



Natconsumers – A mechanism for natural language feedback

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European
Commission

Interreg
European Regional
Development Fund
for Growth & Innovation

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 101019166.

Natconsumers

- An EU H2020 project developing a mechanism for *tailored, 'natural language' energy feedback for households*, applicable across the EU, focusing on electricity
- For advice to be effective, it must be *relevant, interesting* and *useful* to the consumer
- It should be communicated in a *'natural'* way – clear, emotionally intelligent, friendly, and in line with each individual's interests and motivations

Natconsumers

Stage 1: Factors influencing energy use

What determines people's current consumption patterns

What determines people's *likelihood* and *ability* to change

Stage 2: Developing the message

What *advice* to give people

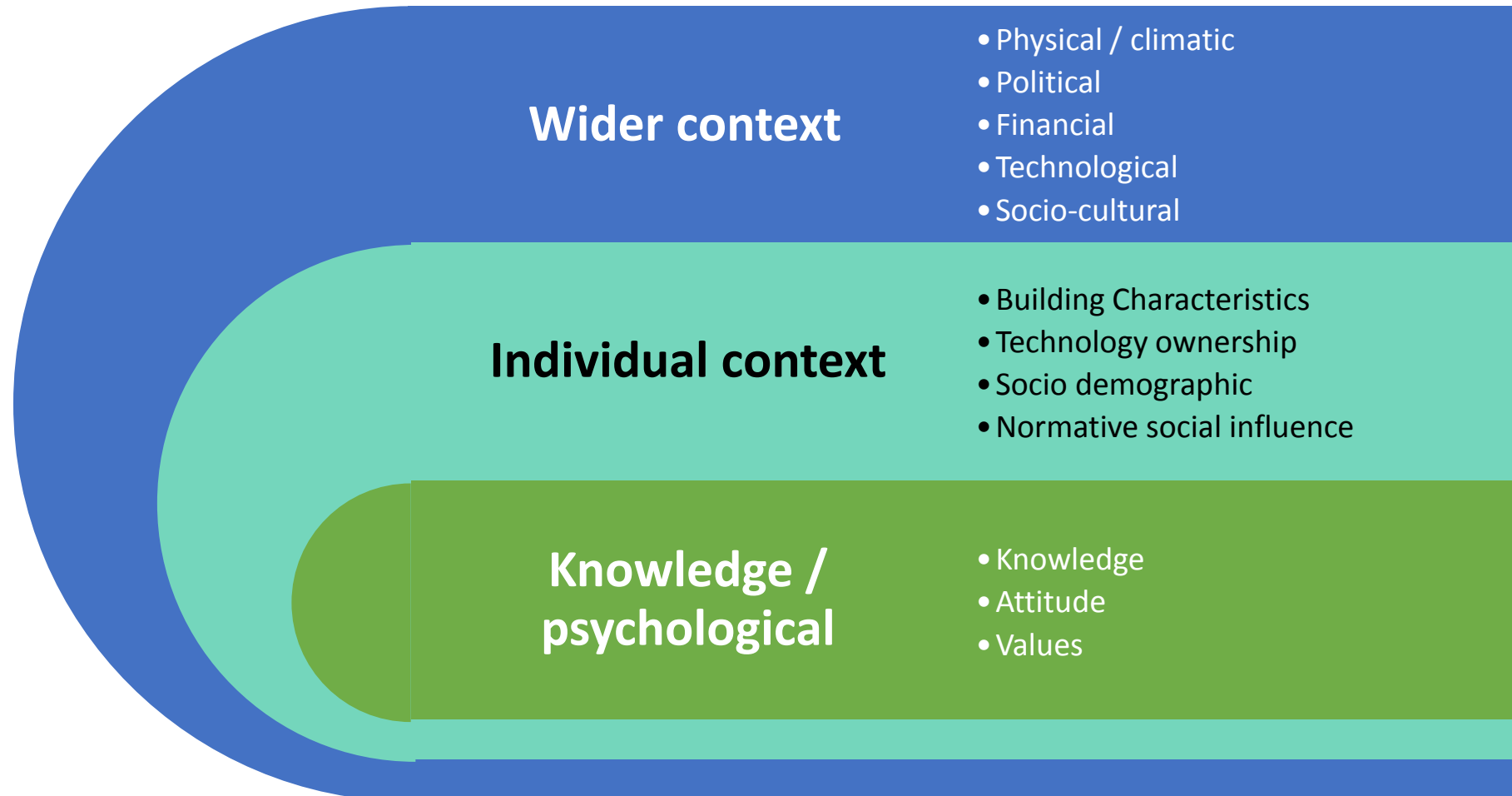
How to *frame* advice

Stage 3: How to deliver advice

What *style* is appropriate

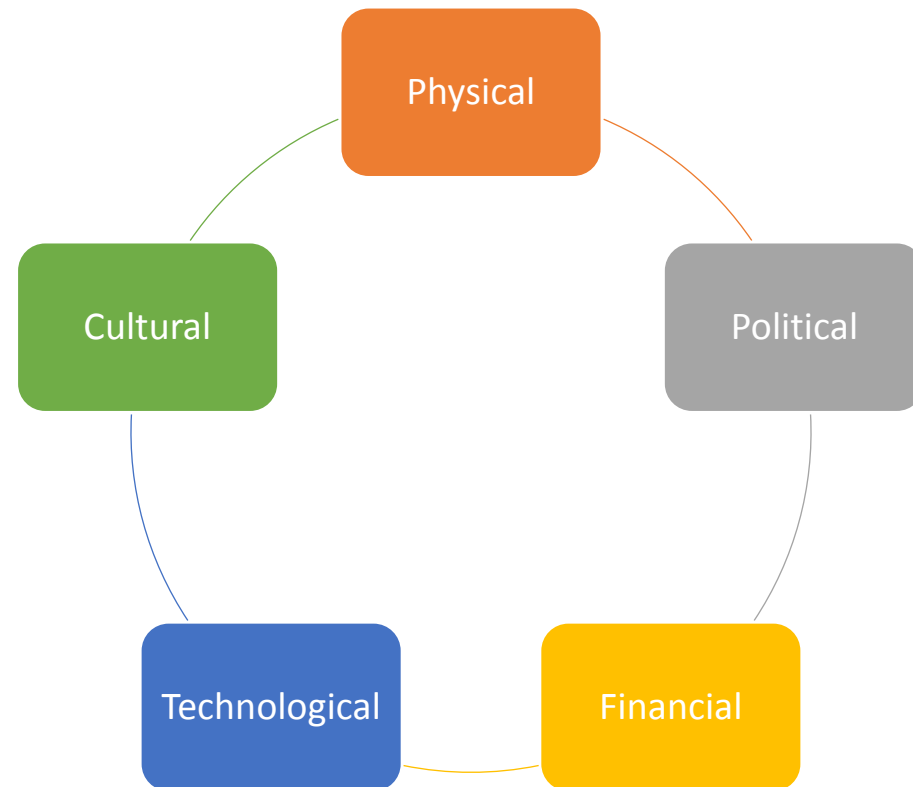
How should messages be *received and displayed*

