



**NATCONSUMERS**

# Intelligent energy feedback: Tailoring advice based on consumer values

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 657672

# Natconsumers

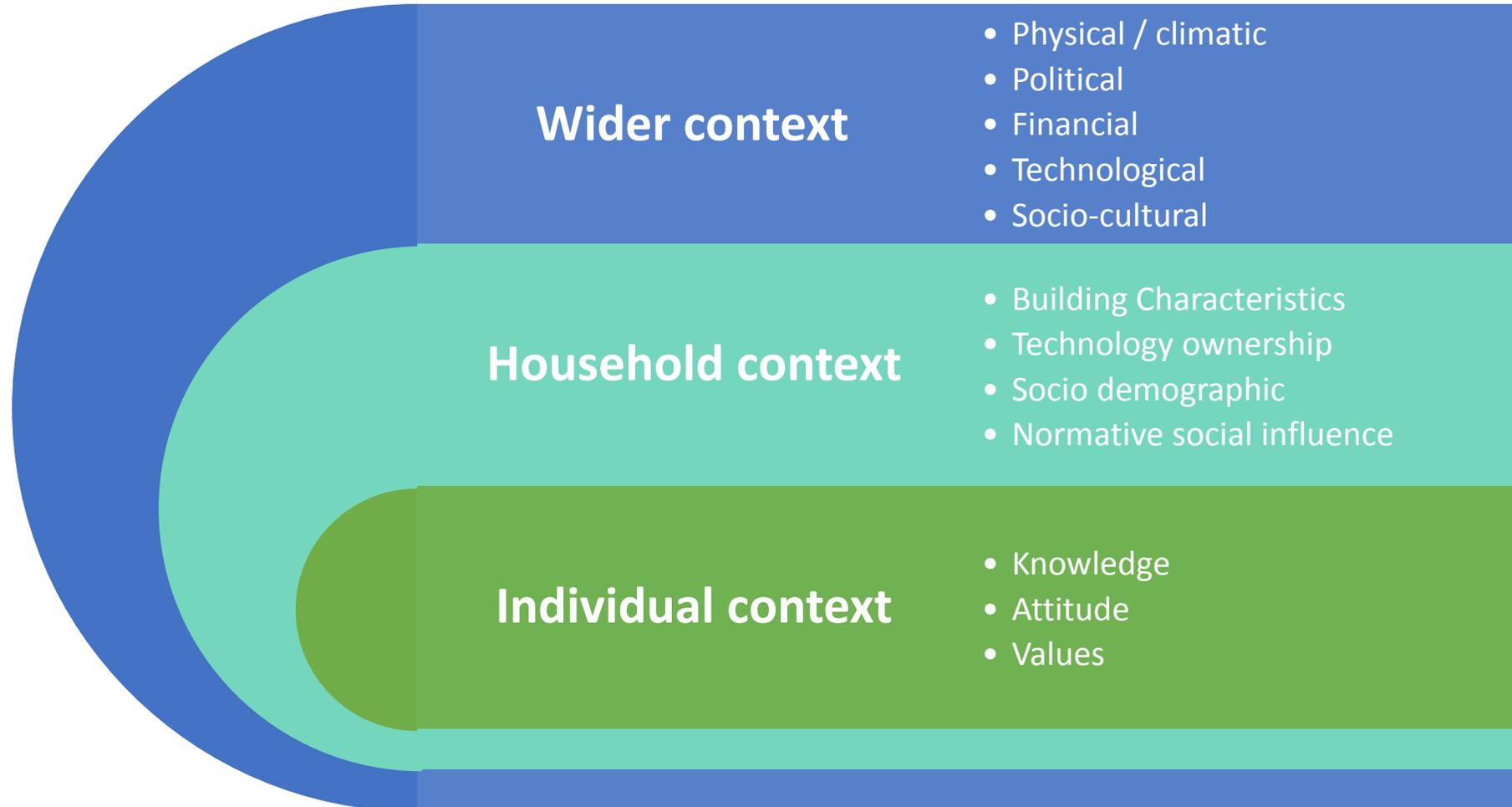
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- An EU H2020 project developing a mechanism for *tailored, 'natural language' energy feedback for households*, applicable across the EU, focusing on electricity
- Creating advice which is *relevant, interesting* and *useful* to each individual consumer
- Communicating in a *'natural'* way – clear, emotionally intelligent, friendly, and evolving and developing over time



# Understanding behaviours

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# Two aspects of tailoring

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What to say

Wider  
context

Individual  
Context

How to say it

Values

Attitudes

# Attitudinal segmentation

- Conducted a *survey of 4,000 people* across four countries, investigating people's attitudes in relation to energy use and their underlying values
- Identified *7 attitudinal segments*



