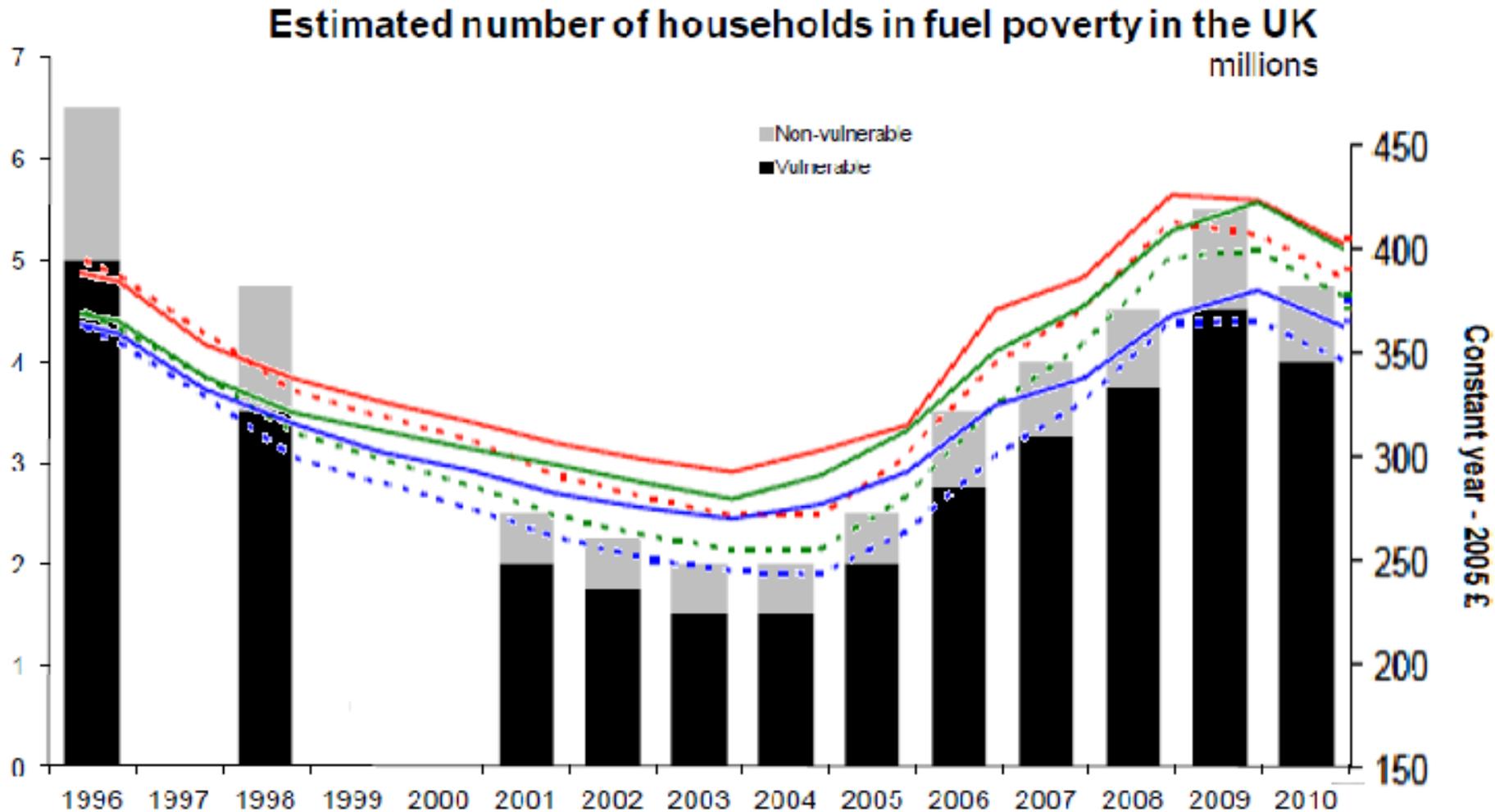
Consensual definitions: strengths and weaknesses

- ✓ Strongly energy-oriented
- ✗ Difficult to apply – onerous data requirements, and some indicators are subjective
- ✗ Insufficient link with poverty (depending on which ‘socially perceived necessities’ are used)
- ✗ Does not work well at the level of a single household