Stage 1: factors influencing energy use

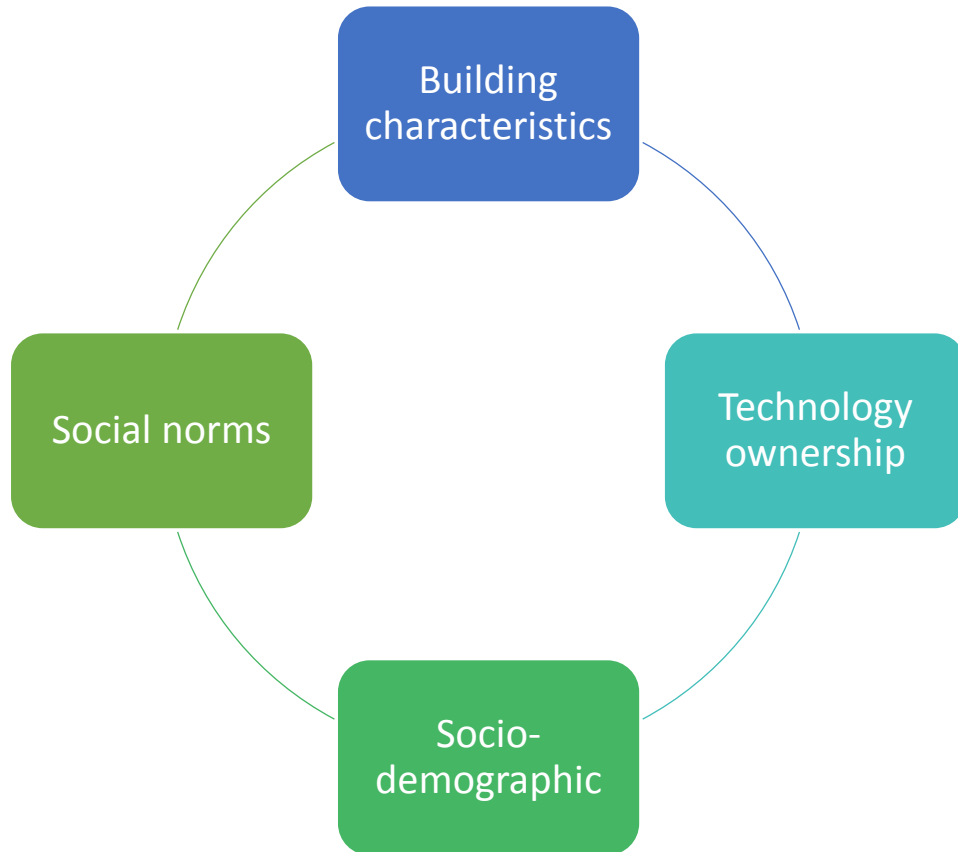


Wider context

Features at the '*landscape*' level form the context within which behavioural decisions are made



Individual context



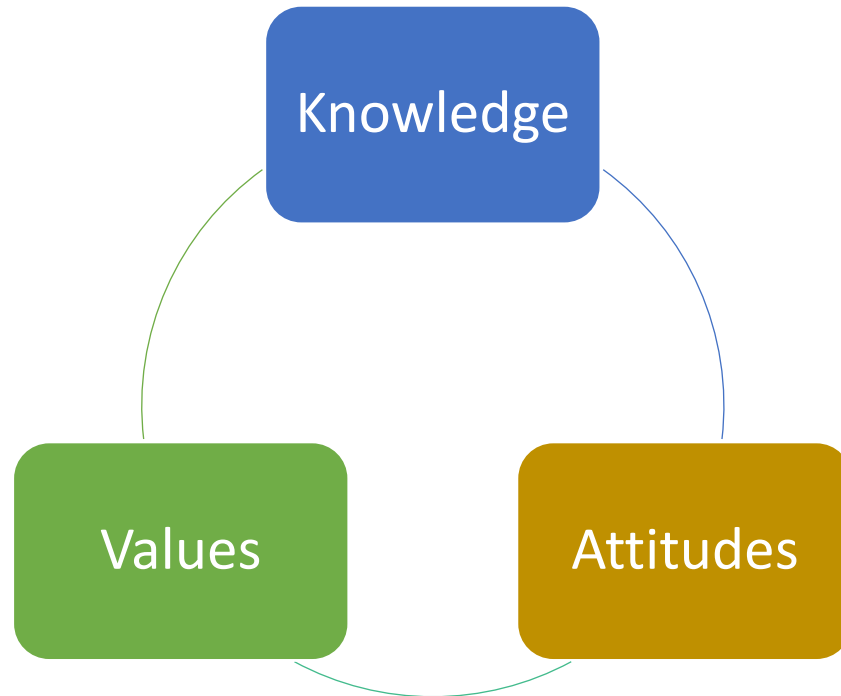
People's behaviours are influenced and constrained by the *physical and social* context within which they live

Individual context influences consumers' capabilities

These factors tend to correlate strongly with *current energy consumption*, but will also *restrict changes* in consumption

Psychological / Knowledge

These factors regard *consumers' attitudes*, *values* and *motivations* to reduce energy consumption as well as their knowledge and understanding of energy usage.



