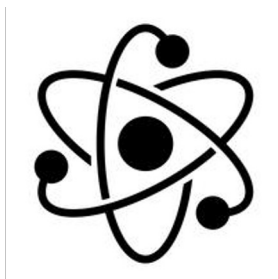
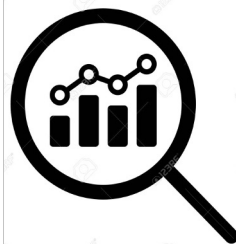
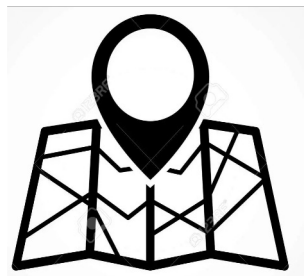




Energy Poverty Measurement: Practices and Implications



Pedro Palma

p.palma@campus.fct.unl.pt

NOVA FCT

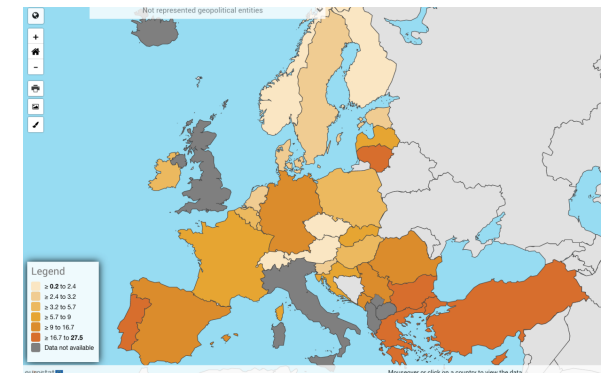
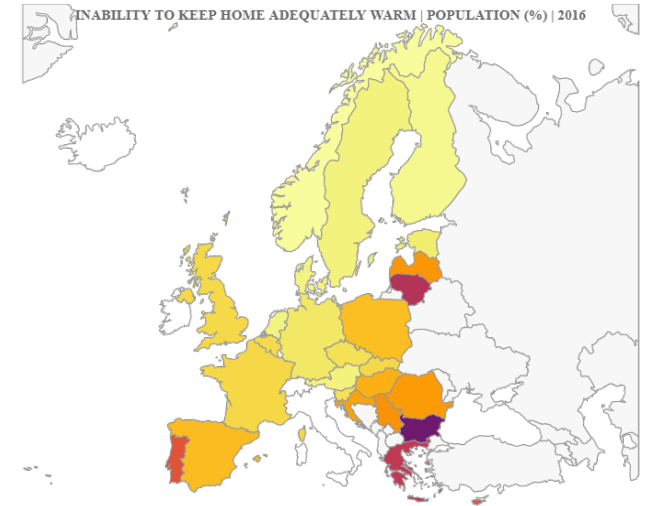


