

Societal challenges: the role of social sciences



Geertje Schuitema

Societal challenges

Changes in curtailment behaviour

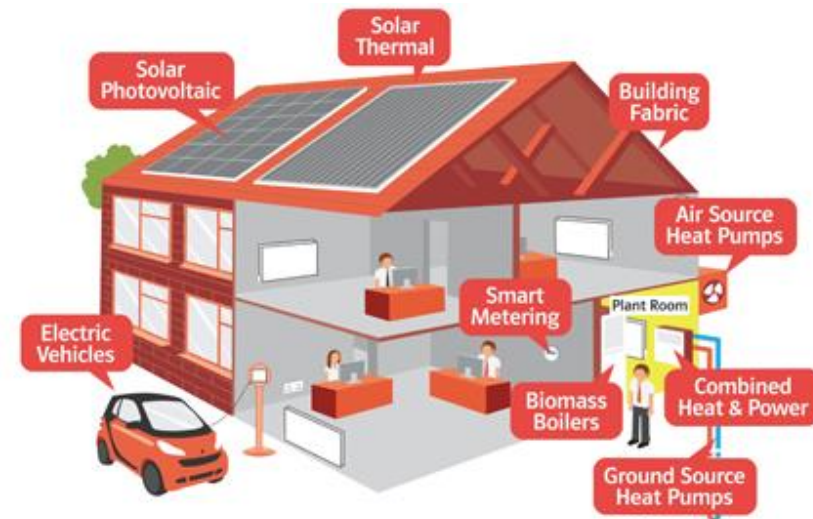
- Peak-load shift
- Use of technologies, e.g.,
 - Heating systems
 - Cooling systems
 - Domestic appliances
 - Electric vehicles
 - Pool pumps
- Energy conservation



Societal challenges

Changes in efficiency behaviour

- Customer Energy Manager
 - Automated control; smart grid appliances
- Increase energy efficiency, e.g.,
 - domestic appliances
 - heating/ cooling
- Energy generation, e.g.,
 - Rooftop solar panels
 - Solar water heaters
- Energy storage, e.g.,
 - Electric vehicles
 - Home energy storage systems



Societal challenges

Public acceptance



Community acceptance the evaluation of energy projects by communities that are close to them.

Social acceptance the evaluation of policies and technologies in general.





Myths

- Setting the “right” price
- We need to “educate” people
- Resistance will disappear over time



Long term planning consideration

- Societal challenges are as important as system, technological, and market challenges.
- Communication about social challenges with social sciences need to be improved.
- Involve social scientists to work on societal challenges.



Interdisciplinary research is the synthesis of two or more disciplines, leading to the establishment of a new level of discourse and integration of knowledge (Klein, 1990; Schuitema & Sintov, 2017)



Thank you!

geertje.schuitema@ucd.ie