



The importance of including the behavioural factor in energy policy-making

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EU GREEN WEEK 2021 PARTNER EVENT

ZERO #EUGreenWeek
POLLUTION
for healthier people and planet

Joint Research Centre

- In-house science and knowledge service of the European Commission.
- JRC mission is to support EU policies with independent evidence throughout the whole policy cycle.
- Headquarters in Brussels and research facilities in 5 Member States
- 2800 staff – 70% researchers



Energy Efficiency and Renewables Unit

We co-create EU policy initiatives and legislation on energy efficiency and renewables and facilitate their implementation

The EU ambition



European Commission

What is the European Green Deal?

December 2019
#EUGreenDeal

The European Green Deal is about **improving the well-being of people**. Making Europe climate-neutral and protecting our natural habitat will be good for people, planet and economy. No one will be left behind.

The EU will:



Become climate-neutral by 2050



Protect human life, animals and plants, by cutting pollution



Help companies become world leaders in clean products and technologies



Help ensure a just and inclusive transition



European Commission

Renovation Wave

The European Green Deal

October 2020
#EUGreenDeal

Buildings represent a significant, largely untapped potential for energy savings

The context

- The European Union has identified EE as a priority in the decarbonisation scenarios advanced in the Energy Roadmap 2050 and in the European Green Deal.
- The policy goal of EE is not without challenges -> *energy efficiency gap* (Hirst & Brown, 1990; Jaffe & Stavins, 1994)
- It is difficult to explain the low take up of EE as purely a rational response to investment under uncertainty (Stern, 2007).

