

Energy poverty and vulnerability in the European Union

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Energy and Justice in EU and in Asia workshop
CERI-Sciences Po, October 16th 2015



Overview

- Introduction
- Energy poverty in the EU
- Characteristics of EC policy
- Member State perspectives: defining the problem
- Member State responses: policy and measures
- Possible future action



Introduction

- Increasingly recognised problem of energy vulnerability, due to rising energy prices, recessionary impacts on national and regional economies, and poor energy efficient homes.
- Challenge of re-orientation of energy system to low carbon, and impacts on affordability – and further market integration
- Research focused on understanding how Member States are dealing with issues of energy poverty and vulnerable energy consumers
- Given the situation, how should the Commission take these issues forward?



What are the issues?

- **Energy poverty:** commonly understood to describe a situation where individuals are not able to adequately heat or purchase other energy services for their homes at affordable cost
 - ‘adequacy’ and ‘affordability’?
 - coverage of different types of energy (gas & electricity only) and energy services (heating, all household, mobility)?
- **Vulnerable consumers:** may include individuals at risk of or in energy poverty, but also a broader group of consumers who may be at a disadvantage in the purchasing and use of energy in the electricity and gas retail markets
 - Who should be included in this broader group of consumers?



Energy poverty in the EU

EU-wide understanding informed by analysis using proxy indicators from EU-SILC (e.g. EPEE 2009; Thomson and Snell 2013; Tirado Herrero and Bouzarovski 2014).



Households unable to keep the home adequately warm (EU-SILC)

Estimated range 10-20% of population in energy poverty. (Total population of EU28 is 505 million).

Austerity measures driving monetary deprivation, and rising energy prices results in a growing problem.

Energy poverty in the EU: regional dimension

- Problem appears strongest – and more pervasive - in Eastern European MS, and in Southern Europe; there is also wide variation across MS in these regions (Tirado Herrero and Bouzarovski, 2014)
- Range of factors –
 - Building fabric is often not adequate in colder months (ENTRANZE)
 - Lack of adequate heating systems (ENTRANZE)
 - Strong impact of economic downturn
 - Reduction in use of regulated tariffs, and other energy market reforms
- Limited in Scandinavian countries, and much lower in Western European MS; characterised as a more focused problem.



Recognition of energy poverty by EC

- The recent EC Energy Union communication on *Protecting vulnerable consumers*:

*Energy poverty negatively affects living conditions and health. **It has many causes**, mostly resulting from a combination of low income and general poverty conditions, inefficient homes and a housing tenure system that fails to encourage energy efficiency. Energy poverty can only be **tackled by a combination of measures, mainly in the social field** and within the competence of authorities on the **national, regional or local levels**.*

- Gas and Electricity Directives under the Third Energy Package (2009):

*Member States shall take appropriate measures to protect final customers, and shall, in particular, ensure that there are adequate safeguards to protect vulnerable customers. In this context, **each Member State shall define the concept of vulnerable customers which may refer to energy poverty** and, inter alia, to the prohibition of disconnection of electricity to such customers in critical times. Member States shall ensure that rights and obligations linked to vulnerable customers are applied. In particular, they shall take measures to protect final customers in remote areas.*



