

Energy-sector Behavioural Insights Platform

DSM Day, Bern, Switzerland, 3rd April 2019

Background

- IEA/IPEEC/G20 workshop
- Desire amongst behavioural insights teams to collaborate
- DSM TCP best-placed to take forward a new Task
- Ireland (SEAI) and the UK (Ofgem) have led the development of the concept with help from Australia (Envt Dept) and the Netherlands (RVO)
- Canada and Japan have joined teleconferences, along with BIT and OECD
- IEA secretariat are a key partner and would like to co-brand the Task



Save the date

Workshop – Behaviour Change and Energy Efficiency

Date: Wednesday, 12 September
Time: 9:00 – 17:30 (TBC)

Venue: French Foreign Affairs Ministerial Conference Centre,
27, rue de la Convention, 75015, Paris, France
You will receive a link to the Registration Portal together with the agenda.

   **Ministerio de Energía
Presidencia de la Nación**

The objective of the workshop will be to:

- Introduce behaviour change: what it is and what are the implications for policy making;
- Understand the particular challenges faced across sectors in encouraging behaviour change;
- Identify possible topics of discussion as well as potential mechanisms and resources for collaboration, including the Task Groups under the G20 Energy Efficiency Leading Programme.

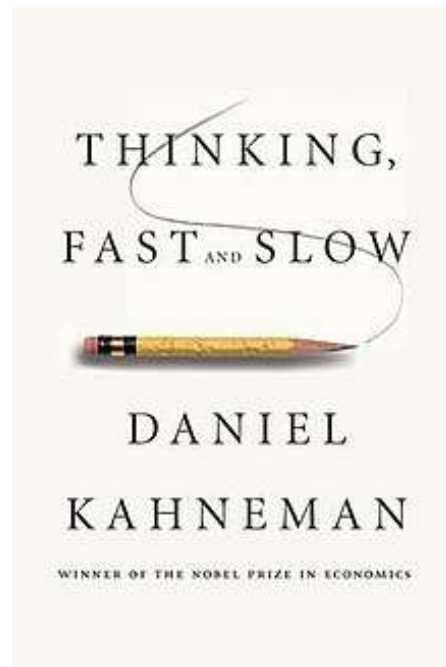
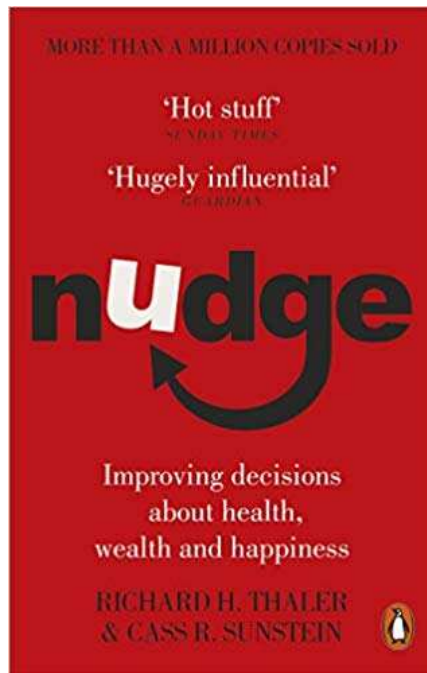
Behavioural insights / behavioural economics



