



NATCONSUMERS

Intelligent energy feedback: Tailoring advice based on consumer values

Caitlin Bent, Energy Saving Trust



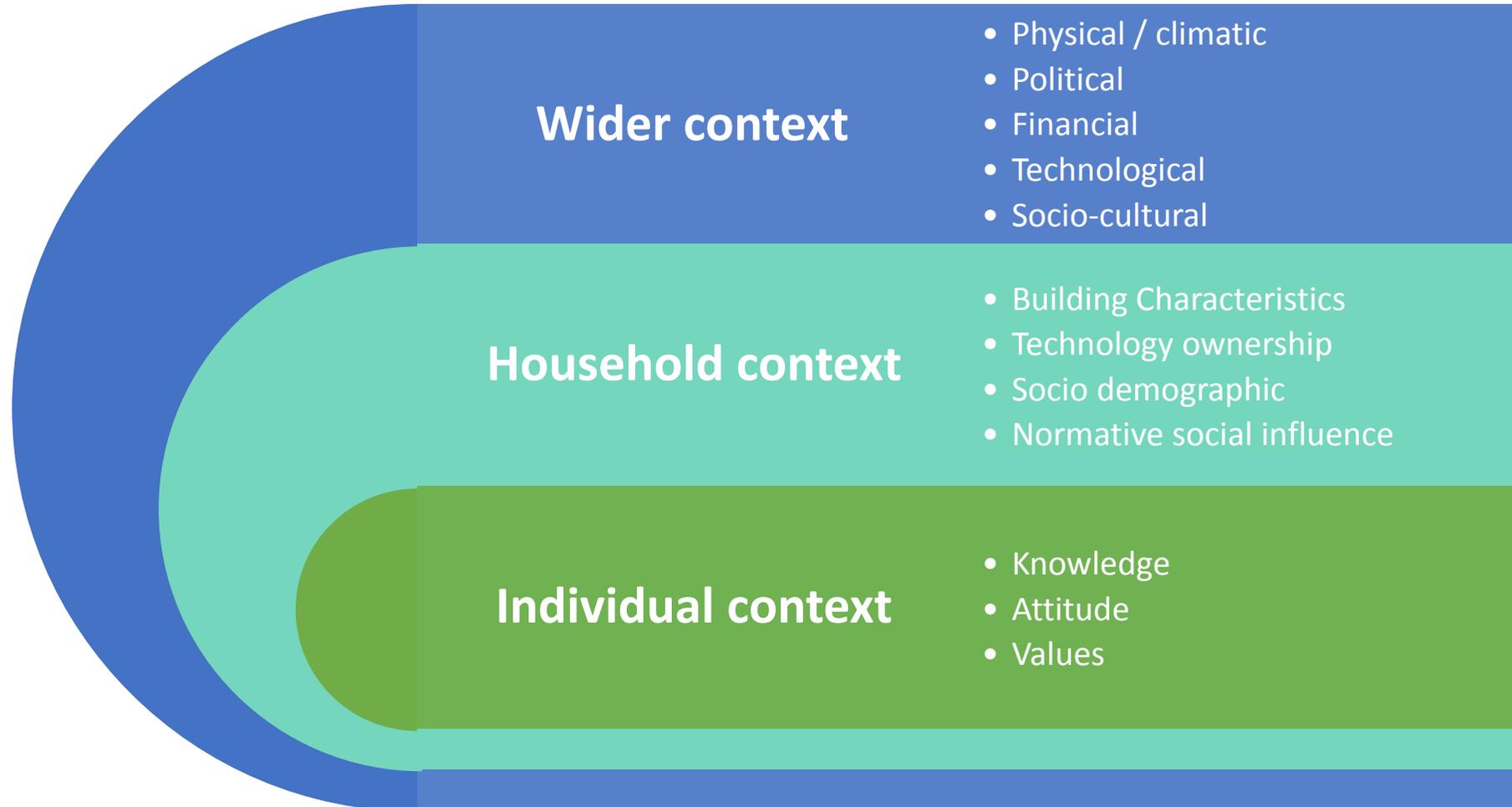
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Natconsumers