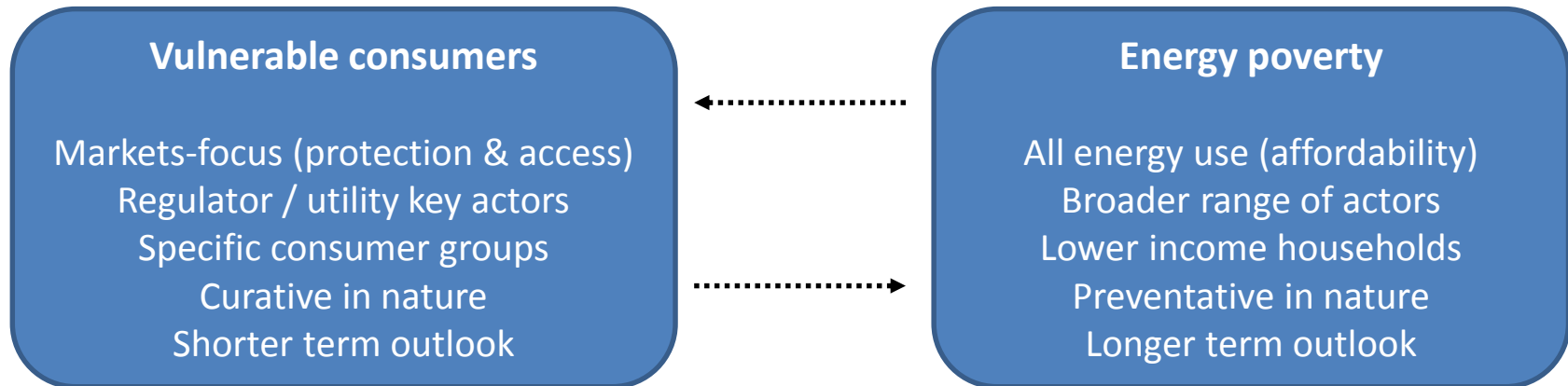
Two key features of EC position

1. Energy poverty ‘captured’ as part of vulnerable consumer issue (within internal energy markets)
 - VCs have to be defined and protections put in place; energy poverty **may** be referred to
[in part, reflects competency]
2. Strong principle of subsidiarity in play
 - On definitions, actions, whether to consider energy poverty
[in part, reflects gap in understanding, and complexity]