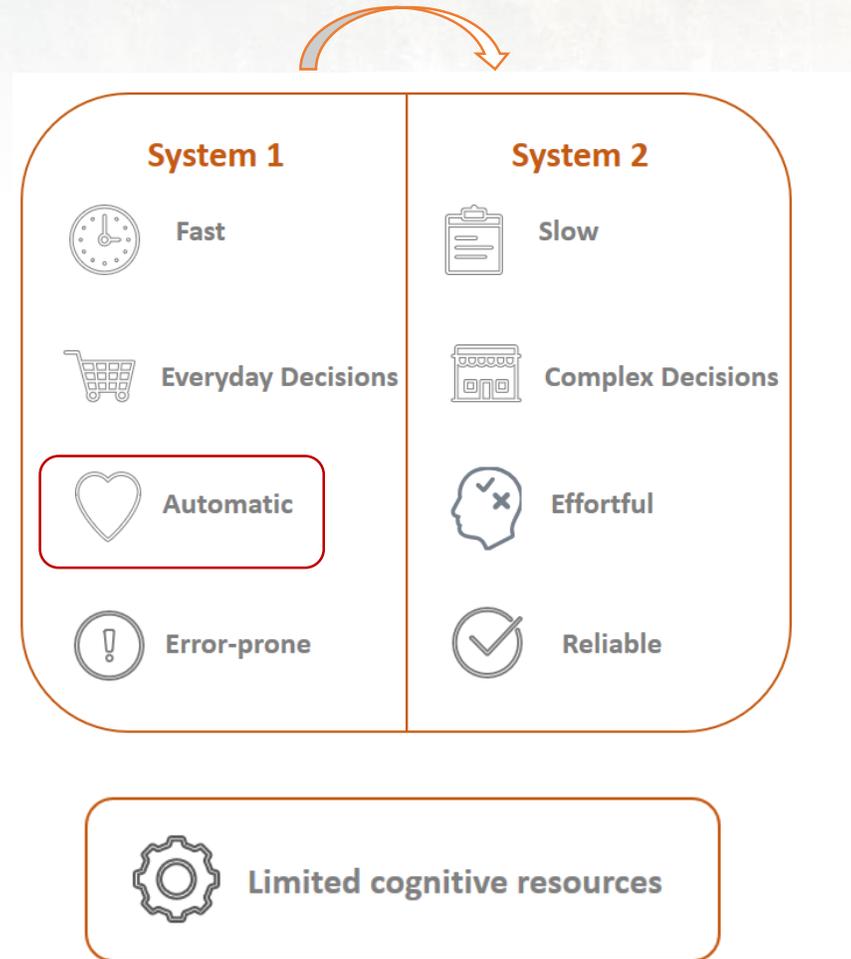
The state of the art

- Scientists have extensively investigated the decision-making process related to EE investments adopting different disciplinary perspectives (Lopes, Antunes, & Martins, 2012; Wilson & Dowlatabadi, 2007)
- However, the perspectives retained in EE policy making mostly focused on costs, drivers and barriers and considered human behaviour as a trivial factor (Lutzenhiser, 1993, 2014).
- With the exception of economics, social sciences (SS) have only recently started contributing to inform the energy policy table (Foulds and Robinson, 2018).
- In particular, with the advent of behavioural economics, insights from behavioural sciences have enabled to integrate the human factor in the EE policy table (van Bavel et al, 2013).

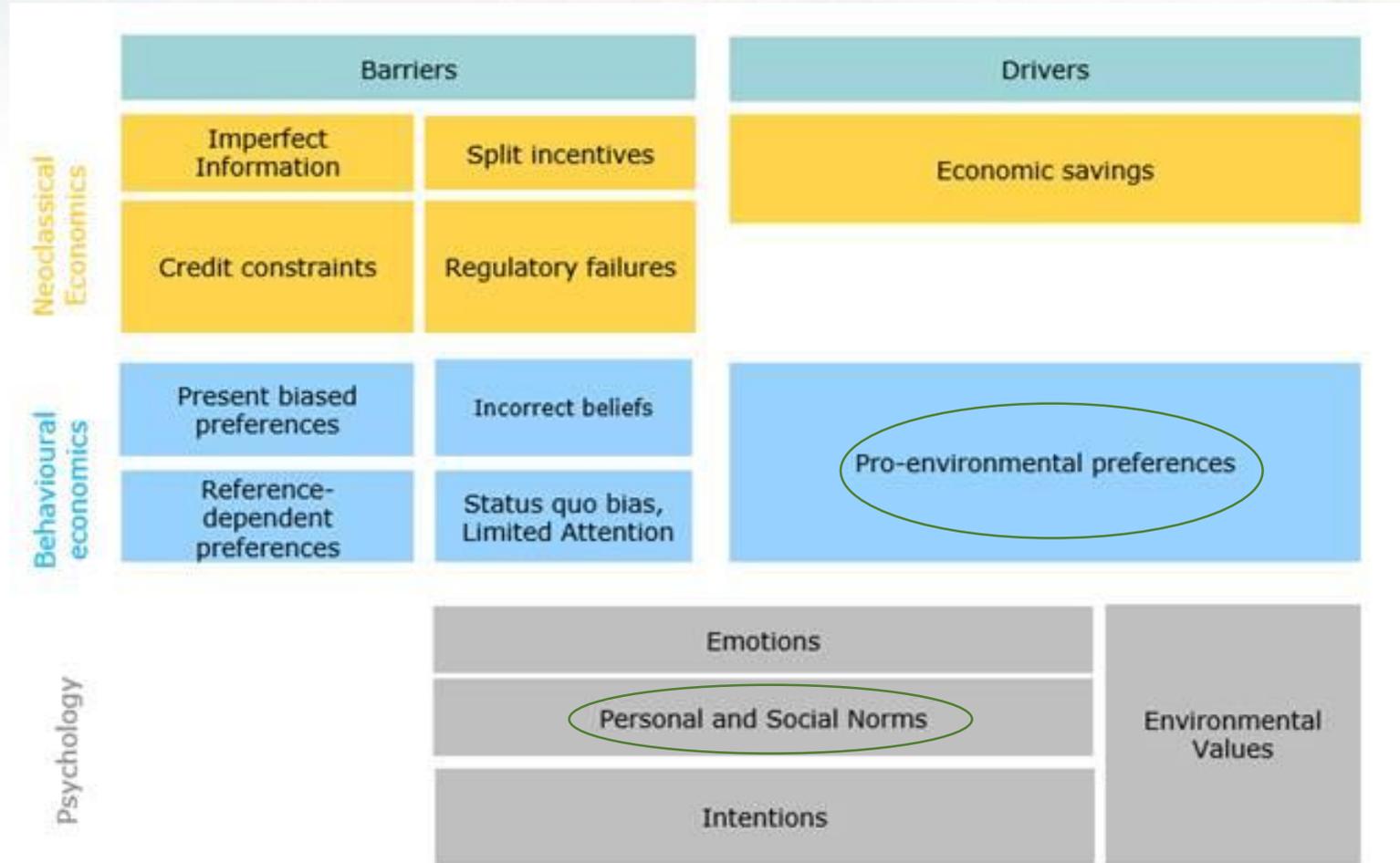
Traditional model informing policy makers: *homo oeconomicus*