- 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



Two aspects of tailoring

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*



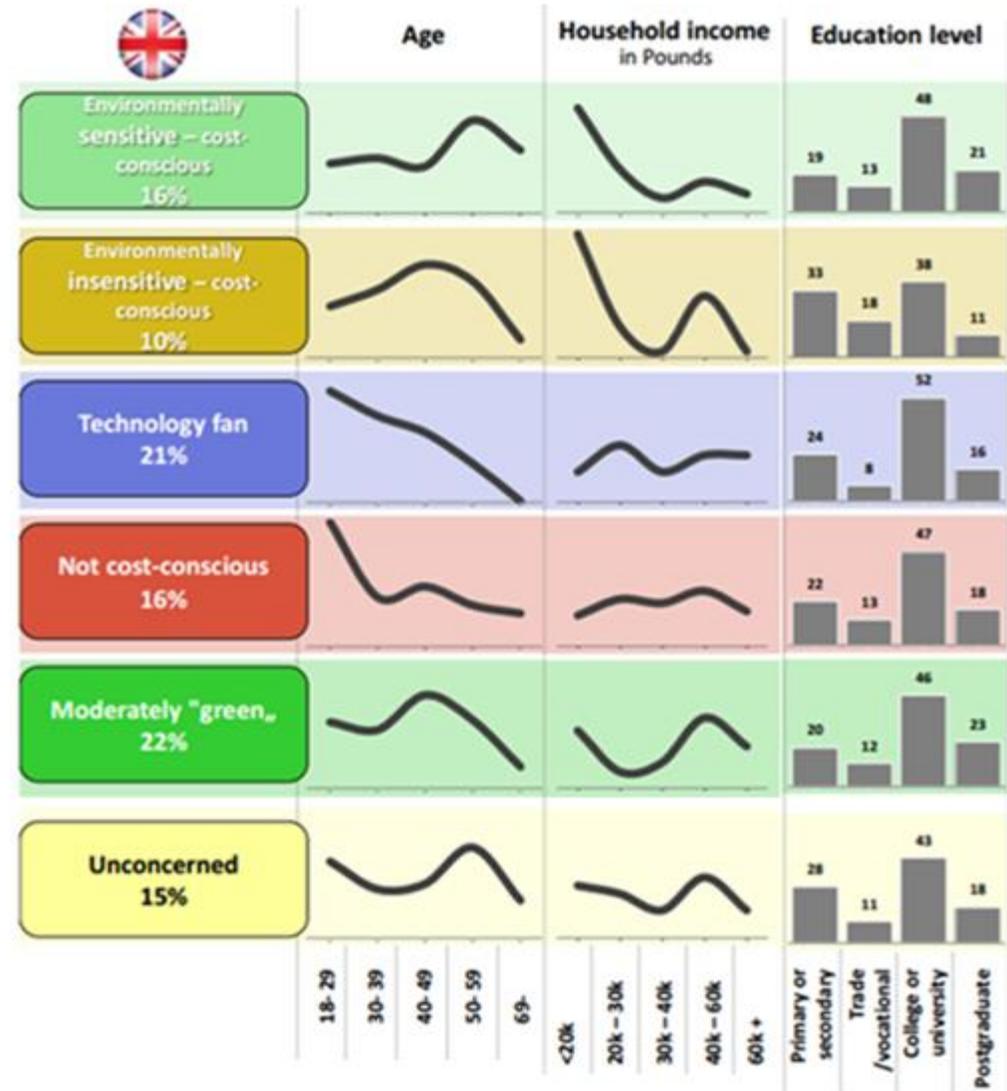
+ affirmative attitude
 - dissenting attitude
 ○ indifferent attitude