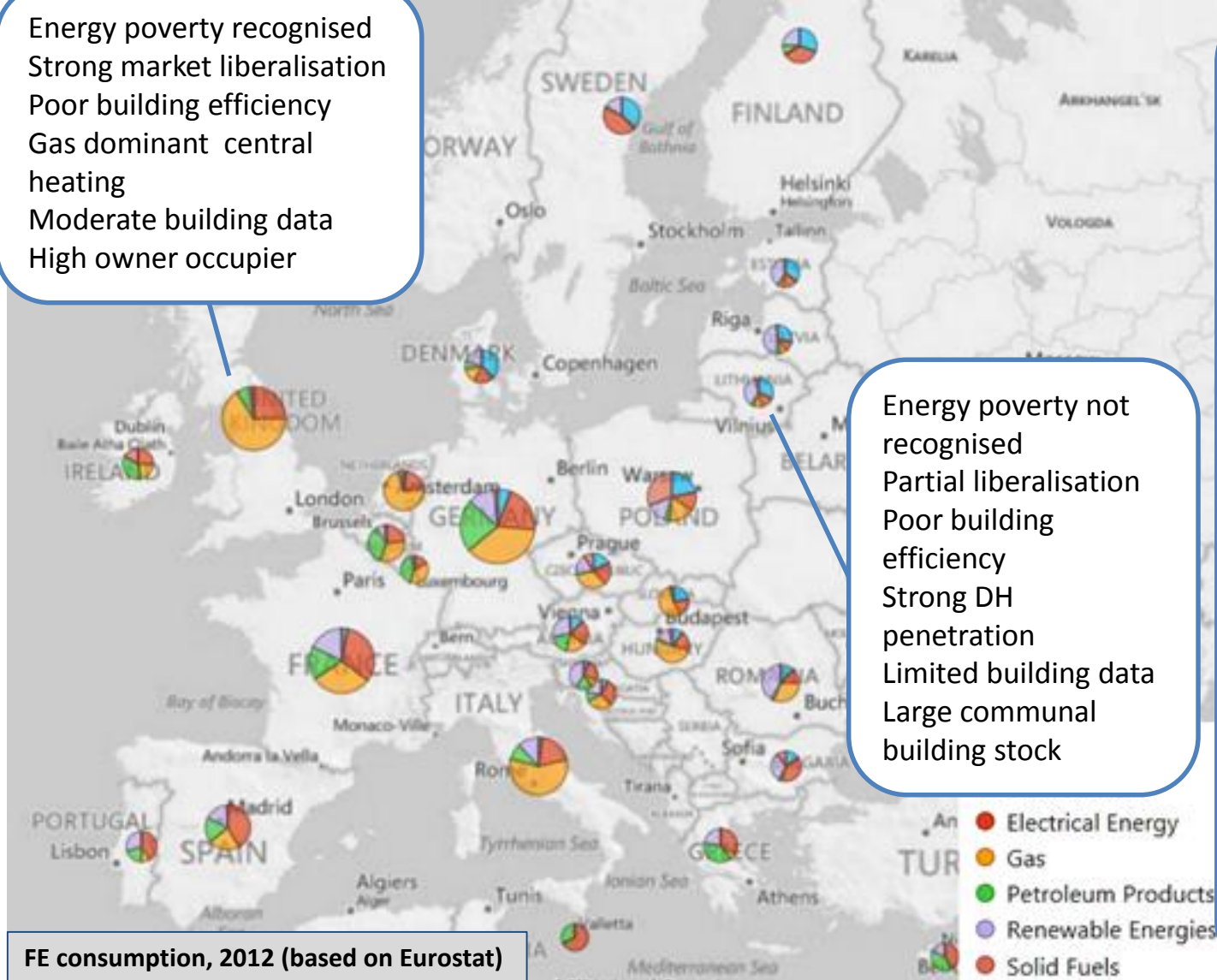
1. Linked but distinct issues

- Measures to protect VCs in energy markets also impact on those in or at risks of energy poverty –
 - through ensuring consumer protection and safeguards
 - offering competitive tariffs (and access to them)
 - Encouraging the efficient use of energy
- Yet these are quite distinctive issues



2. MS context a strong driver of subsidiarity

Energy poverty recognised
 Strong market liberalisation
 Poor building efficiency
 Gas dominant central heating
 Moderate building data
 High owner occupier



Energy poverty not recognised
 Partial liberalisation
 Poor building efficiency
 Strong DH penetration
 Limited building data
 Large communal building stock

- Approaches to policy making.
- Energy supply and use.
- Housing condition, type and tenure.
- State of market liberalisation.
- Access to data.

Member States: defining vulnerable consumers

- All MS, bar one, have a definitions in place (required under Third Energy Package).
- Four key categories (shown below).

| Definition type | Member State (MS) | No. of MS by type |
|--|---|--------------------------|
| Receipt of social welfare | BG, CY, DE, DK, EE, FI ¹ , HR, HU, LT, LU, MT ⁴ , PL, PT, SI ^{3,6} | 14 |
| Energy affordability (low income / high expenditure) | FR ² , IT, SE | 3 |
| Disability / health | CZ, NL, SK, IE | 4 |
| Range of socio-economic groups | AT, BE, ES, GR, RO, UK ⁵ | 6 |
| Not available / Under discussion | LV | 1 |

1 Although term not officially recognised; **2** Under definition of energy poverty; **3** Also includes disabled individuals; **4** Also has health and income categorisations; **5** Based on OFGEM definition, not the national fuel poverty definitions; **6** According to the Concept for the protection of consumers fulfilling conditions of energy poverty, new definition and indicators will be based on social (economic) criteria.

Member States: defining vulnerable consumers (cont'd)

- Large variation in definitions used, reflecting that 'vulnerability' means different things.
- Extremely narrow approach in specific countries, limiting action to disconnection protection (as per EU legislation) for specific groups.
- Greater focus on socio-economic circumstances (age, disability, income) rather than energy system factors (heating system type, fuel type, payment method, tariff access)

Member States: defining energy poverty

- 4 definitions in legislation (UK constituent countries, Ireland, France, Cyprus*) and a number under consideration (Italy, Austria, Malta, Slovakia).
- Expenditure-based metrics (energy expenditure versus income) are most prominent, although France also considers survey-based indicators in its approach (as are Austria and Malta).
- Some Member States do not view this as distinct but rather an indicator of general poverty (e.g. Netherlands, Scandinavian countries).
 - Ltd recognition does not mean inaction, just alt. policy approach.
- In a number of MS the concept is not recognised at governmental level but many civic organisations recognise / campaign on the issue.