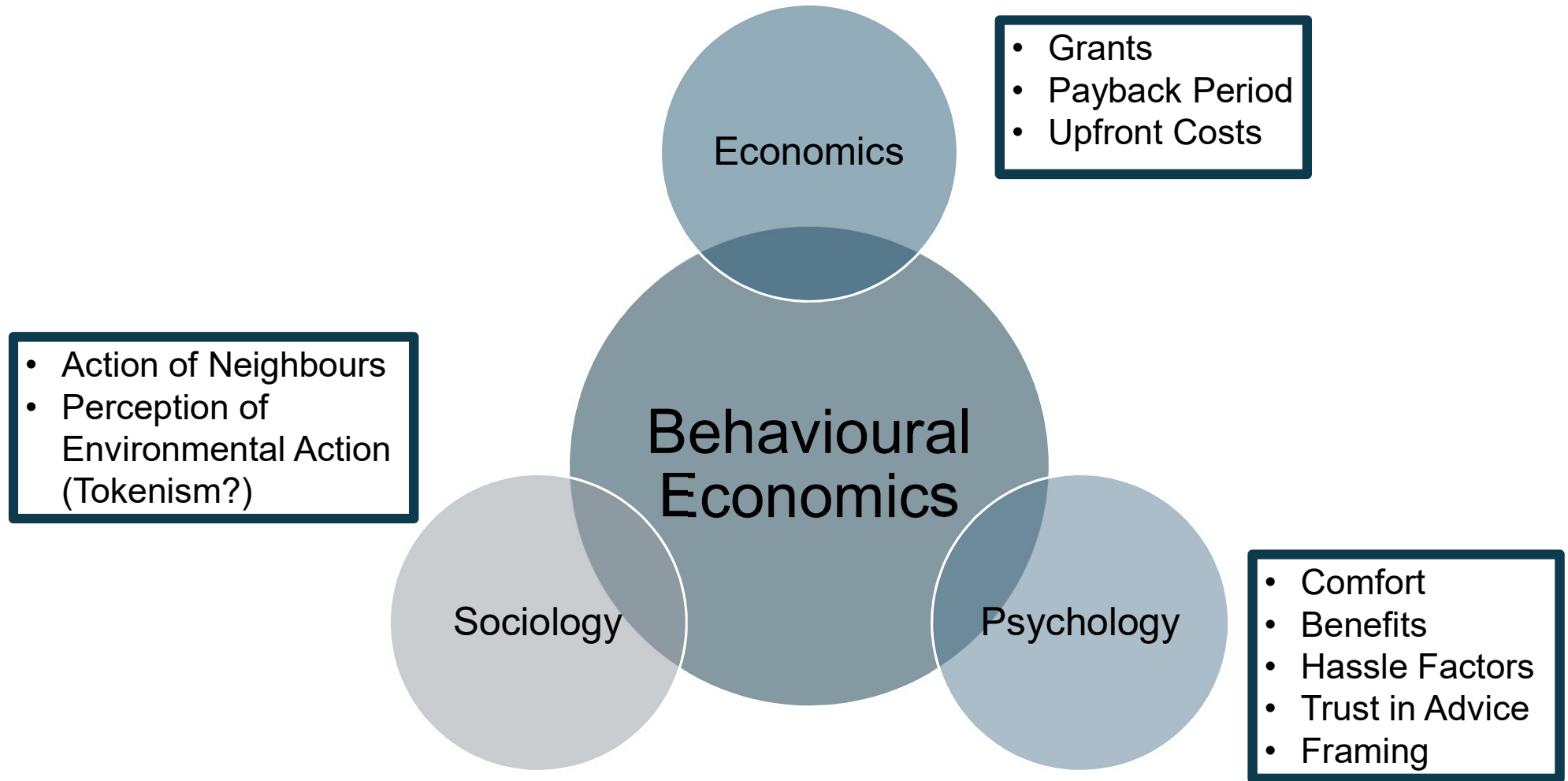
Netherlands Government,
Ministry of Economic
Affairs and Climate Policy



Some influential developments



What is behavioural economics?



Redesigning the Building Energy Rating Advisory Report (SEAI, Ireland)

- Contributed to re-design of advisory Report
- Designing lab experiment to pre-test
- Planning field trial after advisory report launch

Loss Aversion

Benchmarking

Meaningful Benefits

Home Energy Upgrade Report

BER No.

Your Home's Energy Performance Potential



Currently losing per year:

The best package to stop losing money on your energy bill

Your BER assessor has recommended a package of measures that will raise your home's energy performance to its full potential.



Upgrades for your home	BEFORE	AFTER	GRANTS AVAILABLE?
Windows	Poor	Good	<div style="font-size: 2em; color: #008080; margin: 0;">✓</div> <div style="font-weight: bold; font-size: 1.2em; margin: 5px 0;">€6000</div> <div style="font-size: x-small; margin: 0;">subject to availability, terms and conditions</div>
Roof	Poor	Good	
Space Heating Controls	Very Poor	Very Good	
Water Heating	Poor	Good	
Ventilation	Very Poor	Good	
Insulation	Very Poor	Good	
Floor	Poor	Fair	
Renewables Contribution	Poor	Fair	For further information call SEAI today 1850 927 000

Compare your home's performance | Before and after upgrades

POTENTIAL

Your home currently performs like the average house built in	NOW	1900	Your home could perform like a house built in	POTENTIAL	2000
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Benefits of upgrading your home