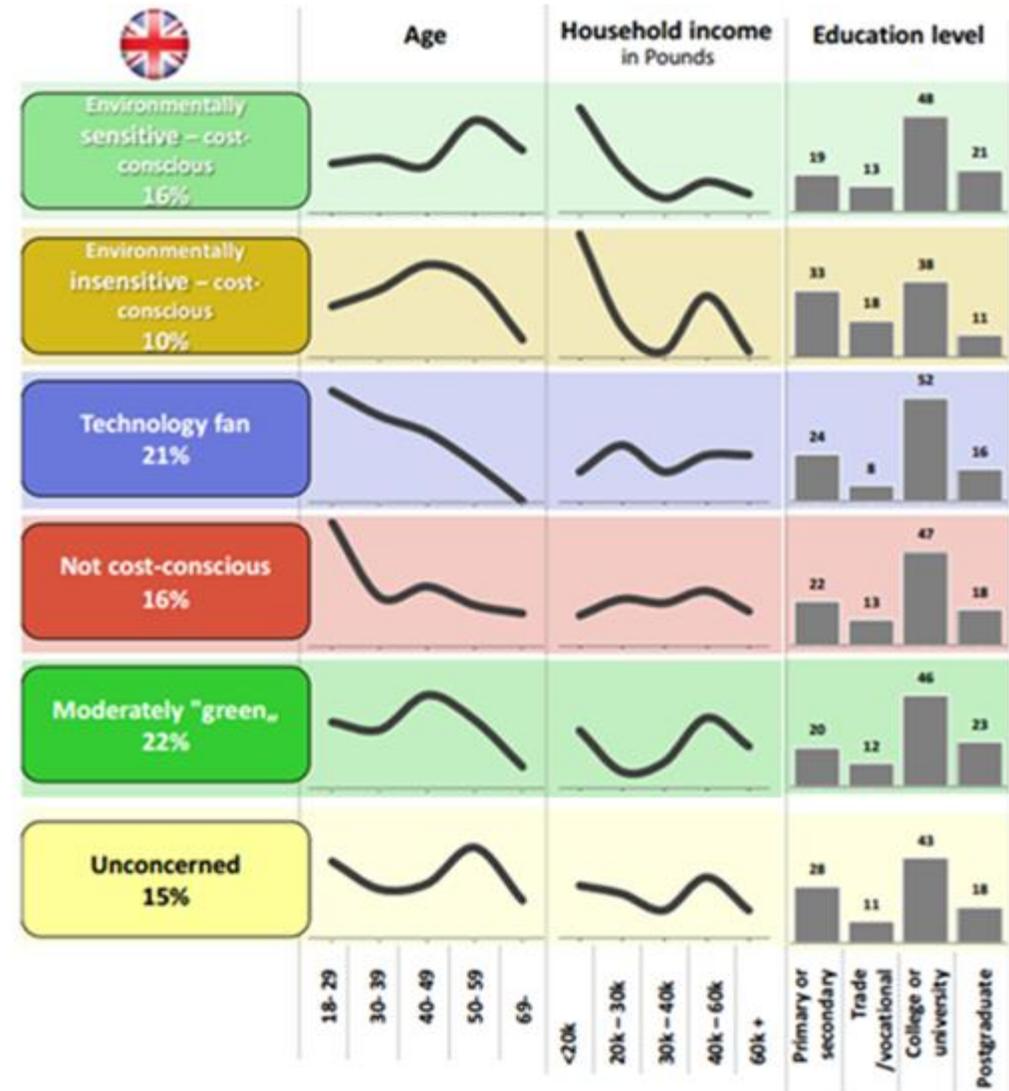
+ affirmative attitude  
 - dissenting attitude  
 ○ indifferent attitude

	Technological innovation	Environment preservation	Utilitarian approach, economic rationality	size
1. Environmentally sensitive - cost-conscious	- - -	+ + +	+ +	15 - 29%
2. Environmentally insensitive - cost-conscious	- -	- - -	+ +	9 - 20%
3. Technology fan	+ + +	○	○	15 - 30%
4. Not cost-conscious	+	○	- - -	13 - 16%
5. Moderately "green"	-	+ +	-	13 - 22%
6. Environmentally insensitive - not cost-conscious	+	- - -	- -	0 - 9%
7. Unconcerned	- -	- -	- -	15 - 23%