The challenge of defining & measuring energy poverty

- For MS, there are range of considerations.....
 - Purpose: national level picture or targeted action
 - Coverage: fuels and energy services
 - Metric type: energy expenditure or survey-based response
 - For expenditure-based metrics
 - where to set expenditure threshold (10% of income?)
 - based on actual or required expenditure?
 - income definition – equivalised, housing costs included
 - Data: can indicators be supported?
- Issue at the EU level; beyond EU-SILC, lack of data make harmonised indicators problematic
- EC revisiting EU-SILC to see how to improve (Thomson and Snell, 2014), and exploring other indicator sets



Review of policies and measures

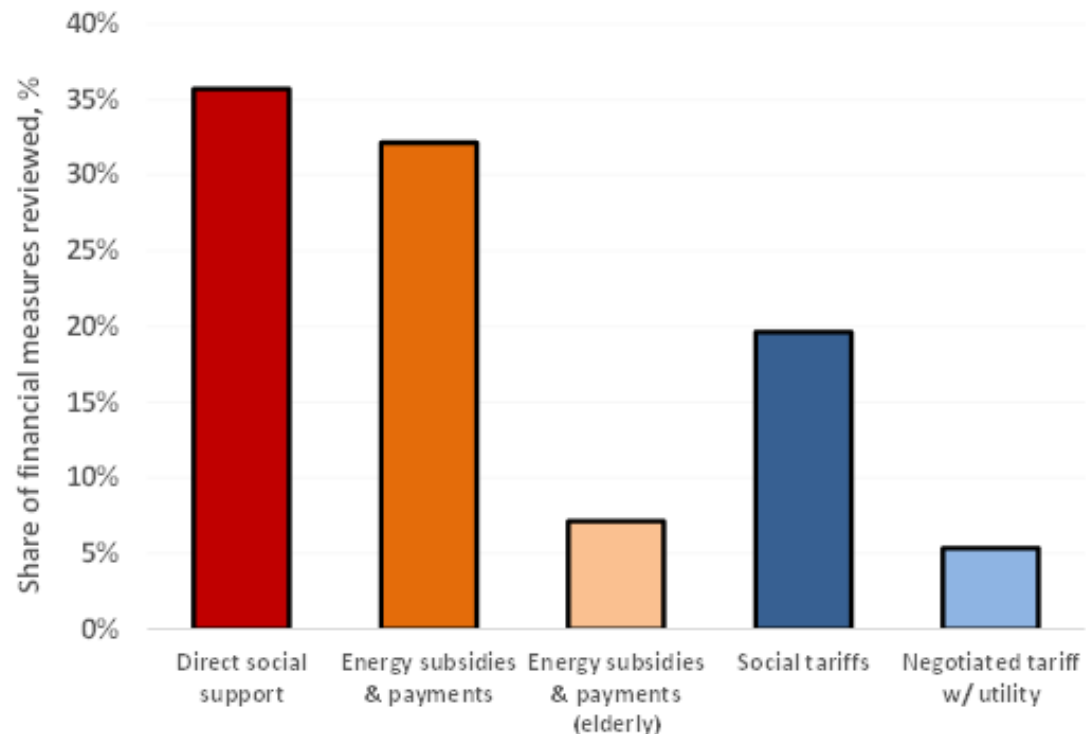
- **Targeted** to provide additional protection to vulnerable groups, or that reduce costs for lower income households
- **Non-targeted**, supporting vulnerable groups implicitly (e.g. reducing energy use in social housing, broader social welfare support, disconnection protection etc.).
- Standardised information gathered - type of implementation mechanism, delivery institution, extent of targeting, effectiveness (if possible to assess) and time horizon (structural or acute problems).
- Over 280 measures were reviewed; of which 40% targeted
- Synthesis report + ~24 MS level working papers