- Choices vary with changes in circumstances such as changes in:
 - **income**
 - **prices** of goods
 - **information available**
- Therefore, to **change behaviour** governments use:
 - taxes and subsidies
 - regulation
 - information provision

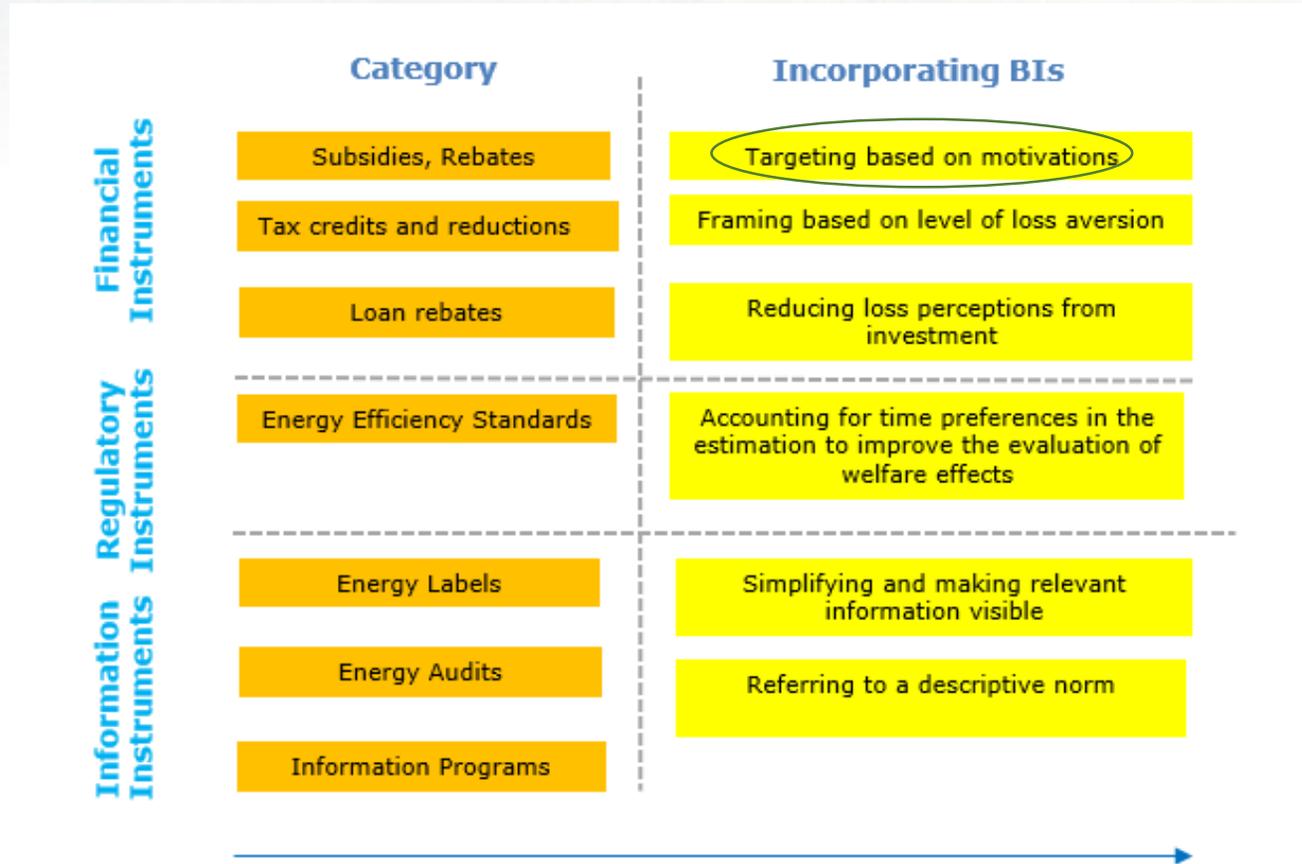
What can we learn from the empirical evidence?