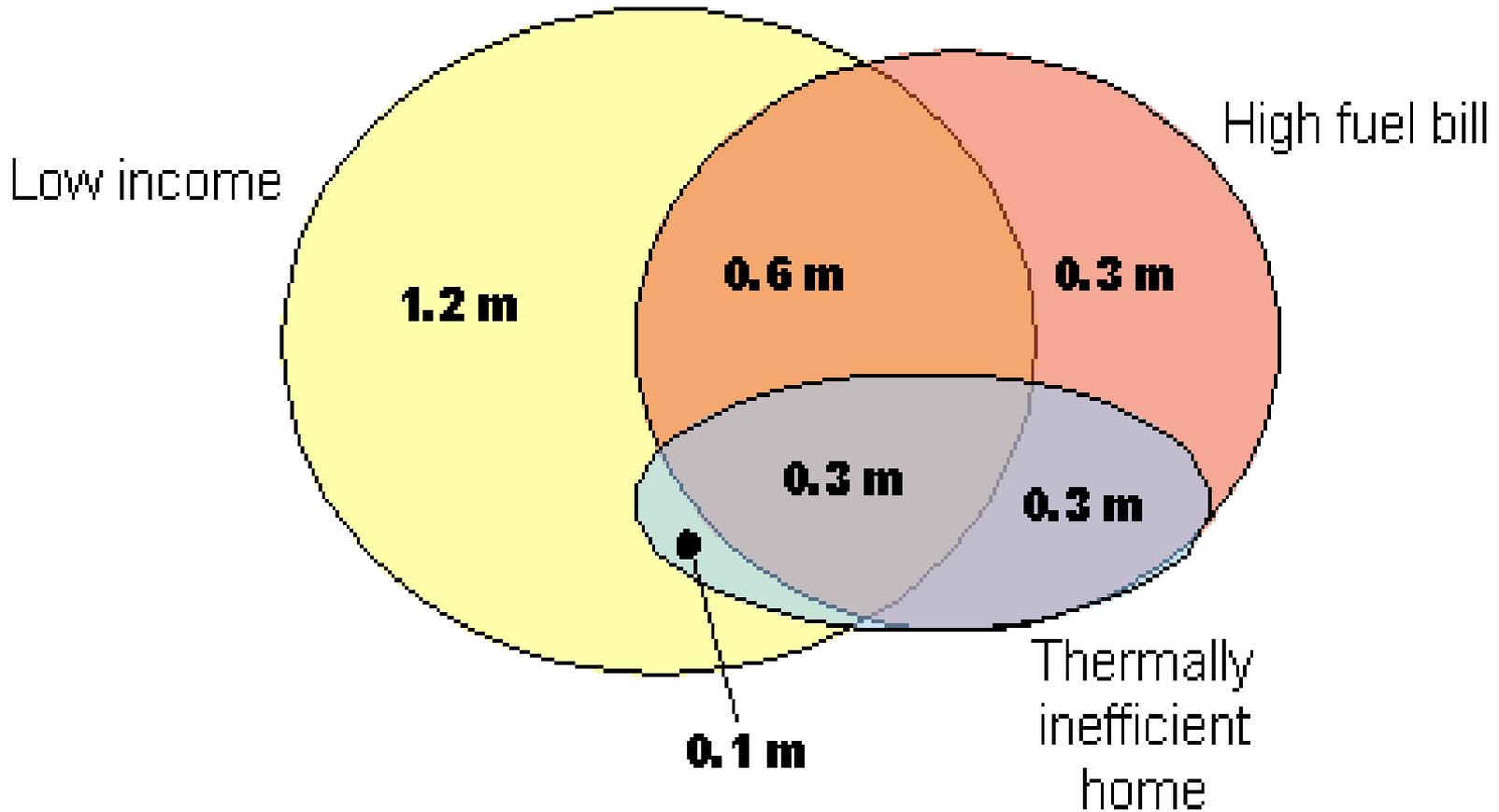
Fuel poverty trends in the UK



Fuel poverty or merely fuel price?



