



Behavioural economics – understanding how audiences tick

For the RE-COMMUNICATE project, IEA-RETD

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The status quo bias and the omission bias

- *We are biased to avoid risks which result from change, we prefer harmful inaction over harmful action*

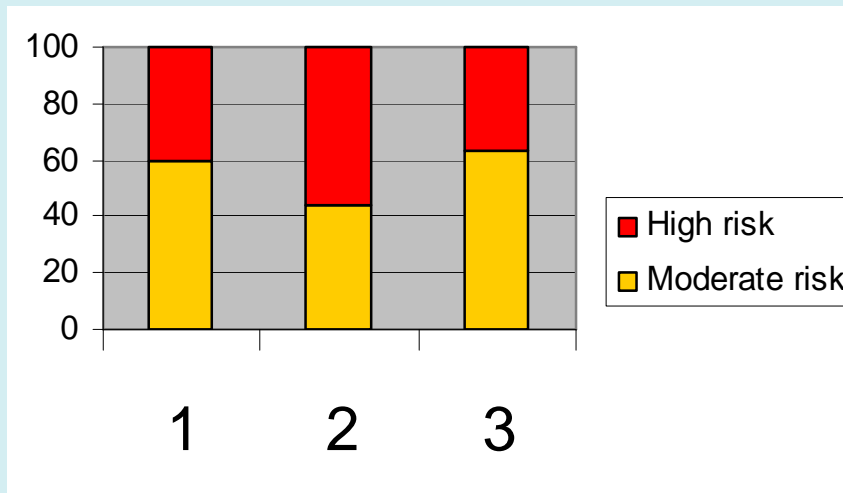
Individuals are asked how they would invest an inheritance - high risk investment vs. moderate risk investment

GROUP 1 = no knowledge of a status quo

GROUP 2 = investment currently in high risk stocks

GROUP 3 = investment currently in moderate risk stocks

Samuelson and Zeckhauser 1988



Individuals have a strong bias against change [particularly – due to the omission bias – if the change might have a negative impact on someone else]

The “endowment effect”

- **Individuals attach extra value to goods they already own or services they already receive**
 - Individuals perceive the value of an object higher if they possess an object than if they do not
 - An individual’s willingness to accept a price for selling an object is demonstrably larger than someone’s willingness to pay for it

Respondents value a ticket with a 50% chance of winning \$20

- Willing to pay to acquire: \$ 5.60
- Compensation to give up: \$11.02

(Source: *Kachelmeier / Shehata, 1992*)



The tangible impact of a sense of ownership

Class A: Given a mug, asked if wanted to swop for a chocolate at the end of a lecture

Class B: Given chocolate, asked if would like to swop for a mug?

Class C: Given a simple choice – mug or chocolate?

A – 89% chose mug

B – 10% chose mug

C – 59% chose mug

(Knetsch 1989)



Sense of ownership has a strong influence on behaviour – if a thing belongs to someone, they soon become attached to it

Loss aversion

- ***Individuals are more strongly motivated by avoiding a loss than acquiring a similar gain***
- If the same choice is framed as a loss, rather than a gain, then different decisions will be made

Group 1 – control

Group 2 – bonus for above average pupil performance at end of year

Group 3 – up-front payment, lost if pupil performance not above average

Result: Difference between groups 1 and 2 insignificant, group 3 produced a significantly better performance

(Fryer, Levitt, List, Sadoff 2012)

Some renewable energy policies appear to result in a loss – e.g. higher energy bills = reduced public acceptance of renewable energy

If individuals have a sense of “ownership” of a future goal, things that put that future at risk can be framed as a loss...

Hyperbolic discounting

- *Individuals consistently underrate the intensity of future desires*
- People will be far-sighted when planning if both costs and benefits occur in the future
- They will make short-sighted decisions if costs OR benefits are immediate

For example:

- an individual may prefer €110 in 31 days to €100 in 30 days
- but prefer €100 now over €110 tomorrow (Frederick et al. 2004)

Often communications about RE emphasise better, greener energy in the future – but individuals focus more on costs (and benefits) incurred today

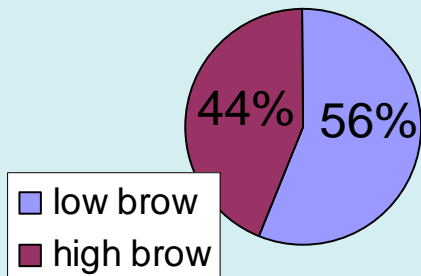
I'll make a better decision...another day...