SAVE

INCREASE your home's value 

INCREASE your home's comfort 

REDUCE your energy bills 

CO₂ **3.8** TONNES

= the same as planting 100 trees

To find out more visit www.seai.ie

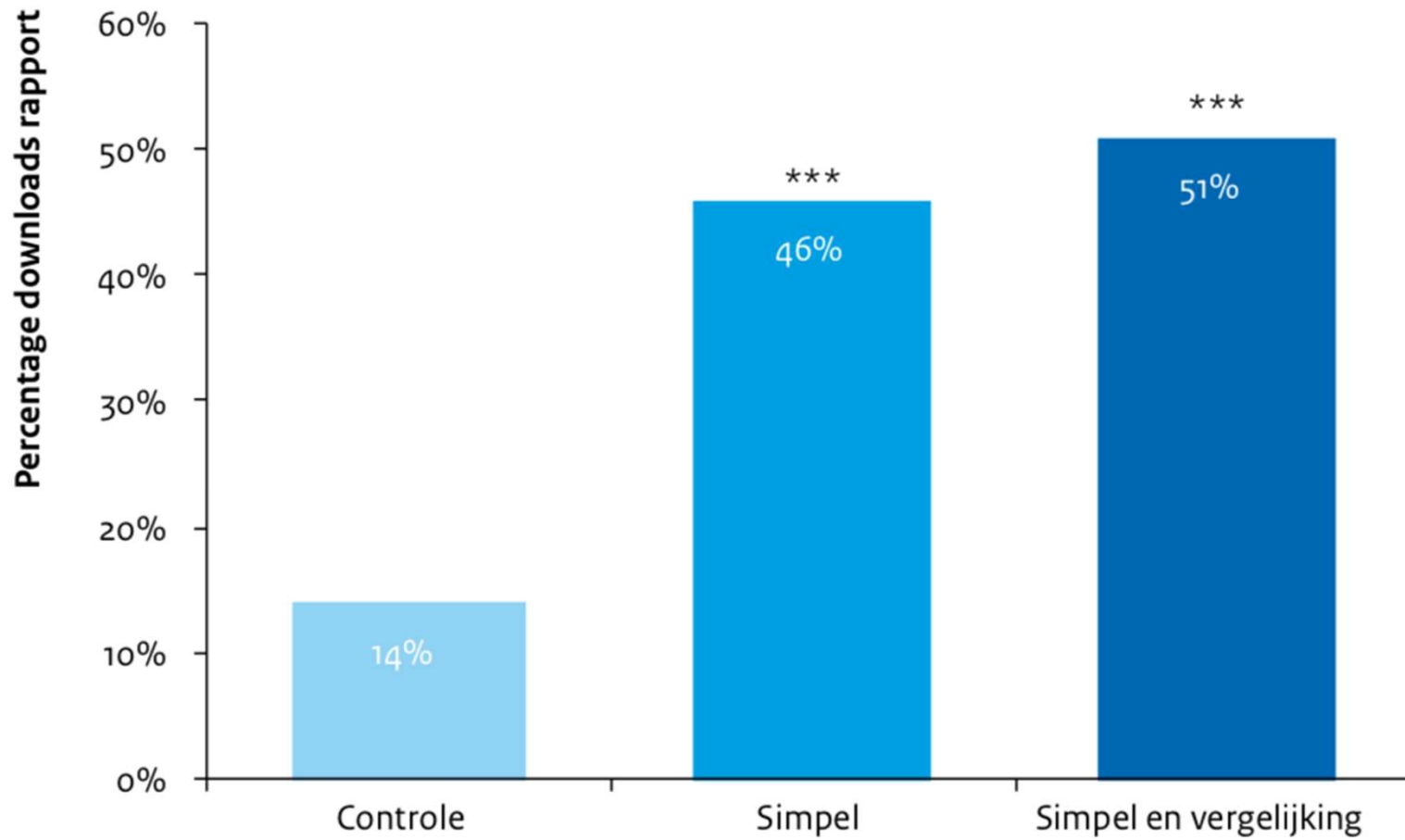




Energy saving in companies – encouraging downloads of feedback reports (RVO, Netherlands)



Results



N = 505

*** $p < 0.01$

Fit the bill (BETA, Australia)



Australian Government
Department of the Prime Minister and Cabinet



Electricity information to fit the bill



Energy prices in Australia have risen 56 per cent in a decade, putting significant pressure on household budgets.

People can save hundreds of dollars a year by shopping around—but more than half of Australians have not switched plans or providers in the past five years.



Energy bills are the primary tool to inform consumers about their energy plan and usage—but they are dense, inconsistent and hard to read.