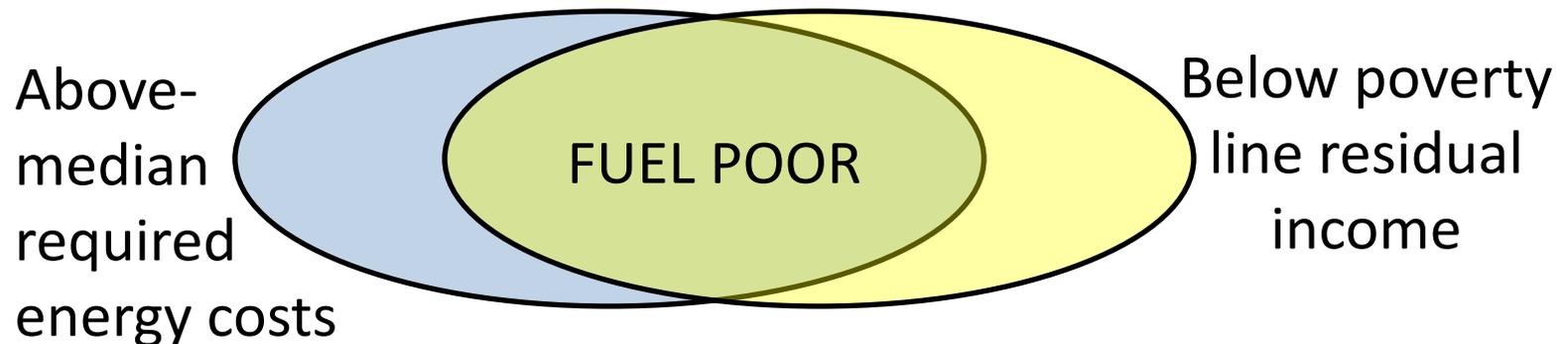
Fuel poverty or merely poverty?



Breakdown of the 2.8 million English households in fuel poverty in 2007

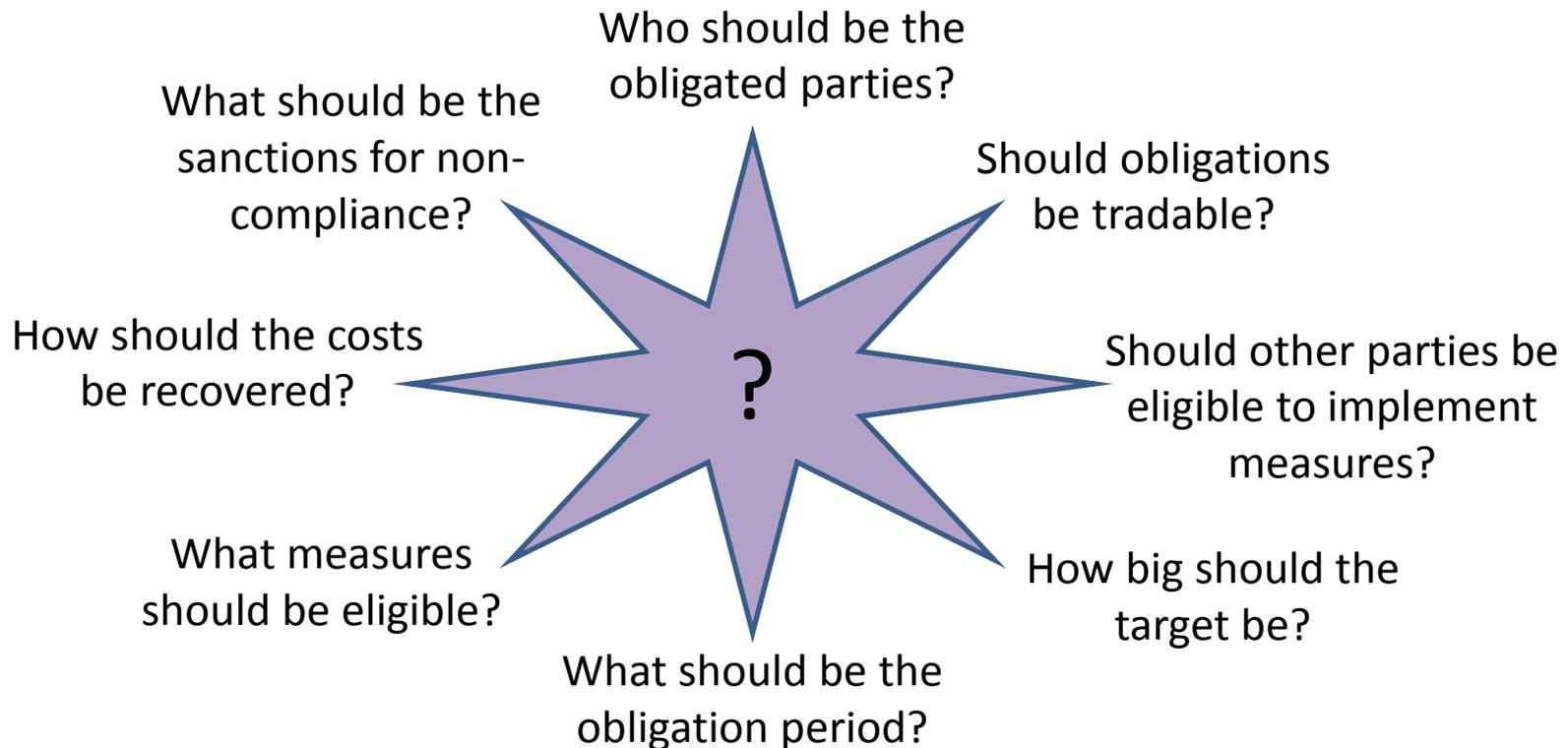
Towards a new definition of fuel-poverty