▪ *...but right now I prefer the more pleasurable choice!*

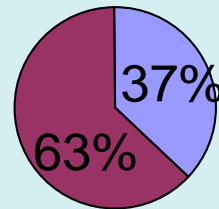
Individuals asked to choose high-brow or low-brow movies for:

1. Tonight
2. This Thursday
3. Next Thursday

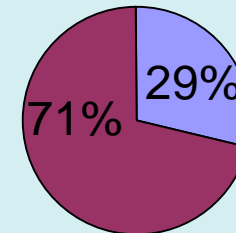
Tonight



This Thursday



Next Thursday

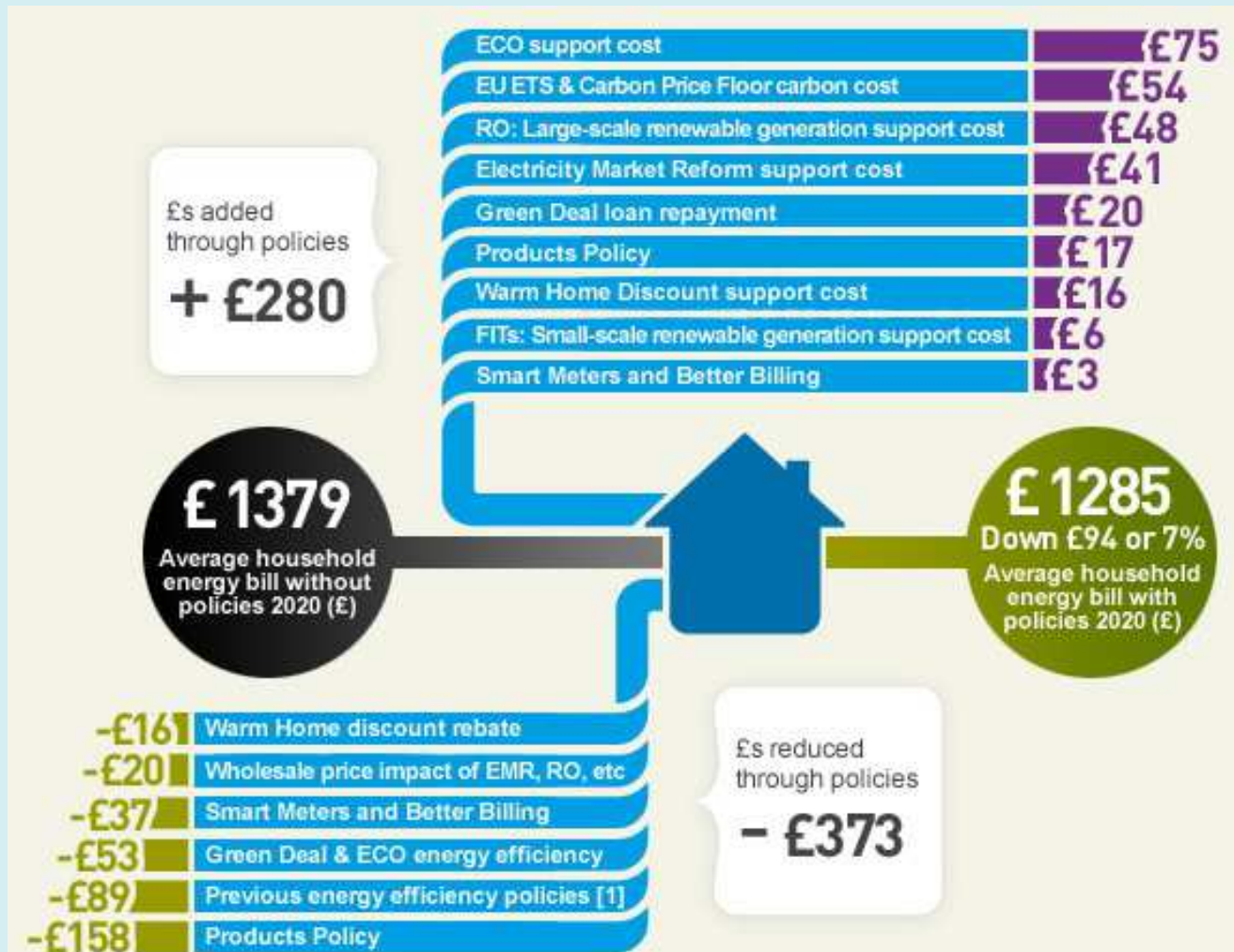


If costs are incurred now and benefits reaped in the future...there will be a strong preference not to incur those costs

Is it possible to frame and communicate policy to bypass this?

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Estimated impact of energy & climate change policies on average household energy bills in 2020 in the UK



Figures may not add due to rounding. [1] CERT, CERT Extension, CESP and EEC 1&2.

Pro-social behaviour and fairness

▪ *individuals tend to value fairness and act pro-socially, particularly if free-riding can be minimised*

- Experimental evidence shows that consumers have strong feelings about fairness
- Individuals place value on social goods and may value not only their own consumption but the consumption of others
- Individuals may also benefit from “warm glow” effect from having contributed to social good
- Monetary rewards tend to crowd out such intrinsic motivations (especially if rewards are small)

These factors also have important implications for policy communication and policy design

Summary and discussion

- *How can campaigns take these findings into account?*
 - Information which feeds into the way people think and make decisions is more likely to elicit the desired response than information that is simply factually accurate
 - Messages crafted to take BE into account should elicit a sharper behavioural response
- How can BE inform the communication of renewable energies?
- How could communications strategies you have been involved in be improved by taking these factors into account?
- How can communications create 'ownership' for RE?
- In which ways can the status quo bias be overcome?