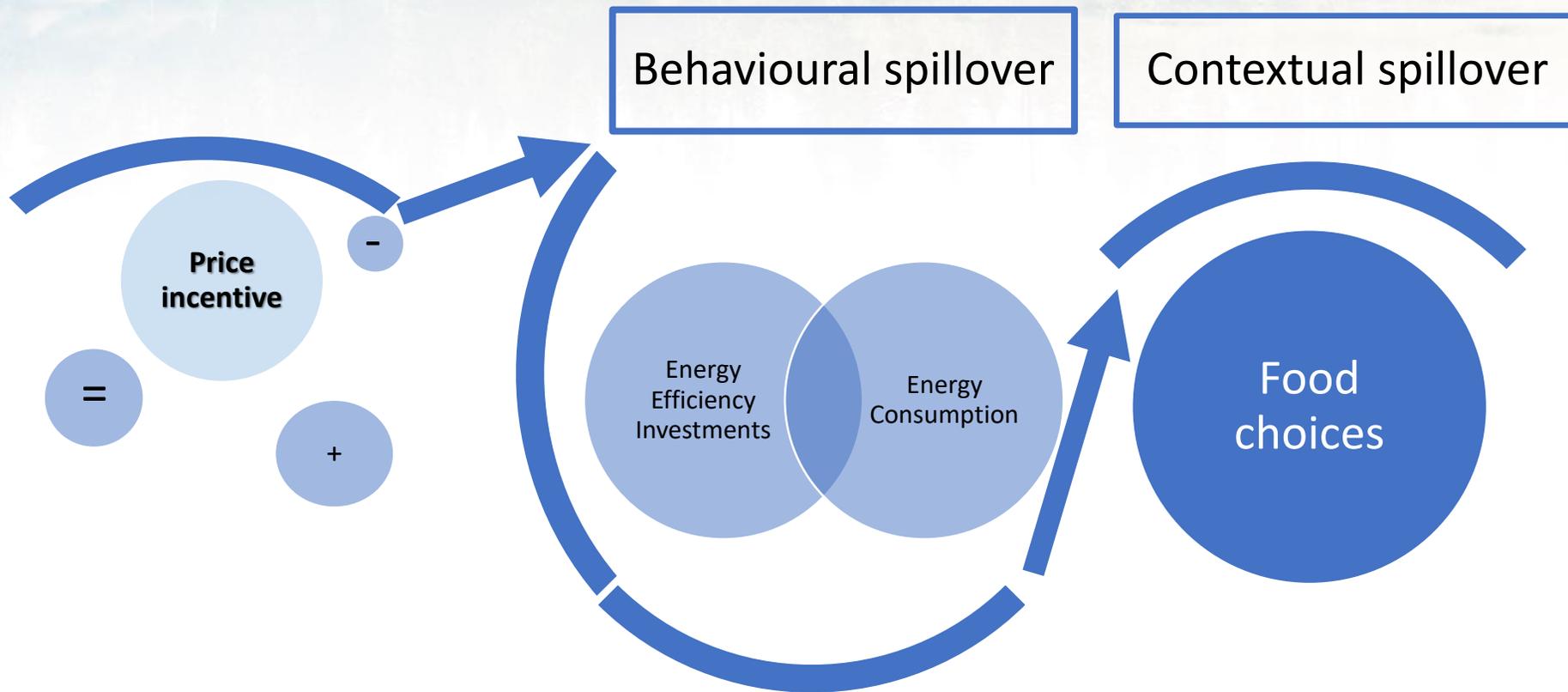
Barriers and drivers: beyond economics



Removing barriers and promoting drivers (1/2)