- Need for a new definition of fuel poverty was identified in the PPG phase of this project
- In March 2012 the 'Hills Review' in the UK came to similar conclusions
- Hills' proposed definition:



Energy efficiency obligation schemes

- Regulatory mechanisms that require obligated parties to meet quantitative energy saving targets by implementing approved end-use energy efficiency measures



Overview of schemes in EU member states (UK, France, Italy)

	CERT (UK)	TEE (Italy)	CEE (France)
Obligated parties	6 gas and electricity suppliers with >50,000 customers	30 gas and electricity distribution cos. with >50,000 customers	All energy suppliers that supply >0.4TWh annually
Other eligible parties	None	Subsidiaries of obligated parties, smaller distribution companies, ESCOs, large end-users with energy manager	Local authorities and social housing providers
Size of obligations	293Mt CO ₂ over 21 months	54TWh over three years	18TWh per year

Overview of schemes in EU member states (UK, France, Italy)

	CERT (UK)	TEE (Italy)	CEE (France)
Eligible measures	List of 37 standardised measures in the residential sector only	List of 22 standardised measures in all end-use sectors	List of 170 standardised measures in all end-use sectors
Trading of obligations	Only bilateral, and only with regulator approval – trading volume negligible	Open market – 75% of all certificates issues are traded	Open market, but only 4% of certificates issues are traded
Cost recovery	Full cost pass-through to customers	Regulator specifies each year the amount per GJ saved that is permitted to be passed through	No cost pass-through for gas and electricity, full cost pass-through for fuel oil

Overview of schemes in EU member states (Denmark, Flanders, Poland)

- Denmark:
 - Originally voluntary on gas, electricity and oil distributors
 - Allows measures that are purely behavioural
 - (Until 2011) savings credited for a single year only
- Flanders:
 - Cost pass-through fixed in advance according to budgets submitted to scheme administrator
 - Only scheme outside the UK that requires a specific effort to target low-income households
 - All actions must include an awareness-raising component
- Poland:
 - Scheme administrator uses a tendering process to select which measures are implemented

Evolution of UK schemes 1994-present

Energy Efficiency Standards of Performance (EESoP)



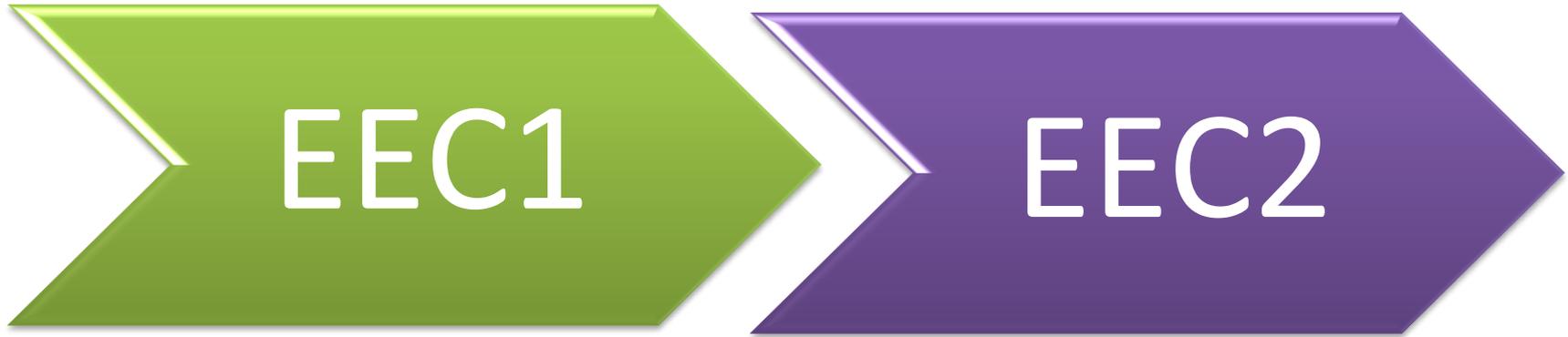
- 1994-1998
- Electricity suppliers only
- Target savings of 6,103 GWh
- Cost of £1 per customer annually