Review of policies and measures (cont'd)

- Measures are categorised into four groups –
 - **Financial interventions**, introduced to support payment of bills, and primarily focused on short term relief.
 - **Additional consumer protection** for consumers using the retail markets.
 - **Energy efficiency programmes**, targeting improvements to the efficiency of building stock, or energy using appliances.
 - **Information provision & raising awareness**, which improve understanding of consumer rights and information on market tariffs and energy saving measures.

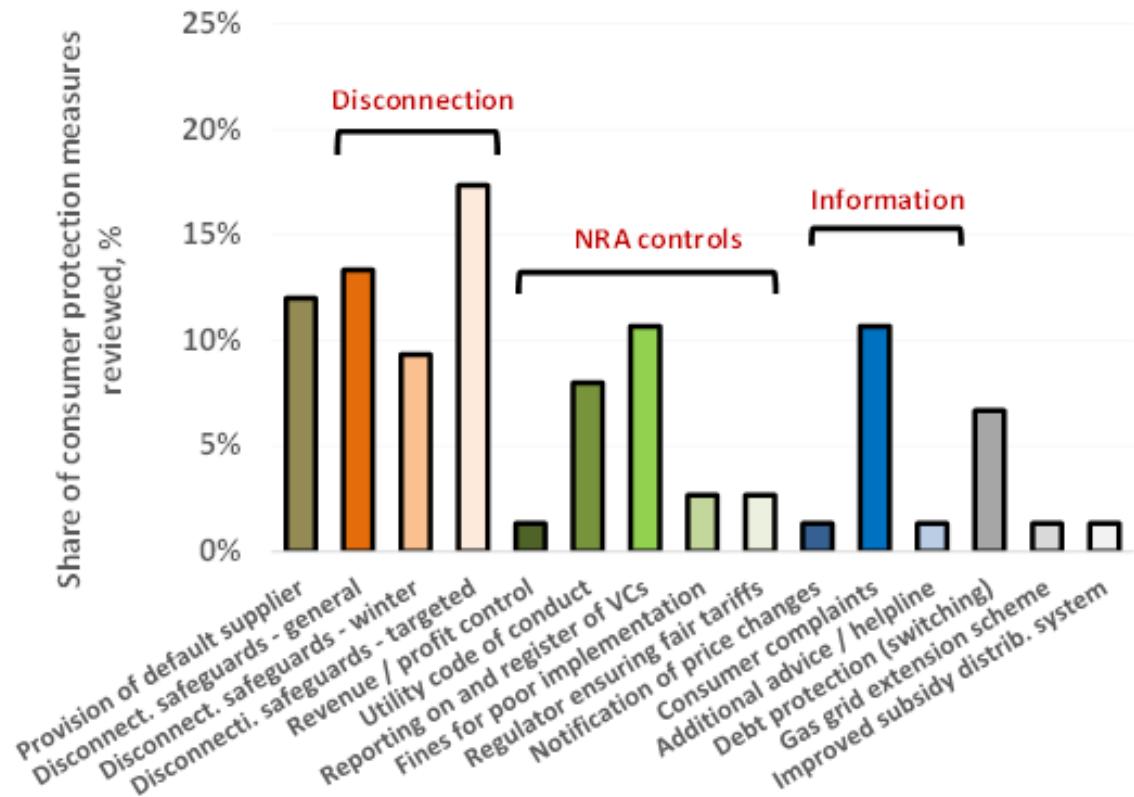
Financial interventions

- Focus of efforts to address VC/EP: 40% of MS
- Spatial coverage: 75% of MS, particularly countries with strong social policy-led programme
- Focus of measures: 70% relate to social welfare or direct energy payments
- Key differences in implementation – targeted vs. blanket approach; automatic payment or claim
- Critical for short term support, but usefully combined w/ measures addressing underlying issues e.g. energy efficiency



