

EU energy policies and projects

A perspective on an inclusive energy transition

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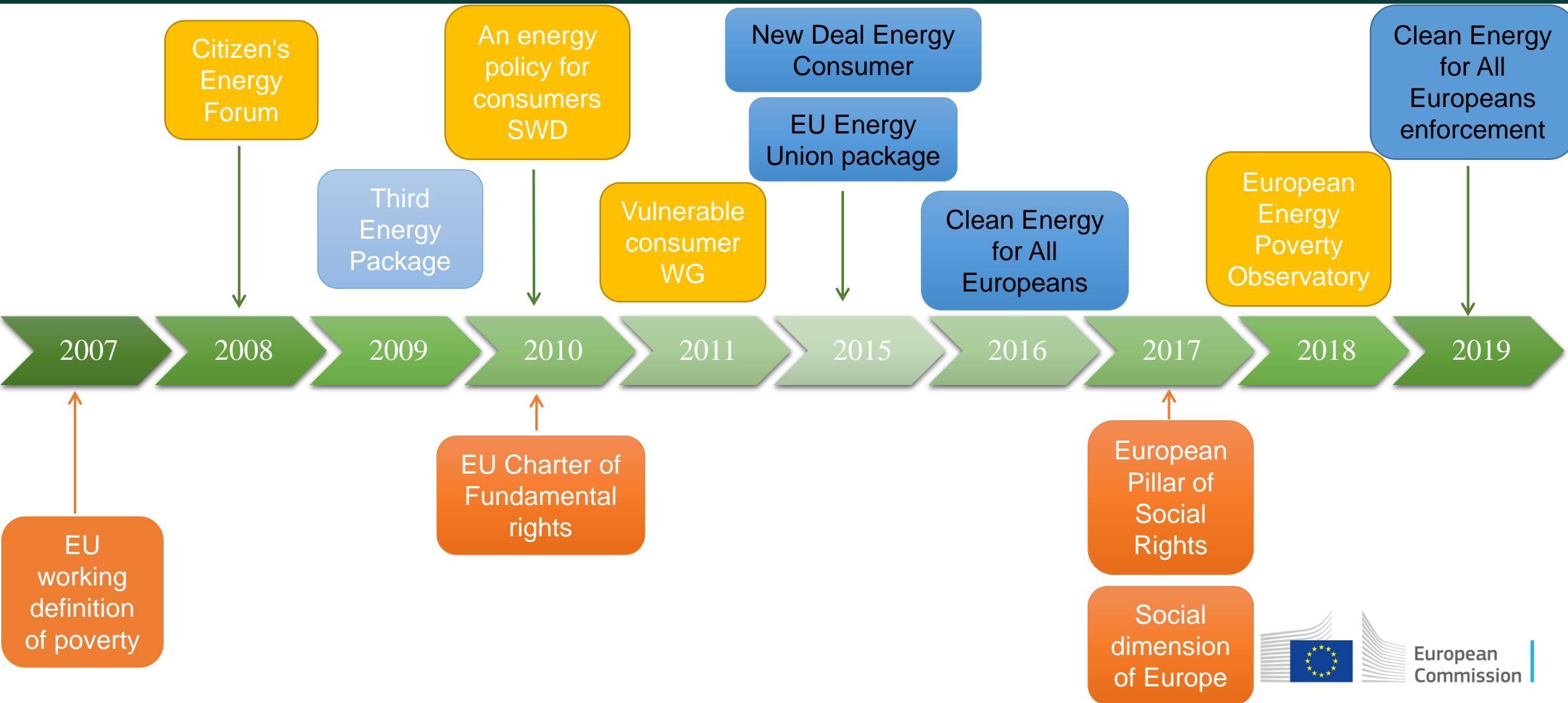
PowerWeb Conference

Delft, 4th June 2019

Outline

- The social dimensions of EU energy policies
- Socio-energy systems: a framework for an inclusive energy transition
- Energy poverty and vulnerable consumers in EU R&I projects
- Concluding remarks

The social dimensions of EU energy policies



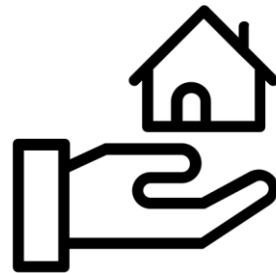
The social dimensions of EU energy policies