Spillovers



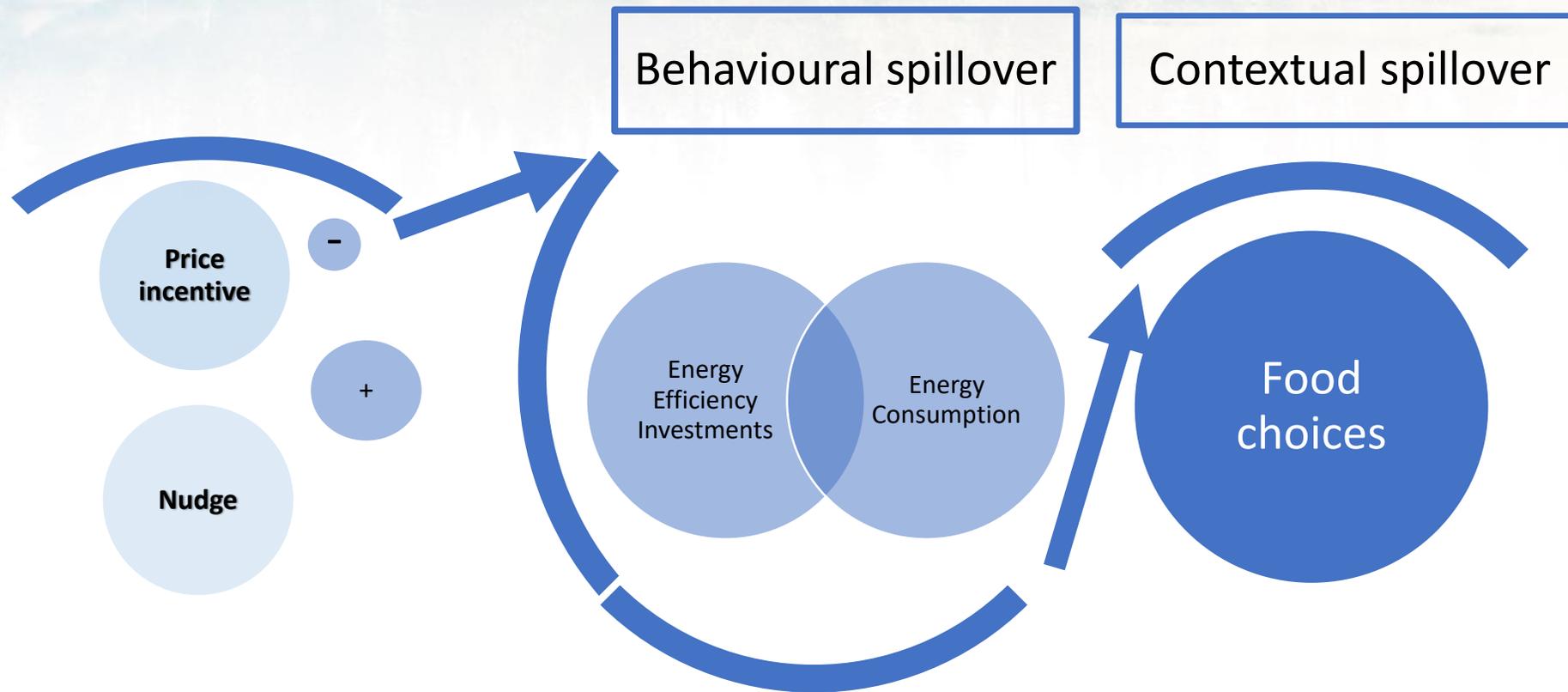
Removing barriers and promoting drivers (2/2)