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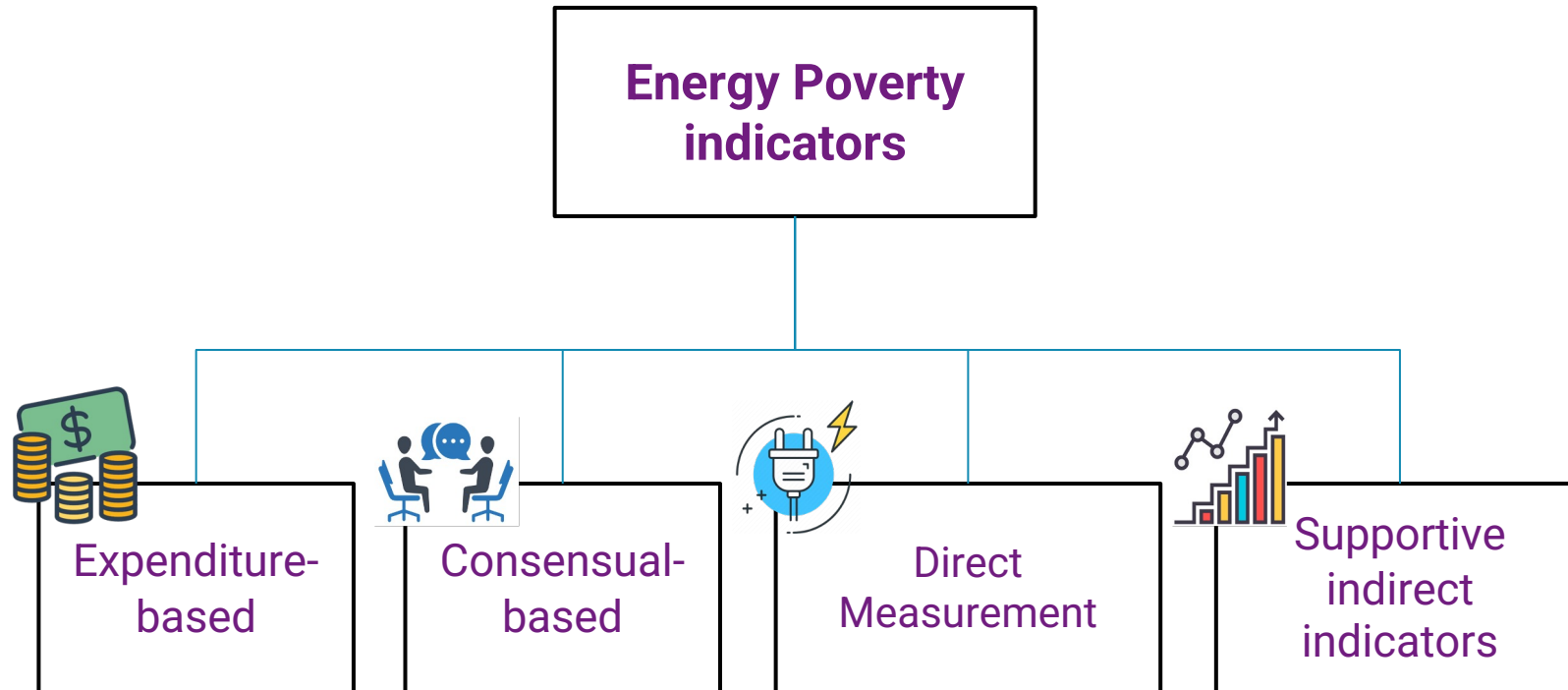
Energy Poverty Measurement in Europe

- **Diagnosis** is a crucial part of mitigation efforts
- Member states are **mandated to report EP levels**
- Integration in **NECPs and EP strategies**
- European Commission defends the **use of multidimensional indicators**
- EPAH provides **relevant analysis of EP indicators** for policy makers
- Need for **bottom-up regional and local measurement** approaches and policies



Types of methods and indicators to measure EP

- Diversity of indicators can be categorized according the **method of measurement** (Herrero, 2017; Thomson et al., 2017; Rademaekers et al., 2016)

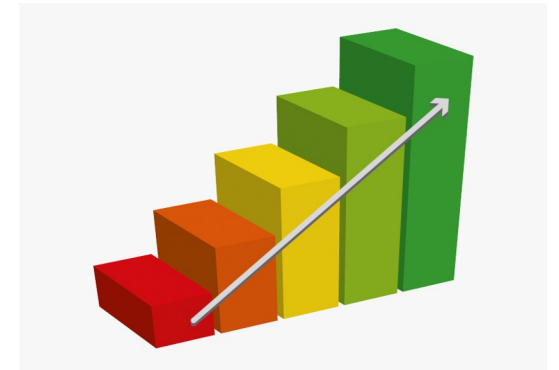


Indicators can also be a mix of all these types!

Types of methods and indicators to measure EP

Indicators can be categorized according to different factors (Rademaekers et al., 2016):

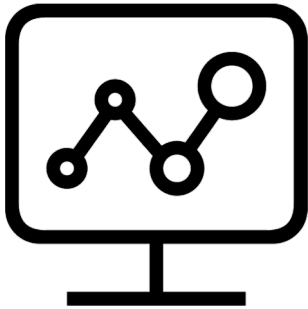
- **Type of Outcome** - binary or scale
- **Perspective** - subjective or objective
- **Type of measurement** - quantitative or qualitative
- **Object of measurement** - causes, drivers, outcomes
- **Subject of Measurement:** individuals, households, populations
- **Organization** – separate or composite



What to measure

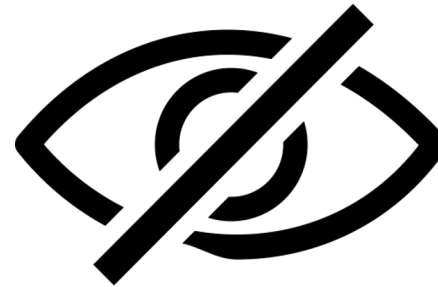
Types of energy poverty

Measured



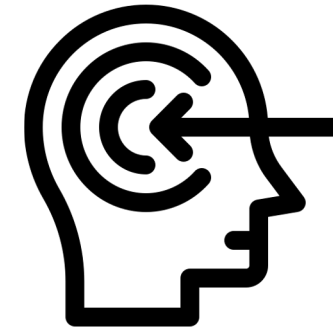
Households that spend an abnormally high share of their income on space heating and cooling