Energy consumers' rights



rights by Berkah Icon from the Noun Project

Energy poor and energy vulnerable protection



protection by Vectorstall from the Noun Project

Citizen energy communities



Green community by dDara from the Noun Project

The social dimensions of EU energy policies

*.... a vision of an Energy Union with **citizens** at its core, where **citizens** take **ownership of the energy transition**, **benefit from new technologies** to reduce their bills and **participate actively** in the market, and where **vulnerable consumers are protected**.*

*....Member States should ensure the **necessary supply for vulnerable and energy poor customers**. In doing so, an **integrated approach** could be used..*

*.....**community energy initiatives** demonstrate their potential to **facilitate the uptake of new technologies** and consumption patterns, including smart distribution grids and demand response, in an **integrated manner**.**Community energy** can also.....**help fight energy poverty** through reduced consumption and lower supply tariffs*

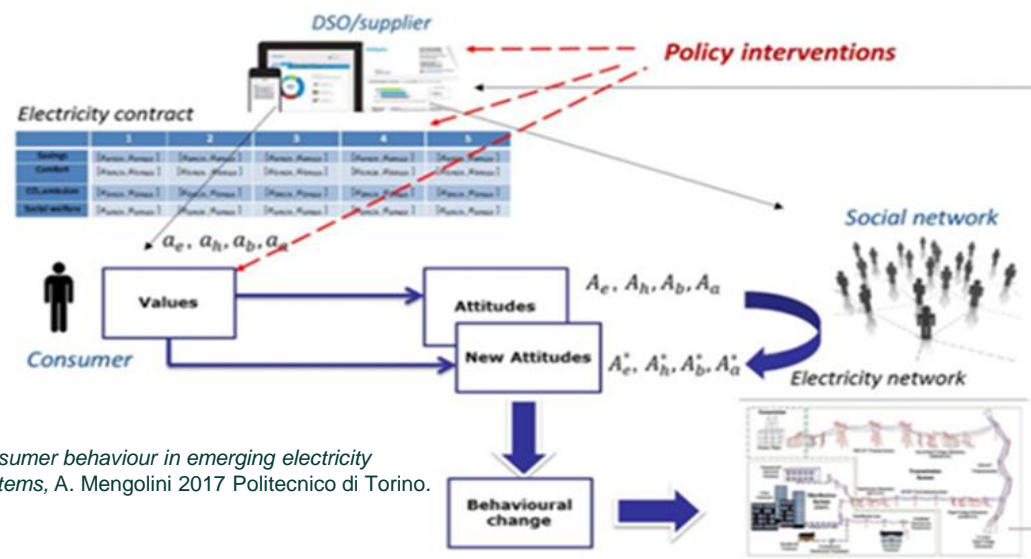
Socio-energy systems

A framework for an inclusive energy transition

Social processes: choices, behaviours

Social changes: values, relationships

Social outcomes : (un)equal distribution?



Infrastructure: hidden but structuring social arrangements?

Knowledge: who knows? Whose knowledge counts?

Energy justice: how to implement a just energy transition?