	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%

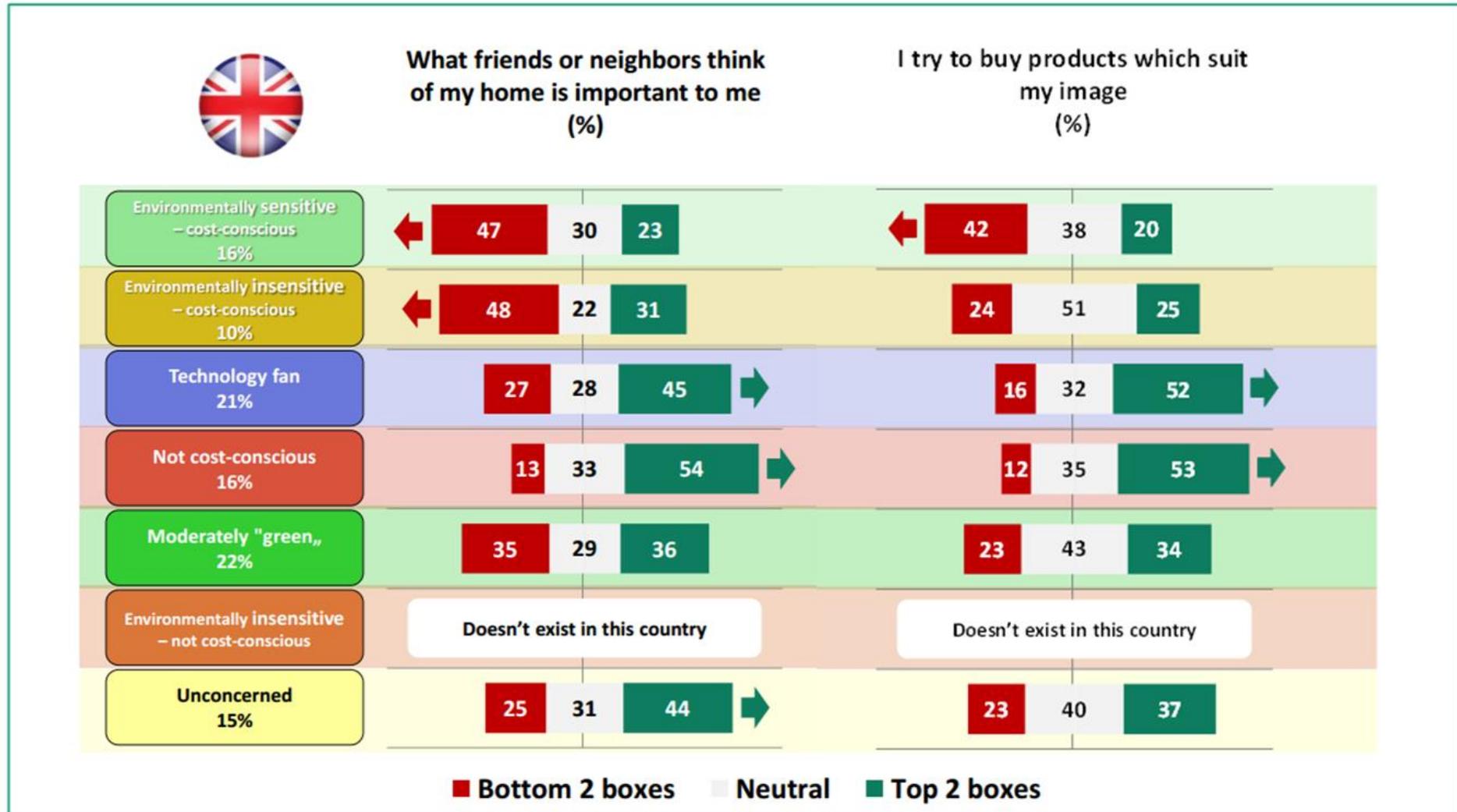
Demographics

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

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

Factual	The standby mode of your devices consumes electricity. You could save energy by switching them off at the wall.
Confrontational	Are you serious? You're leaving your devices in standby? It saps so much energy! Turn them off completely!
Creative	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

Web: www.natconsumers.eu

Join the LinkedIn Group: Natconsumers

Link up with us on Twitter: “@Natconsumers”

Email: caitlin.bent@est.org.uk

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