Nudges



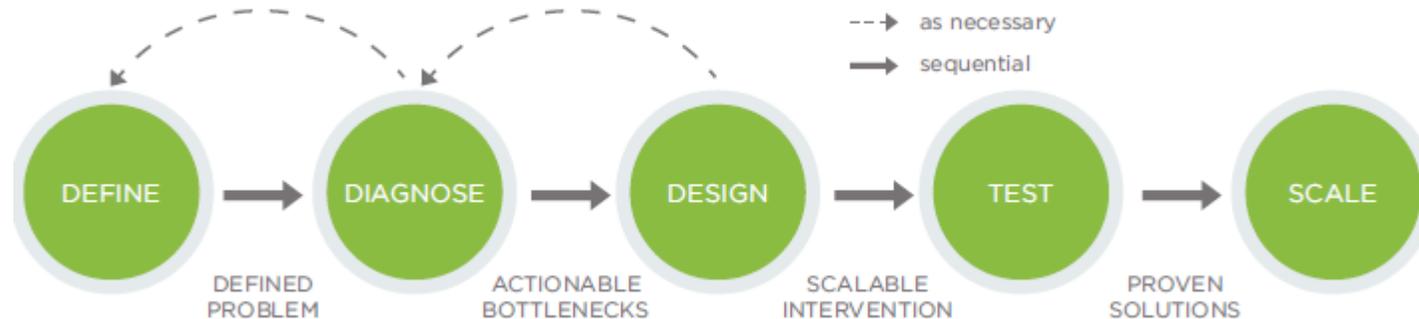
	Category	Example
Decision Structure	Changing Defaults	Setting by default the furnishing of new buildings with energy-saving light bulbs
	Changing option-related effort	Decreasing financial effort by enabling to pay EE measures with generated savings
	Changing option consequences	Providing options to self-present when products increase social status
Decision Assistance	Providing reminders	Reminding with information about the visit date and time of the energy audit
	Promoting commitment	Embedding mild commitment to reach saving targets in dedicated accounts
Boosts	Promoting core competences	Training on energy-financial literacy
	Reducing cognitive costs	Presenting information in graphical way, rather than in numerical way

Synergic effects

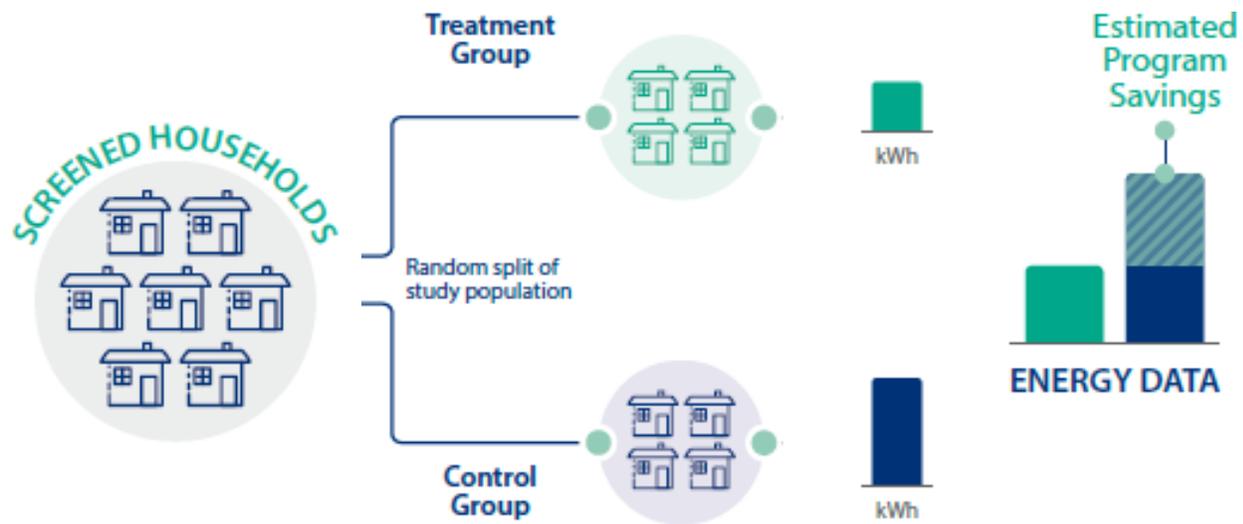


Challenges (1/2)

'Social science research evidence is central to development and evaluation of policy...We need to be able to rely on social sciences and social scientists to tell us what works and why and what types of policy initiatives are likely to be most effective' (Young et al, 2002)



Source: Ideas 42



Source: Sustainable Energy Authority of Ireland

**Is this feasible?
Are there other
suitable
approaches?**

Challenges (2/2)

- The perspective taken is that of *agency*, with the individual as the unit of analysis (Sovacool et al., 2018).
 - The *energy efficiency gap* is understood as a failure for individuals to make optimal choices (Schubert & Stadelmann, 2015).
 - The policy goal is to detect and remove(leverage) decisional barriers(drivers).
 - However, EE policy will unlikely work unless it accounts for the social aspects of energy (Jenkins, McCauley, & Forman, 2017)
- > The next challenge would be to integrate in the energy policy table also the sociological perspective to account for the collective and social aspects of EE decisions.**

Thank you!

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