We worked with the Department of the Environment and Energy, to design and test new electricity bill designs with around 4,200 Australians.

We focused on:

- ✓ simplifying the structure and style
- ✓ drawing attention to key information



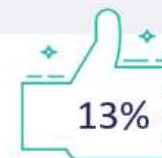
Simple design and personalised savings



✓ including a 'ways to save' box encouraging people to search for a better deal.

The screenshot shows a 'Ways to save' section. On the left, it says 'You could save \$300' with a piggy bank icon and a hand pointing to a link: 'Visit www.madeeasy.gov.au and use your unique code: 2043789159'. On the right, it says 'Your yearly electricity bill will be \$1687 on your current plan but could be as low as \$1387 by switching to a better offer'. Below this is a horizontal bar chart with three points: '\$1,387 Cheapest offer', '\$1,687 Your plan', and '\$1,896 Most expensive offer'. At the bottom, it says 'Based on your usage over the past 12 months and current offers'.

We found a simple design and information about personalised savings increased confidence in using the bill to find a better deal by thirteen per cent.

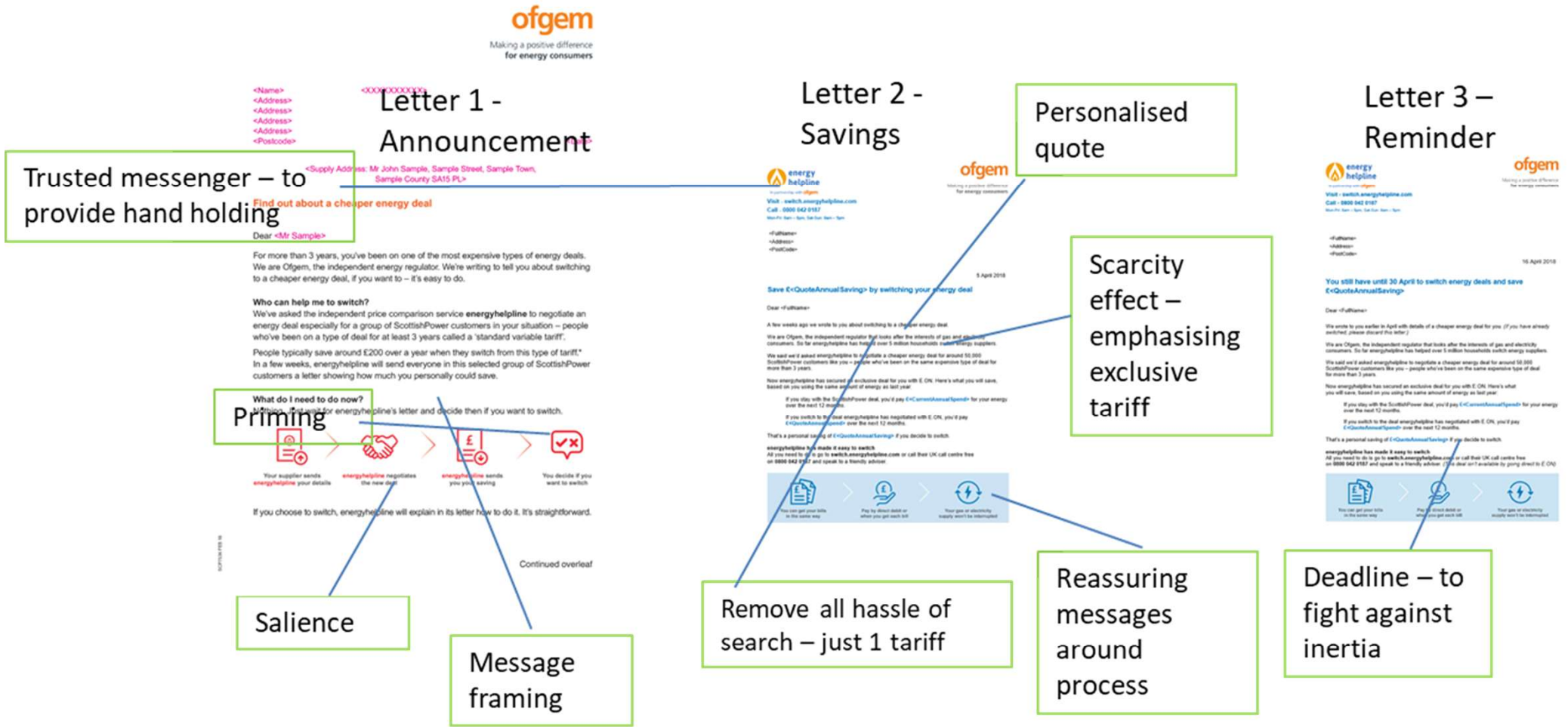


But we found no difference among the bill types with regard to consumers' stated intention to look for a better deal.