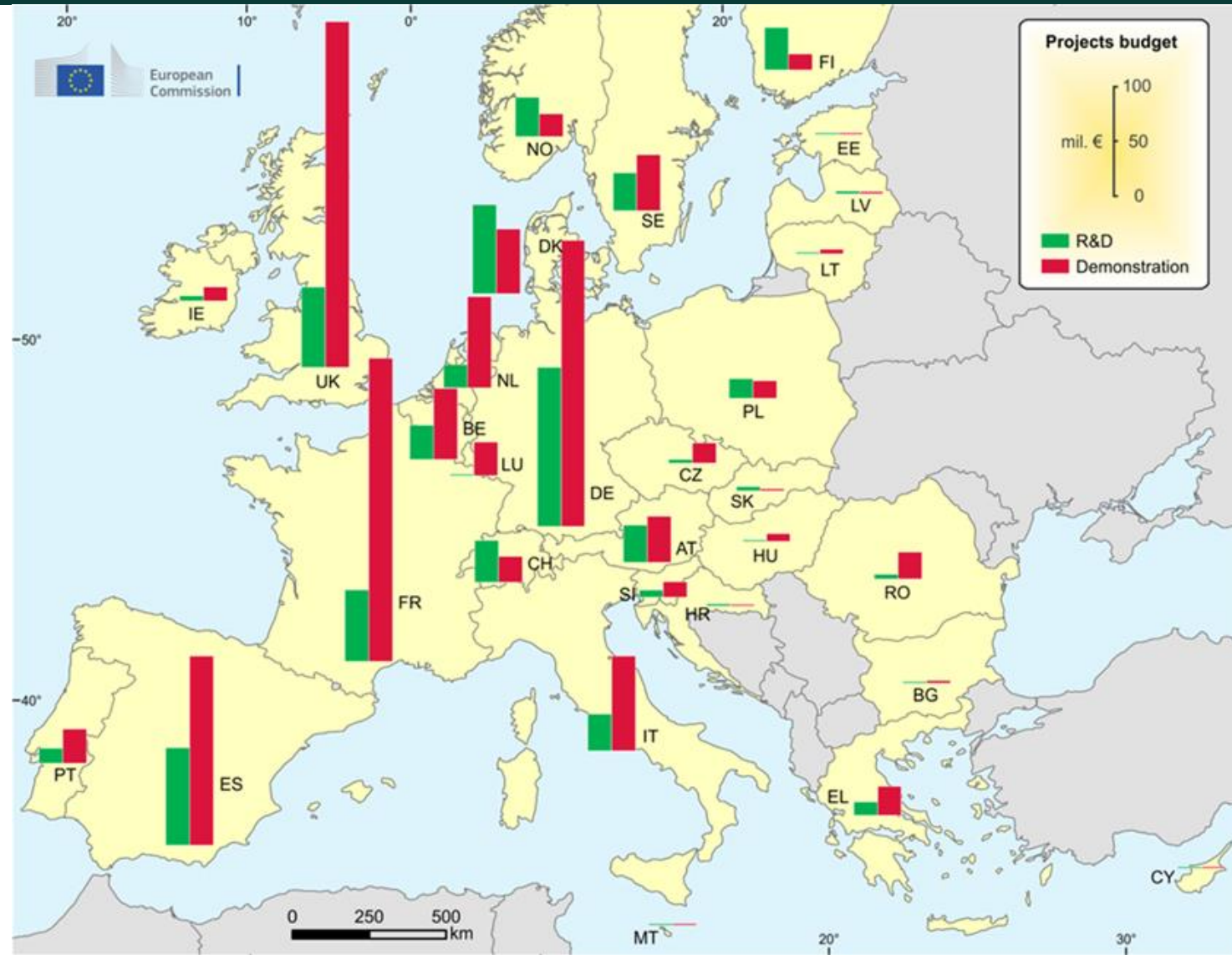
JRC mapping EU smart grid R&I projects

- **950** smart grid projects
- **~5 billion EUR** investment
- UK, Germany and France lead

Reports & datasets online:

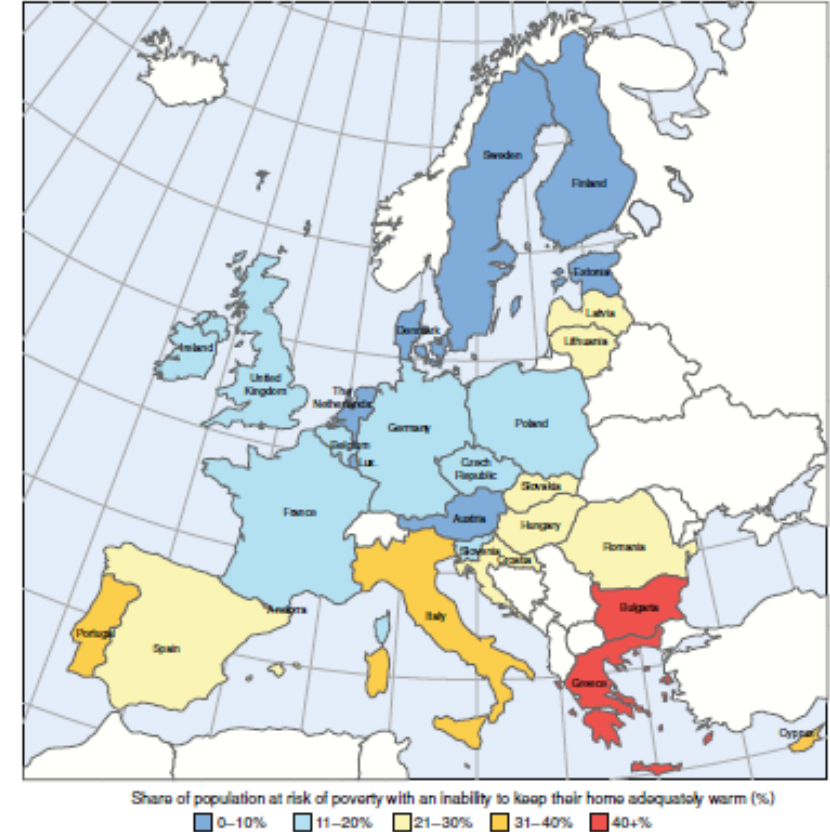
ses.jrc.ec.europa.eu/

smart-grids-observatory



Energy poverty and vulnerable consumers in R&I projects

- It is estimated that more than 50 million people in Europe were experiencing energy poverty in 2018
- **Energy poverty:** *"a situation where households are unable to adequately meet their energy needs at an affordable cost"*.
- The concept of **energy poverty** is intertwined with but distinct from that of **vulnerable consumers**.
- There is **no common definition** of energy poverty at EU level despite calls from the research communities to do so.



Source: Strengthening the EU response to energy poverty, Nature Energy, vol 4, January 2019

Energy poverty and vulnerable consumers in R&I projects

- JRC Science for Policy report – *Energy poverty through the lens of EU Research & Innovation projects*
- Analysis of EU R&I projects with focus on energy poverty and vulnerable households
- Projects categories: **digital technologies, behavioural change, financing, sharing of best practices**
- Target groups: consumers in **social housing**, consumers receiving **social welfare**, consumers facing **energy affordability issues**.