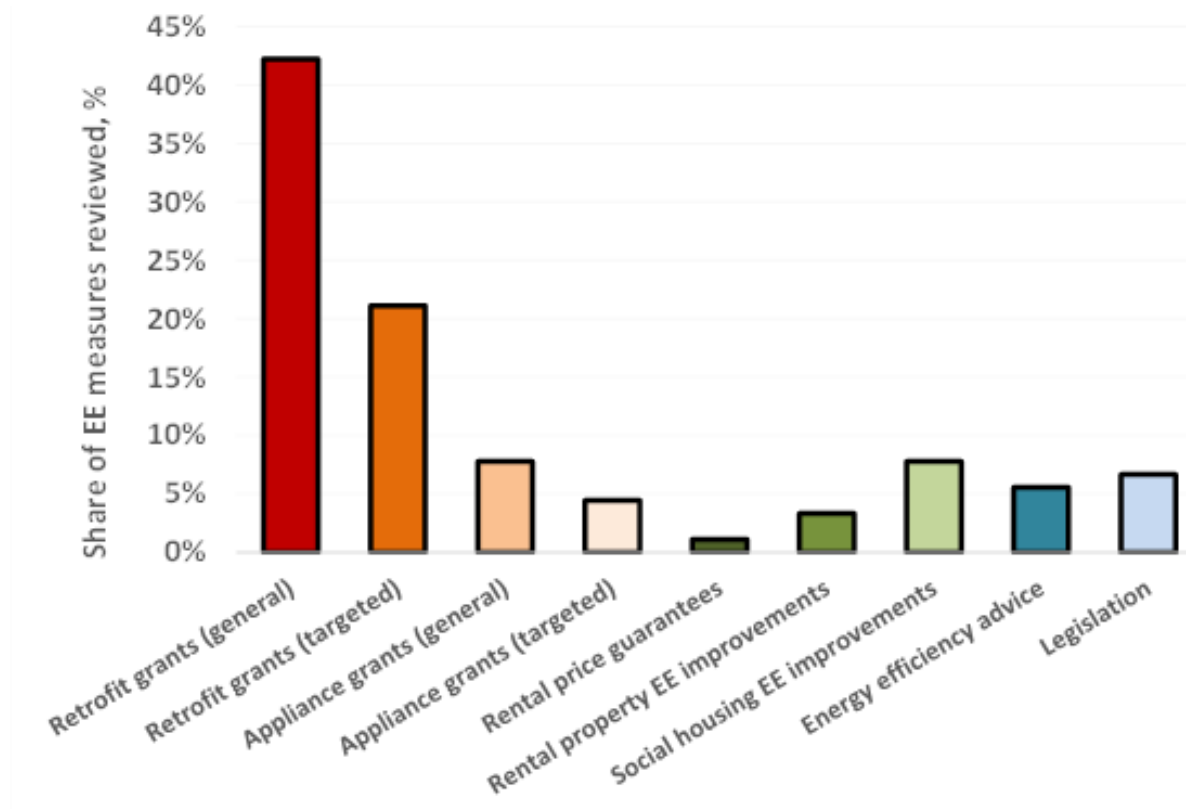
Consumer protections

- Focus of efforts to address VC/EP : 20% of MS (reflecting legislation)
- Focus of measures: 40% relate to disconnection protection
- Spatial coverage on disconnection: 80% of MS
- Spatial coverage: 75% of measures in most liberalised markets
- Heterogeneous category w/ spread of measures
- Strong role for regulators (NRAs) in ensuring protections in place
- Key learning for markets undergoing liberalisation