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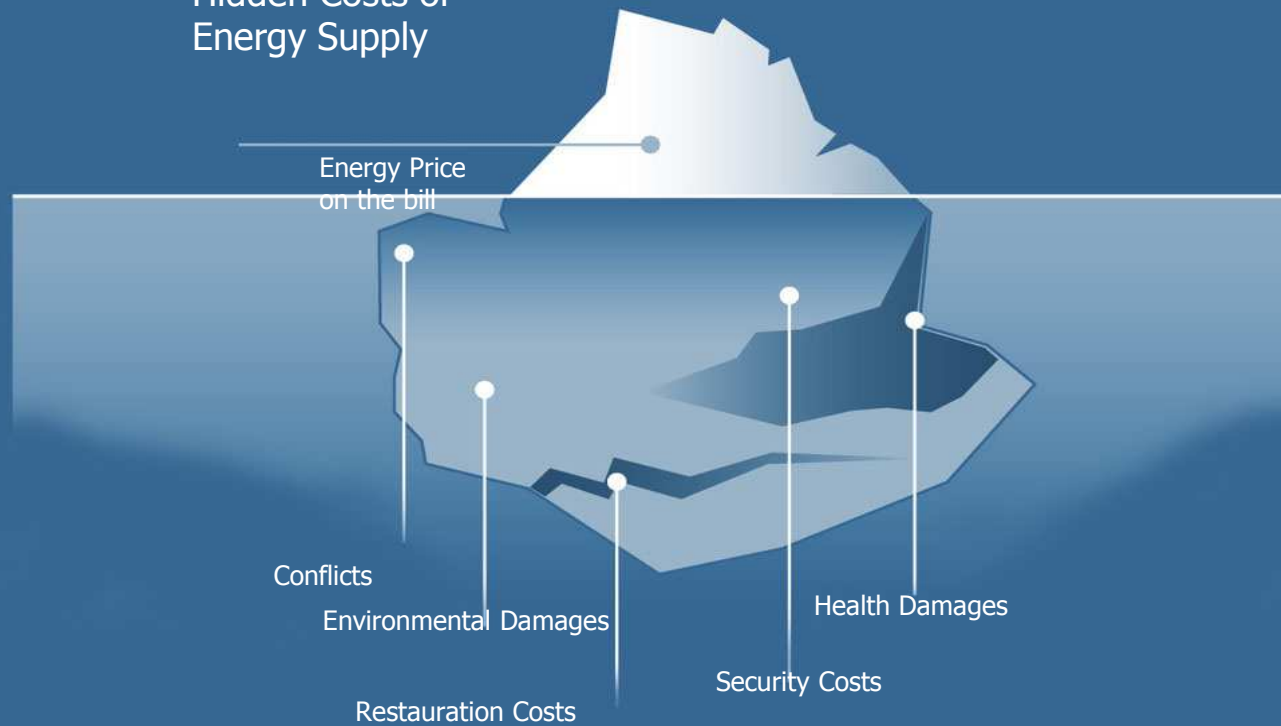
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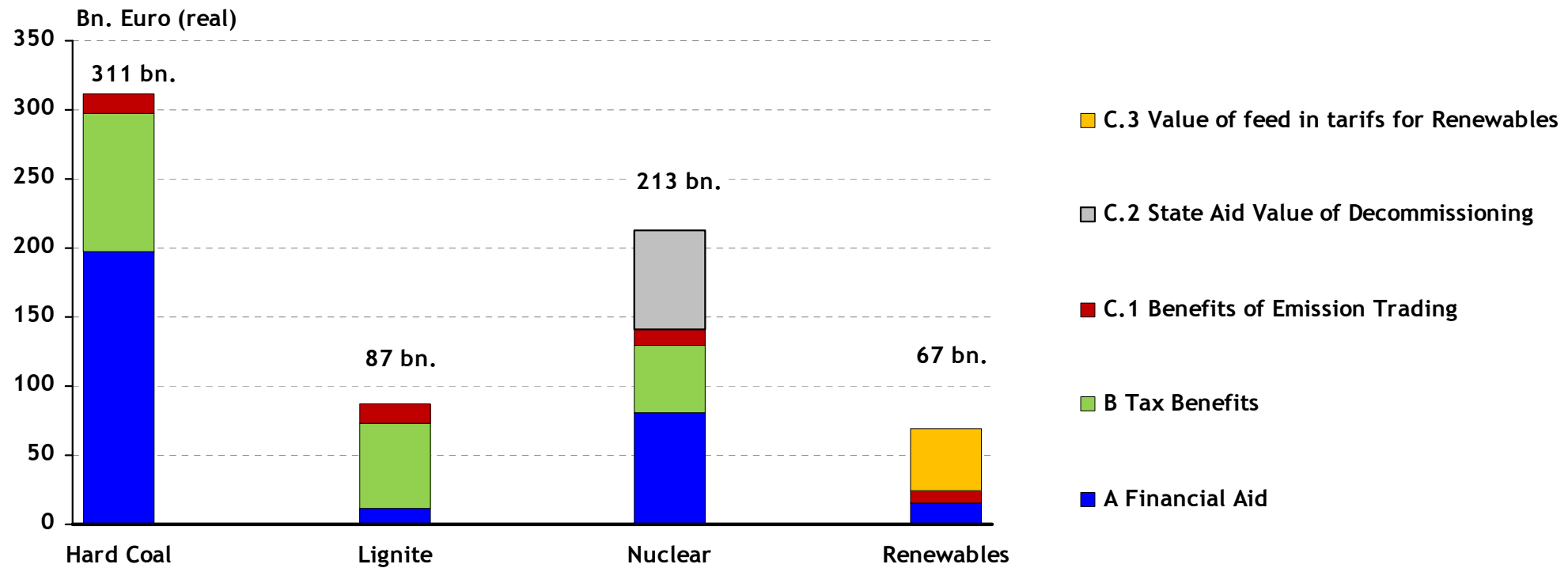
Hidden Costs of Energy Supply



© Informationskampagne für Erneuerbare Energien 2007

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Energy subsidies and regulation with subsidy character