Psychological / Knowledge

Knowledge

- *Pre-requisite for action* – gives people information on how to act and the consequences of their behaviour
- But there is a *knowledge-action gap*
- Only *action-related knowledge* is important to changing behaviour

Attitudes

- Most studies find an *attitude-behaviour gap*
- Have *very little impact* on habitual behaviours

Values

- Stable sets of *beliefs or guiding principles* which underlie our world-view
- *More important influence* on behaviour than attitudes

Stage 2: Developing the message

What the message is

Wider context

Individual Context

How the message is communicated

Values

Actionable knowledge

Segmenting electricity users

Load profile segmentation

Looking at *patterns of electricity consumption* across 3 timescales: daily, weekly, monthly
Identifying *common characteristics* in consumption between countries

Demographic segmentation

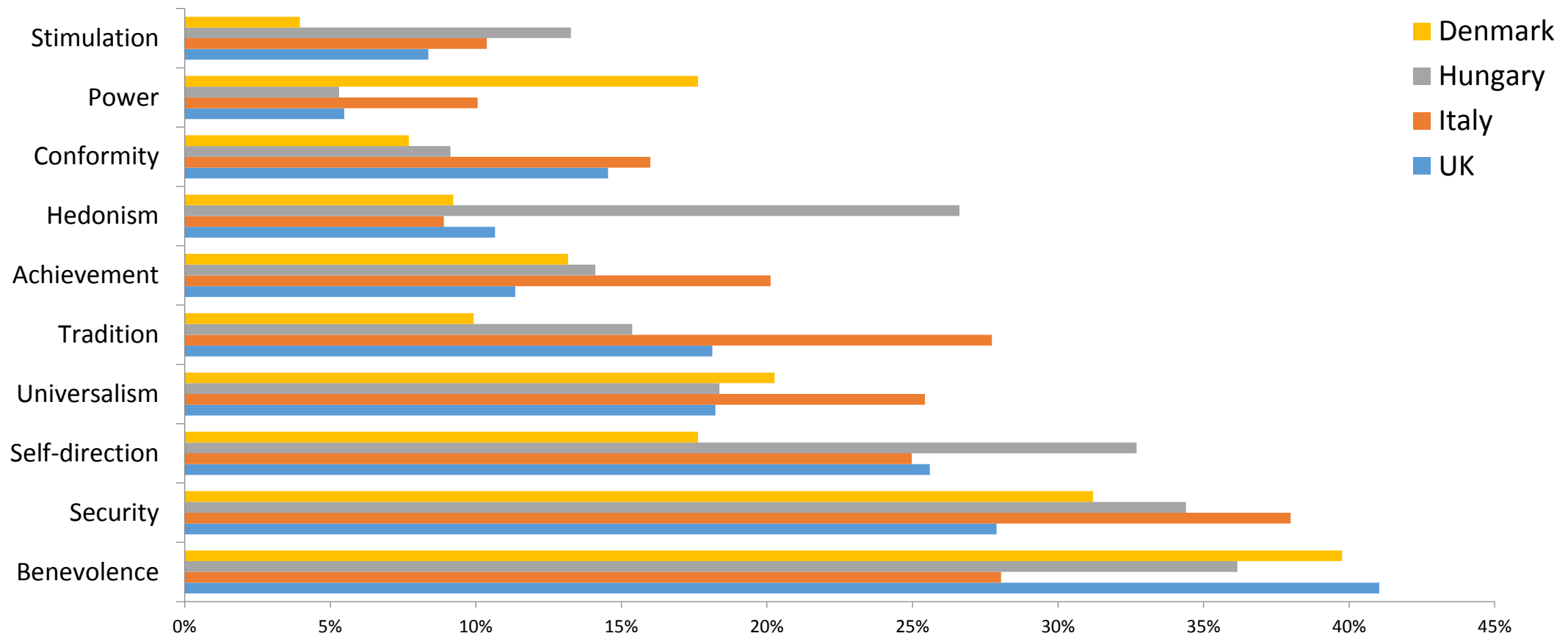
Based on the 'individual context' factors – *building characteristics and demographics*
Shows what advice might be relevant to each type of household

Psychological segmentation

Based on *motivations, knowledge* and *values*
Will be used to frame messages

Segmenting electricity users

Primary values in each country



Next steps

- How do we deliver messages – what style is appropriate?
- How do we display messages in an innovative way?



Summary

Stage 1: Factors influencing energy use

Wider context factors, *individual context* factors and *psychological* factors all influence energy use and people's abilities and willingness to reduce their consumption

Stage 2: Developing the message

Three segmentation models being created

Load profile and demographic segmentations will say what advice is *relevant*, psychological segmentation will say how to *frame* advice to resonate with people

Stage 3: How to deliver advice

Next steps of the project are to look into *innovative advice delivery*

Thank you

Web: www.natconsumers.eu

Join the LinkedIn Group: **Natconsumers**

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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)