- 1998-2000
- Electricity suppliers only
- Target savings of 2,713 GWh
- Cost of £1 per customer annually

- 2000-2002
- All electricity and gas suppliers with more than 50,000 customers
- Target savings of 4,981 GWh (elec.) and 6,144 GWh (gas)
- Estimated cost of £1.20 annually per customer per fuel

Evolution of UK schemes 1994-present

Energy Efficiency Commitment (EEC)



- 2002-2005
- All electricity and gas suppliers with more than 15,000 customers obligated
- Target savings of 62TWh
- Estimated (ex ante) cost of £3.60 annually per customer per fuel

- 2005-2008
- Eight supply companies obligated
- Target savings of 130TWh
- Estimated (ex ante) cost of £9 annually per customer per fuel

Evolution of UK schemes 1994-present

Carbon Emissions Reduction Target (CERT) and Energy Company Obligation (ECO)



CERT

- 2008-2012 (originally scheduled to finish in 2011)
- Six electricity and gas suppliers obligated
- Target savings of 185Mt CO₂
- Revised up to 293Mt CO₂ when the scheme was extended to Dec. 2012



ECO

- October 2012-March 2015
- Obligation on all electricity and gas suppliers with more than 250,000 customers
- Target savings of 27.7Mt CO₂
- Target energy bill reduction among low-income and vulnerable customers of £4.2 billion

EESoP-EEC-CERT and the fuel-poor

- EESoP1: no specific targeting, but a guideline that 30% of implemented measures should be in the homes of 'disadvantaged' customers (low-income or elderly)
- EESoP2 & 3: 60-80% of expenditure to be targeted at disadvantaged customers
- EEC: 50% of savings to be achieved among 'priority groups' (defined as elderly or in receipt of means-tested state benefits)
- CERT: 40% of savings to be achieved among priority groups
- Fuel poverty itself has never been used as a criterion for targeting, even though obligation schemes are seen as important elements in the Fuel Poverty Strategy

ECO and the fuel-poor (1)

- The Energy Company Obligation (due to commence in 2013) has three components:
 - Carbon Emission Reduction Target (20.9Mt CO₂)
 - Carbon Savings Community Target (6.8Mt CO₂)
 - Home Heating Cost Reduction Target (£4.2 billion)
- First component designed to complement the “Green Deal” finance scheme
- Second and third components specifically address the fuel-poor

ECO and the fuel-poor (2)

- Carbon Savings Community Target
 - Both private sector and social housing eligible
 - Target at areas falling in the lowest 15% by Index of Multiple Deprivation
 - Approximate annual cost estimated at £190 million
 - Target lifetime CO₂ savings of 6.8 million tonnes
- Affordable Warmth Target
 - Only private-rented and owner-occupied properties are eligible
 - Households must be in receipt of certain means-tested state benefits to qualify
 - Approximate annual cost estimated at £350 million
 - Target energy cost savings of £4.2 billion

Conclusions – fuel poverty

- In order to tackle fuel poverty, it must first be defined in a rational way
- Current UK definition has many flaws, and is not recommended for use in Romania
- New definition proposed by Hills matches the intuitive understanding of the problem
- Important to use an indicator for the depth of fuel poverty as well as a ‘headcount’ – otherwise, efforts will be focused on households in ‘shallow’ fuel poverty

Conclusions – utility obligation schemes

- Starting modestly may be essential if obligated parties are not financially robust
- Meeting multiple objectives (e.g. both CO₂ reductions and fuel poverty alleviation) requires careful design – or even separate schemes
- Vital to ensure a smooth transition between phases, to avoid shocks to the energy efficiency market
- Measures such as wall insulation are attractive only if savings can be credited over long periods

Thank you for your attention

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