3.3 Ct/kWh

1.3 Ct/kWh

4.0 Ct/kWh

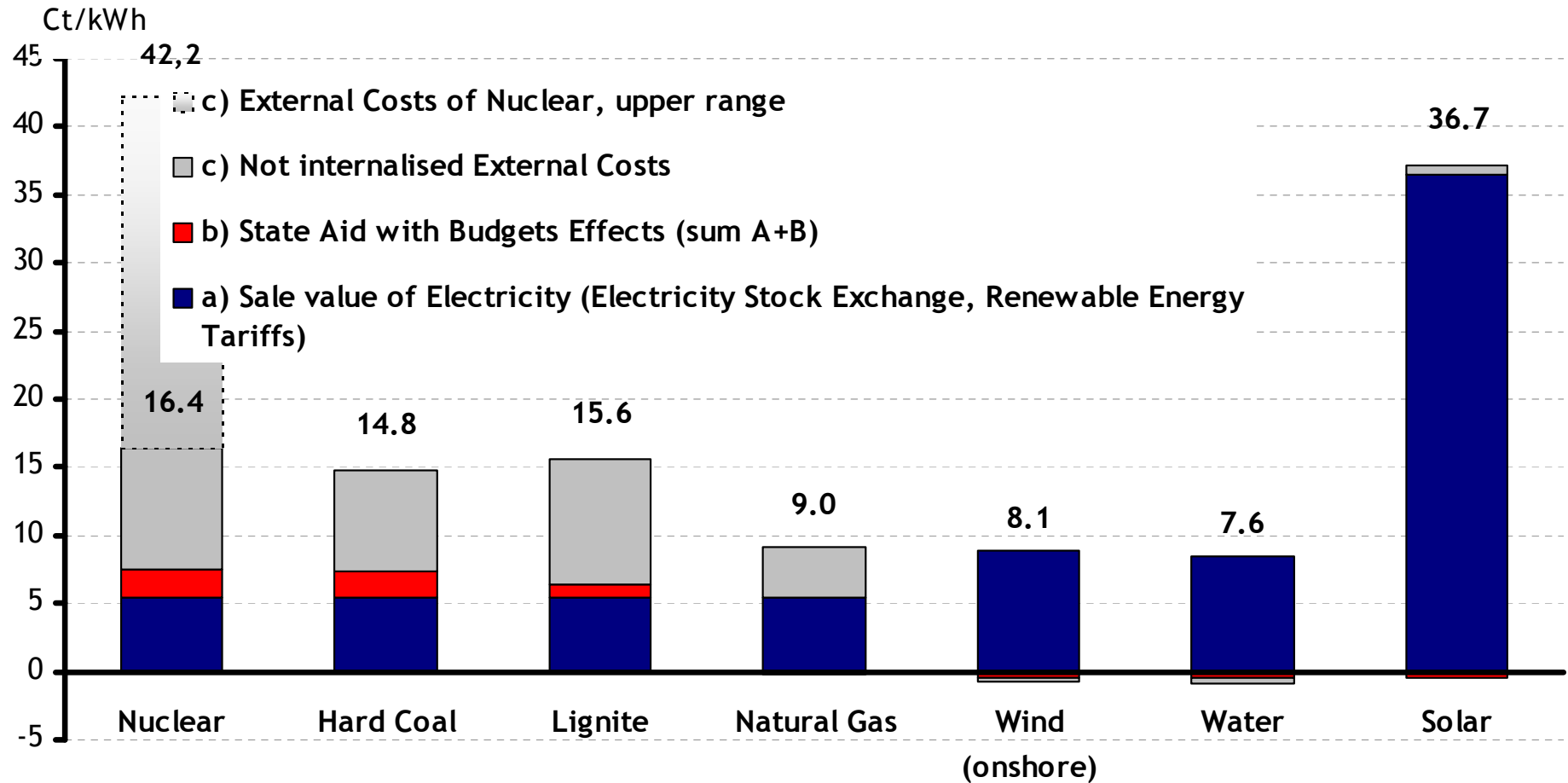
3.4 Ct/kWh

Ø amount of subsidy per kWh

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The true cost of electricity in Germany, 2012

= market value, state aid and non-internalised external costs



Feed-in tariffs for conventional energy in Germany, 2012?

Changes to the electricity price due to feed-in tariffs for renewables

