

First meeting of the project "ODYSSEE-MURE, Monitoring EU Energy Efficiency First Principle and Policy Implementation" 16-18 December 2019, Berlin, Germany

WP4 - Operationalizing the "Energy Efficiency First Principle" (EE1)

Adressing Fuel poverty as an important pillar of the EE1 principle

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Outline

- Energy poverty and EE1
- Energy poverty in ODYSSE-MURE
- Indicators on energy poverty in ODYSEE



Energy poverty and EE1

There are two major barriers to a strong implementation of the EE1 principle:

- A number of societal trends and rebound effects are counteracting the EE1
 principle though there are also a number of New Societal Trends (such as
 the Shared Economy, Digitalization and a Trend towards a Circular
 Economy) to encounter the EE1 principle (sufficiency policies).
- Distributional effects which impede certain parts of the population, especially those in energy poverty, to realize the full potential of the EE1 principle.

So besides covering sufficiency policies we aim to

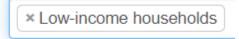
Organise and analyse information in the MURE database on distributional effects of policies and policies addressing in particular energy poverty.



Energy poverty in MURE

Implementation of Energy poverty in MURE (currently):

Targeted audiences



Descriptor make policies aiming on energy poverty identifiable Query Household - 36 Measures Found

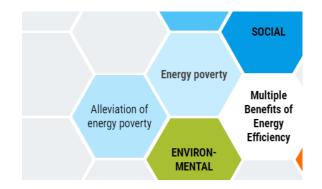
Future development: Connecting policies from MURE with Energy poverty related indicators (MB facility, ODYSSEE, Energy poverty observatory,....)

- In the EE1 facility (sub-facility on Energy poverty)
- Extension of Policy mapper and Summary tables to cover Energy poverty



Existing data in MB:EE facility

- Indicator on impact on Low income households
- Based on
 - energy savings (ODYSSEE, MURE)
 - energy prices (Eurostat)
 - Income deciles (Eurostat)



Energy poverty observatory

Primary indicators (<u>Arrears on utility bills</u>, <u>Low absolute energy expenditure (M/2)</u>, <u>High share of energy expenditure in income (2M)</u>, <u>Inability to keep home adequately warm</u>)

Secondary indicators (Energy prices, Number of rooms per person, Comfort, Energy

expenses (for different income quintiles), Equipment rates (heating, cooling)

→ Suitable indicators to be added to ODYSSEE database? (income deciles, energy prices?)



Interaction with NTs on energy poverty:

- Roundtable after this presentation
- Presentation of national policies on energy poverty in MURE workshop by NTs
- Full MURE update: One important focus should be put on energy poverty measures

Further action:

 Literature review for updating Fraunhofer study¹ on energy efficiency policies for low income households (identification of energy poverty policies based on MURE measure types -> suitable for energy poverty sub-facility)

¹ https://www.europarl.europa.eu/RegData/etudes/STUD/2016/595339/IPOL STU(2016)595339 EN.pdf



Analysing distributional effects of policies (e.g. taxes, subsidies, EEOs):

- Classification of suitable measure types in MURE
- Developing methods for estimating distributional effects based on energy savings
 - Where do the energy savings occur (related to income groups)?
 - Case studies on certain measure types
- → Discussion at the round table



Possible approach:

- Identify and classify policies which act positively or negatively on Energy Poverty (enhance or decrease distributional effects: for example taxes may enhance distributional effects, certain types of subsidies could decrease energy poverty)
- 2. Incorporate data from other databases (e.g. energypoverty.eu: not necessarily energy efficiency policies)
- 3. Enquire with national teams on their energy efficiency policies concerning energy poverty (questionnaire)
- 4. Quantitative analysis on distributional effects of policies. What kind of data are needed? (e.g. income deciles). Should be included in the **Odyssee-Indicators.**
- Organise and structure the policies for energy poverty accordingly in the MURE database.
- 6. Use the MB facility in MURE to link savings from measures to calculate impacts on energy poverty. Maybe the EP Observatory provides further ideas.



Indicators on energy poverty in ODYSSEE

Some EUROSTAT data:

- Housing cost burden indicators
- Arrears on utility bills
- Proportion of inhabitants unable to keep home adequately warm
- Housing deprivation indicators (e.g. population living in a dwelling with a leaking roof, damp walls, floors or founfation, or rot in window frames or floor)
- Poverty rate

Or other possible series:

- number of households spending over 10%, 20% ... of their global income for energy expenditure (followed by some countries)
- → To construct new indicators (based on the Odyssee detailed data, energy price and income distribution data)



Indicators on energy poverty in ODYSSEE

- → Based on the Odyssee detailed data, energy price and income distribution data (and possibly other assumptions), some energy indicators (preliminary considerations) :
- share of final energy consumed by energy poor household by countries
- medium share of energy expenditure per households per quantile
- share of the energy expenditure (energy consumption) dedicated to heating, and transport
- share of the total energy savings made by energy pool households
- share of energy poor households by type of heating system (based on census data)?



Thank you! Danke!

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