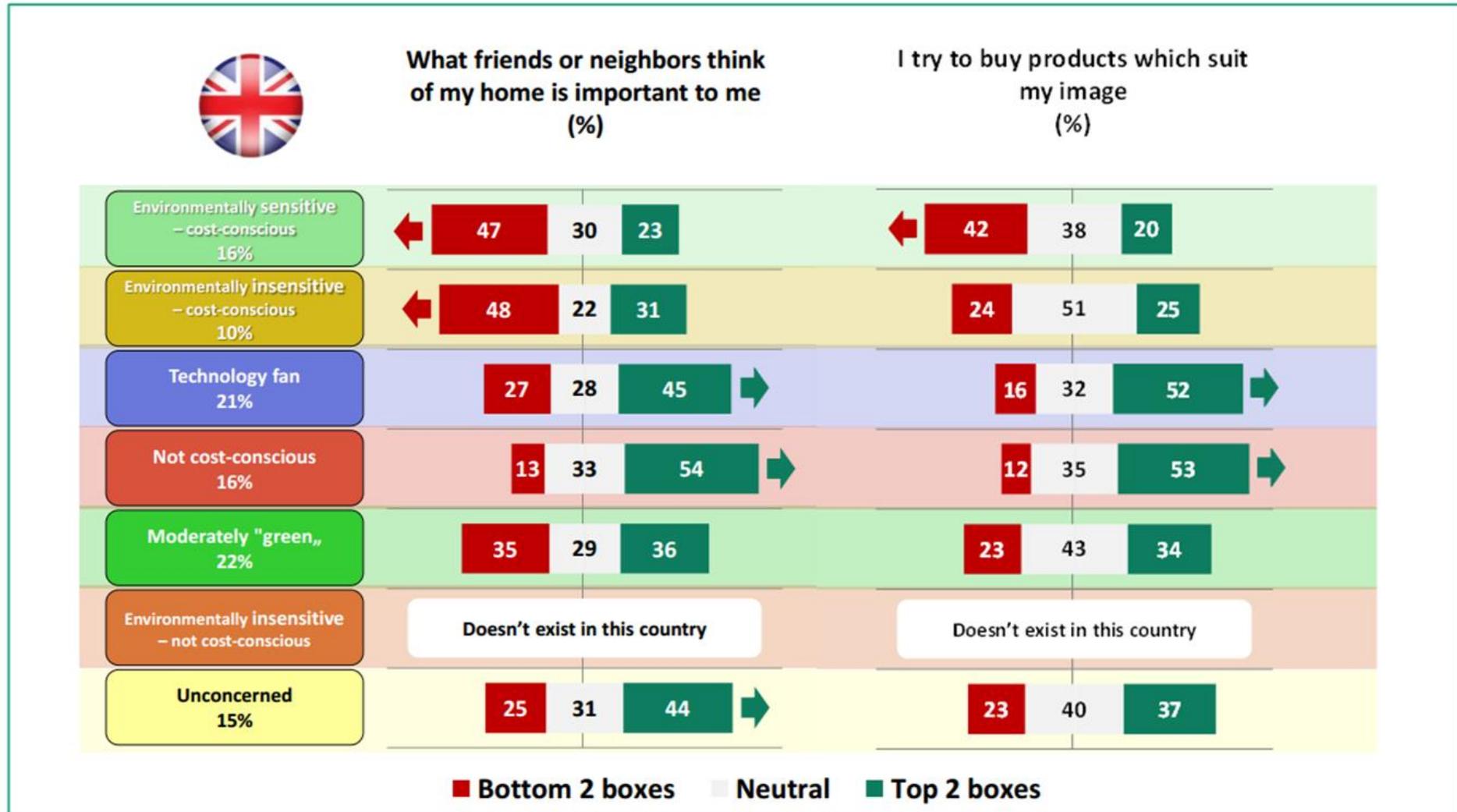
# Demographics

Some clear demographic trends:

- **Technology fans** and the **Not-cost conscious** tend to be younger
- **Cost-conscious** segments have lower incomes
- **Environmental** segments tend to have higher levels of education



# Secondary attitudes



# The segments

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## *Environmentally sensitive – cost-conscious*

- *Environmental preservation* is a key driver, with *financial savings* also a high priority
- Generally *older*, living in *1-2 person households* without any children living at home
- *Limited trust in new technologies*, tend to have fewer appliances than the average household
- Generally have *below average disposable income*, and so are very cost-conscious; *willing to sacrifice comfort and convenience* to save money.

## *Technology fans*

- Very *open to and interested in new technologies*; they always like to have the latest technologies and think it's fun to try new things
- Relatively *young*, predominantly *male*, with slightly *above average income*.
- Generally *indifferent attitude towards money*
- Interested in using new technologies to make their home *more comfortable*, make their *life more convenient*, or to *keep up with their peers*

# Message style

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<b>Factual</b>	The standby mode of your devices consumes electricity. You could save energy by switching them off at the wall.
<b>Confrontational</b>	Are you serious? You're leaving your devices in standby? It saps so much energy! Turn them off completely!
<b>Creative</b>	The surface is dark. Empty. Only a little red light survives. The eye of a dragon. A powerful energy monster snoring in silence.

- Preferred message style is not related to segment
- Appropriate style depends on relationship between user and sender:
  - Who is the sender?
  - Stage of communication?

# Next steps



# Thank you

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Web: [www.natconsumers.eu](http://www.natconsumers.eu)

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Project reference: 657672 (H2020)

Type of action: CSA

Topic: The human factor in the energy system (LCE-20-2014)

Duration: May 2015- April 2017 (24 months)