JRC SCIENCE FOR POLICY REPORT

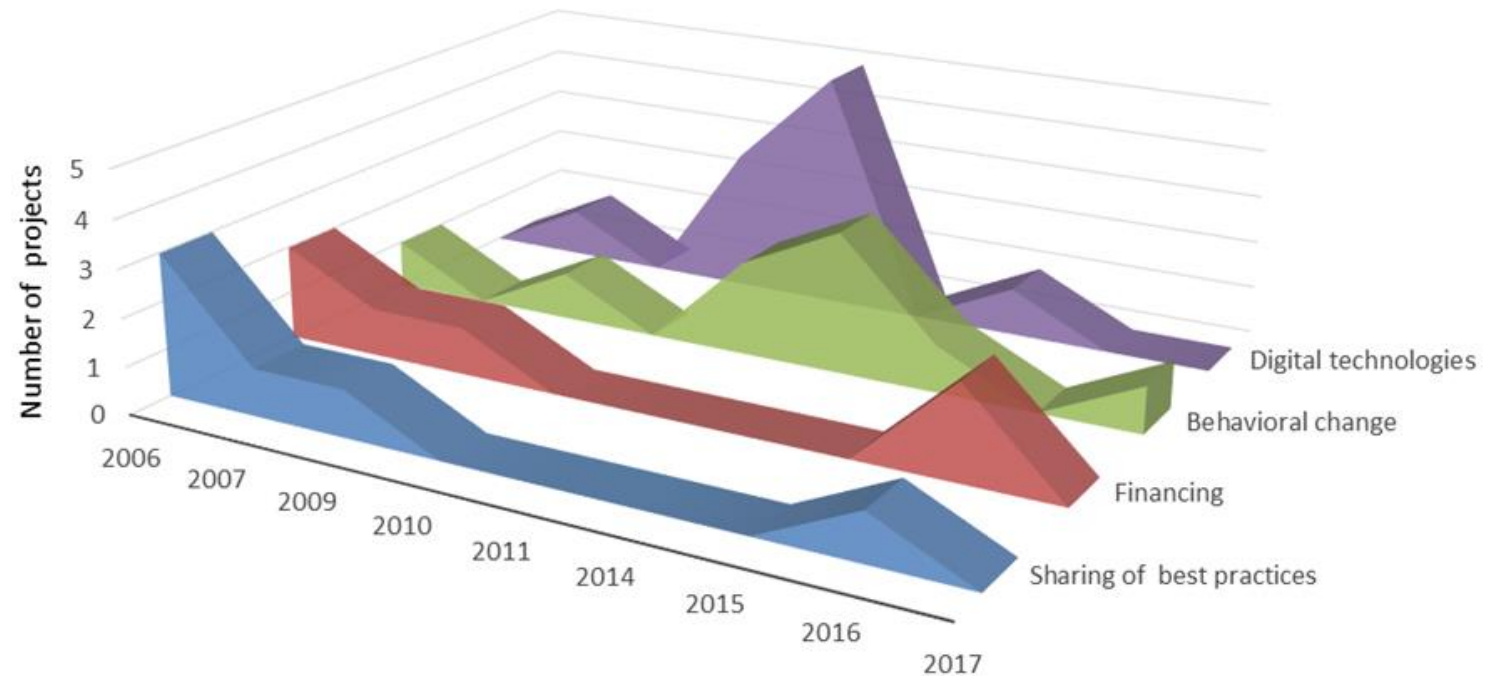
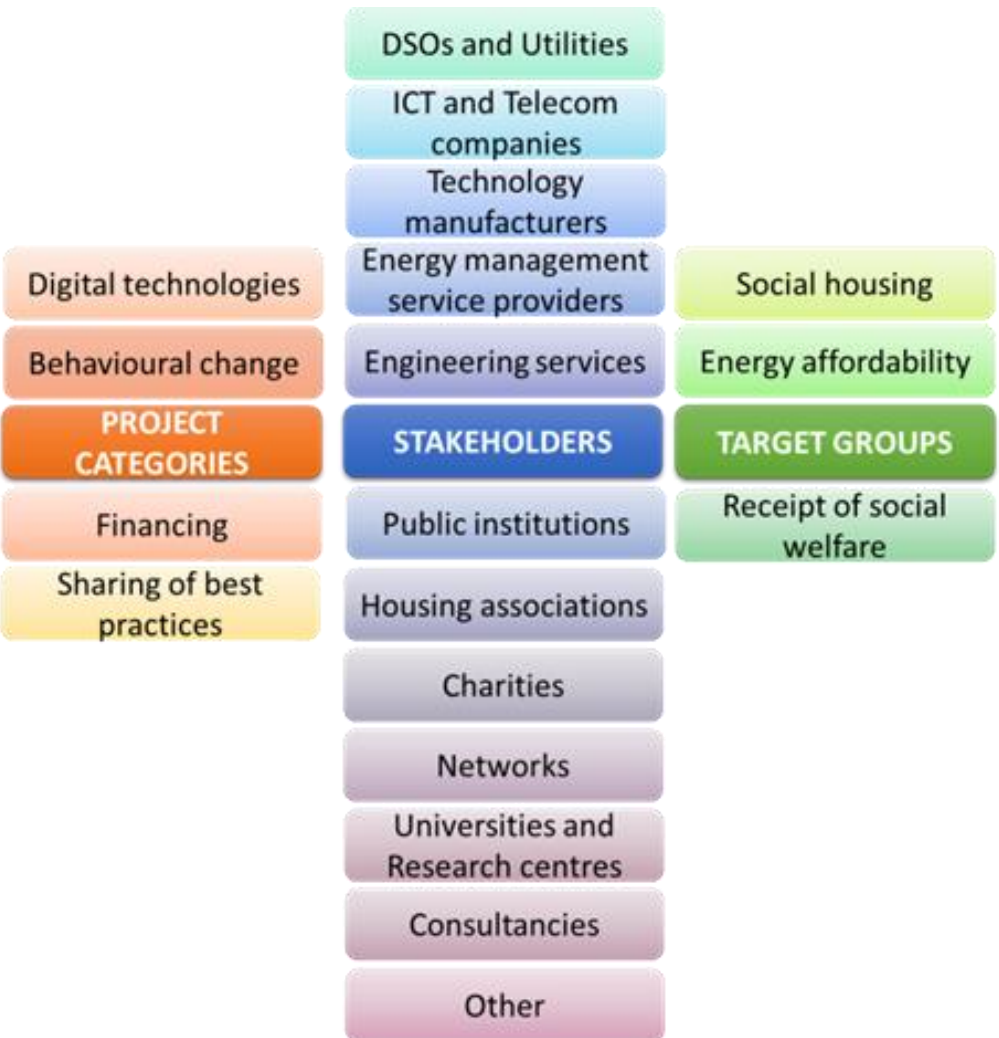
Energy poverty through the lens of EU Research & Innovation projects

Gangale, F., Mengolini, A.

2019



Energy poverty and vulnerable consumers in R&I projects



Source: Energy poverty through the lens of EU Research & Innovation projects, JRC Science for Policy Report, EUR 29785, 2019

Energy poverty and vulnerable consumers in R&I projects

- Many projects pursue multiple objectives
- More focus on needs of vulnerable consumers and wider societal aspects of energy poverty
- Quantitative results difficult to compare
- New indicators to measure the success of R&I initiatives



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of EU Research & Innovation
projects

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Concluding remarks

- EU energy policies promote an inclusive energy transition
- Integrated approach: socio-energy system approach?
- Project success indicators: what should be measured?
- Social consequences of energy projects: how to measure them?



Thanks

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