Energy efficiency interventions

- Focus of efforts to address VC/EP : 30% of MS (with more energy policy focus approach)
- Focus of measures: 65% relate to building retrofit measures (30% of such measures targeted on low income households)



Energy efficiency interventions: key issues

Energy efficiency programme reviewed suggest some key issues for design and implementation –

- **Targeting** – are proxy indicators sufficient to adequately target? Too much admin. complexity?
- **Delivery** – by utilities (efficiency but profit motives, trust) vs. local suppliers (employment but scale issues).
- **Implementation** - area-based (street-by-street) approaches or more adhoc, selective interventions or housing type?
- **Measurement & enforcement** – need to determine how to measure success, and ensure monitoring of targets e.g. to see if delivery being achieved.
- **Funding** – via energy bills or general taxation or other ring fenced revenues; both have challenges. Measures to get over issue of tenant-landlord issues (social / rented housing cost guarantees), and make loans / grant schemes attractive.

Selected energy efficiency interventions

| Type of measure | EE targeted measure |
|--|---|
| Low income households with employment benefits | <p>Germany: Stromspar-Check (Energy-savings-check for low-income households)</p> <p>Belgium: Energy savers (Energiesnoeiers) project</p> |
| Low income households | <p>Croatia: Energy efficiency and use of renewable energies for households</p> <p>UK: Energy Company Obligation (ECO)</p> <p>Ireland: Better Energy: Warmer Homes</p> |
| Social housing focused | <p>France: Habiter mieux programme (“Living better”)</p> <p>Netherlands: Energy Saving Covenant / Energiesprong</p> |
| Communal buildings | <p>Hungary: SOLANOVA - renovation of large residential buildings and heat-supply-systems</p> <p>Lithuania: Multi-family building renovation via JESSICA funding mechanism</p> |