Hidden



Households that limit their energy consumption to reduce bills, compromising thermal comfort

Perceived



Households that report being in energy poverty and not being able to maintain thermal comfort

How to measure

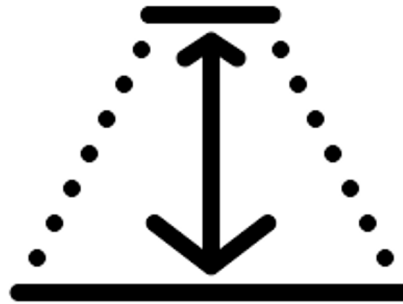
Assessing EP according to...

Extent



*Estimating **how many** people that are in a situation of energy poverty*

Depth



*Assessing **how deep** are they in energy poverty, or **how serious** is their situation*

Persistence



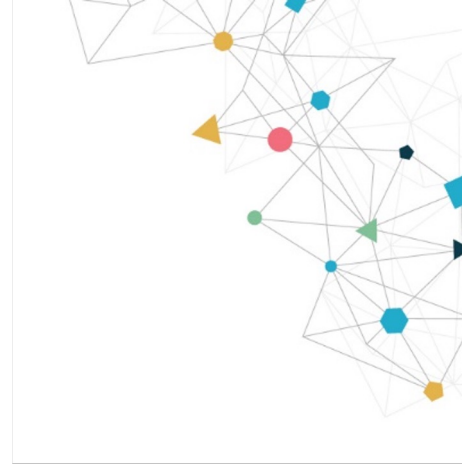
*Investigating **how long** have energy-poor households been in this vulnerable situation*

Debate over Measurements

Questions raised and sparked discussion

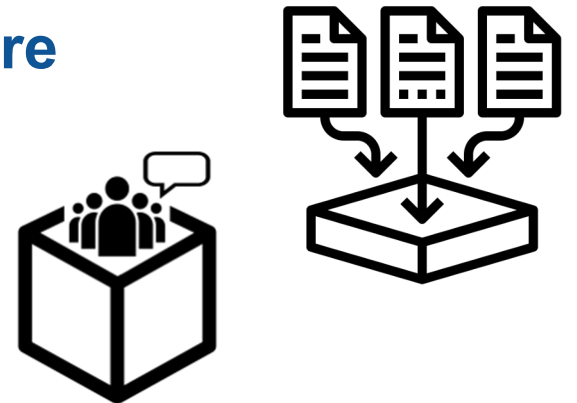
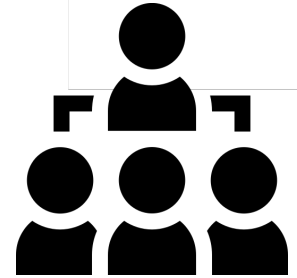
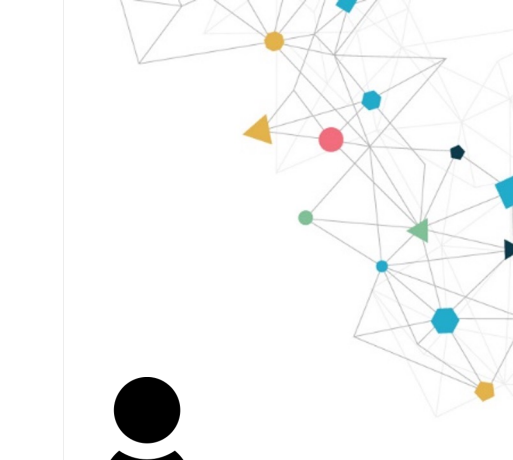
- Discussion over **definitions, thresholds, advantages** and **limitations**
- What is an **adequate level of energy services**?
- **Relative** or **absolute** energy expenditure **threshold**?
- “**Required expenditure**” vs **actual costs**?
- **Total income** vs **disposable income**?
- Quantitative data/statistics or **subjective self-reports**?

New methods arising to **address shortcomings**



Political Implications of Indicators

- Dependent of **EP definition** adopted
- Historical focus on **Expenditure** and **Space Heating**
- Problem dimension: **34 or 66 million in EP?**
- Surveys and proxy indicators were **not designed to measure energy poverty**
- Efforts and neutrality in **data collection**
- Policy impact: Reporting **outputs** or **outcomes?**
- Concepts of **energy, housing as rights**





Thank you!

Pedro Palma

p.palma@campus.fct.unl.pt

NOVA FCT