A fragmented response exists at the EU level

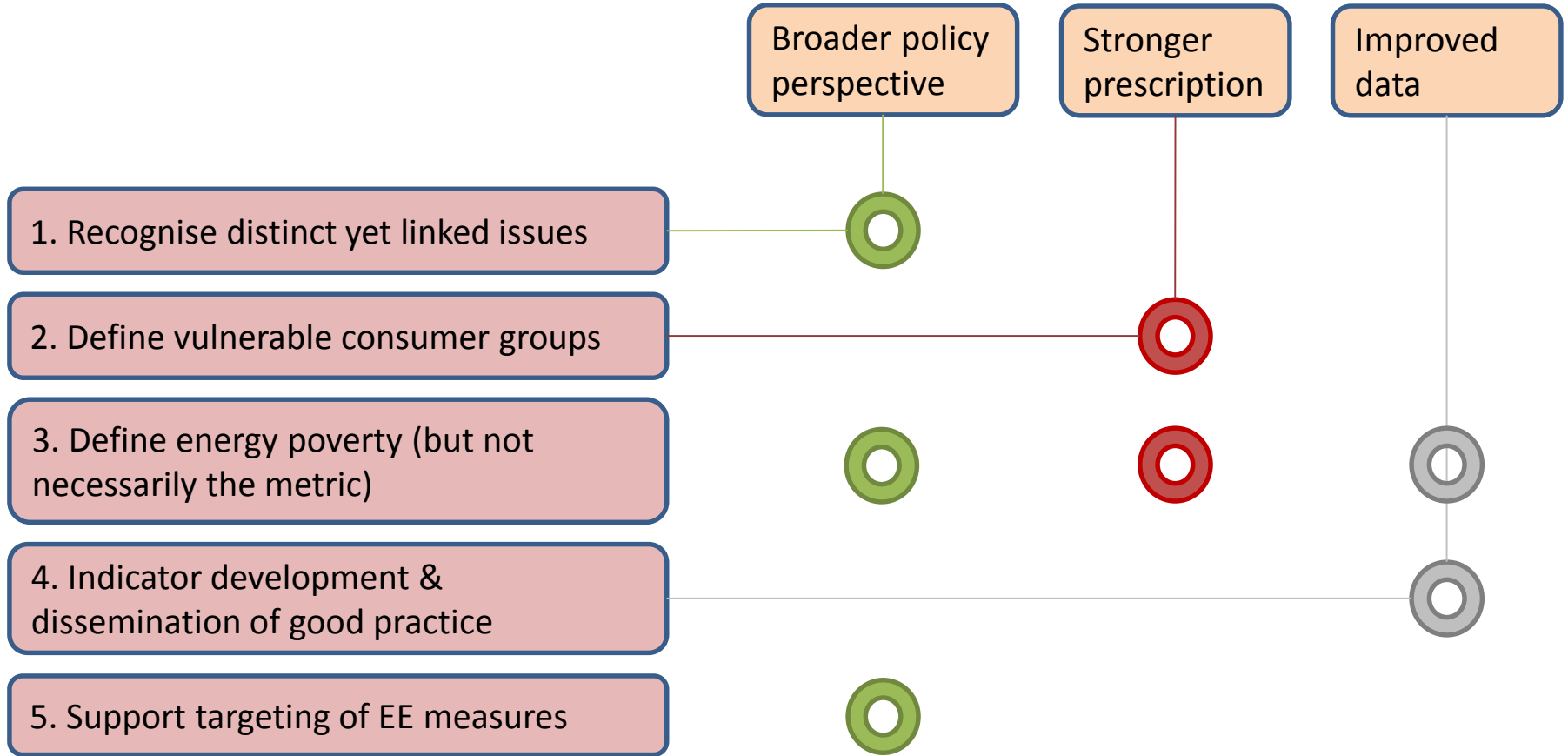
Three key reasons –

- The problem is not yet fully understood due to shortcomings in existing indicators
- Action to date has been guided by the principle of subsidiarity
- EC competency in internal energy markets means a focus on vulnerable consumers, not on energy poverty across the wider energy system

- Paper argues that these can start to be addressed through a more co-ordinated and comprehensive European response



Overview of key recommendations



Recommendations

1. Recognise distinct yet linked issues

- Broaden energy poverty perspective beyond vulnerable consumers
- Amend legislation (during revision) to distinguish issues, and requirement for distinct actions

2. Define vulnerable consumer groups

- Strengthen prescription on groups included, and for stronger reporting (in legislation)
- 'Vulnerability' - affordability, access and participation, acknowledging both socio-economic and structural circumstances with regards to energy use
- Not only reactive emergency responses

3. Define energy poverty (but not necessarily the metric)

- Develop EU communication document or strategy – what is the issue, current understanding, solutions?
- Distinctive nature of problem – but need for co-ordinated response; raise awareness and drive additional action
- Leverage research knowledge to develop this – and understand gaps



Recommendations (cont'd)

4. Indicator development & dissemination of good practice

- Review of indicators – improve understanding and inform measures
- Development of observatory, as focal point for disseminating best practice, pulling together expertise, collating data etc.
- New programme of work from DG ENER - *Pilot Project 'Energy Poverty – Assessment of the Impact of the Crisis and Review of Existing and Possible New Measures in the Member States'*

5. Support targeting of EE measures

- Orientate current legislation towards more targeting, such as the via the EE Directive
- Allocation of other EU funds towards specific regions where need is greatest

Final comments

- The review highlights a fragmented European response across issues of energy vulnerability / poverty – both in definition and action
- It also shows a range of interesting, potentially effective measures that could be transferable to other countries
- Strong role for EC (supported by VCWG and others) in coalescing efforts through a range of actions that
 - enhance understanding of the issues through development of improved indicators, and sharing of experiences
 - provide increased prescription in helping define the issues
 - allow for a broader perspective on vulnerability and energy poverty, beyond internal energy markets



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Thanks for listening. Any questions?

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Acknowledgements:

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Research report published by INSIGHT_E consortium (www.insightenergy.org/)