Increasing consumer confidence in a market facing record-low levels of trust is important. For this reason alone, making bills clearer and more accessible for consumers makes sense and should be considered by electricity retailers.

Nudging people to switch energy tariff - applying BI to address as many of the barriers as possible (Ofgem, UK)



Results

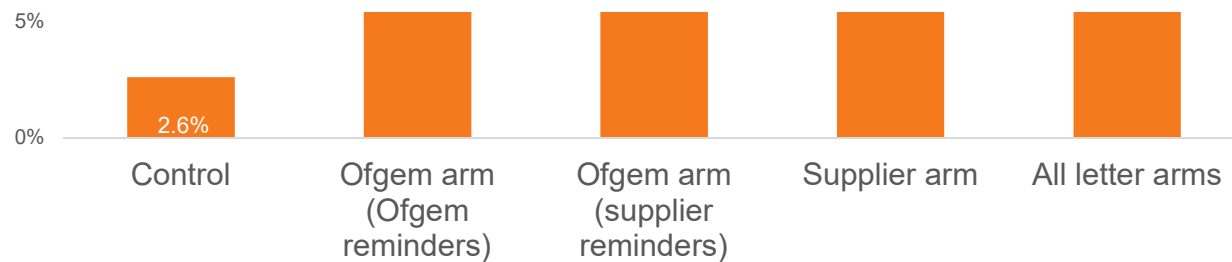
Switching by trial arm



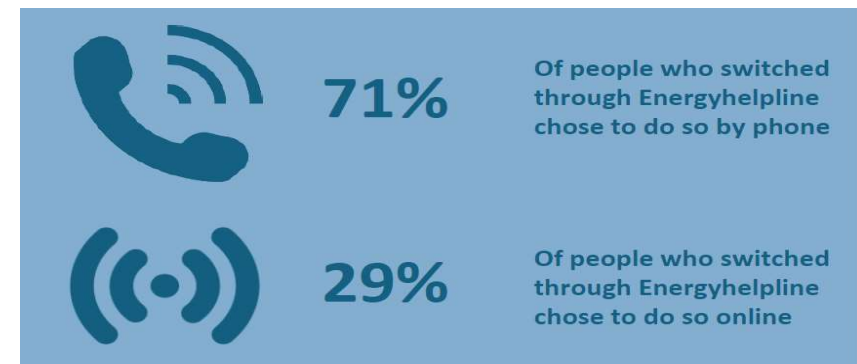
M Money ▶ Save money

Most successful money-saving tactic tried yet - as thousands get £300 off bills each

The best way to get people moving to cheaper energy deals is for them to club together, according to a new trial



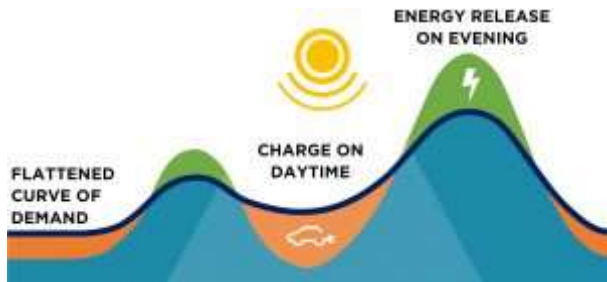
- The intervention had a clear and substantial impact on behaviour
- Customers who received information and reminder letters with their supplier's branding switched the most – 10X the control
- 24% of the switches made through energyhelpline were by customers over 75 years old



Smart charging of electric vehicles – what behaviour are we trying to promote?



What EV owners do now



What EV owners are 'expected' to do

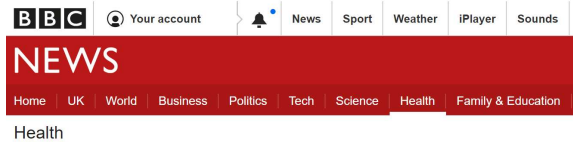
Two key behavioural changes:

- 1. Adopt** a smart charging tariff or service
- 2. Respond** to the price signals by adjusting the timing of their charging or not overriding automated current curtailment

One size fits all solutions to inertia



Inertia affects pension and organ donation enrolment as well as switching to cheaper energy deals



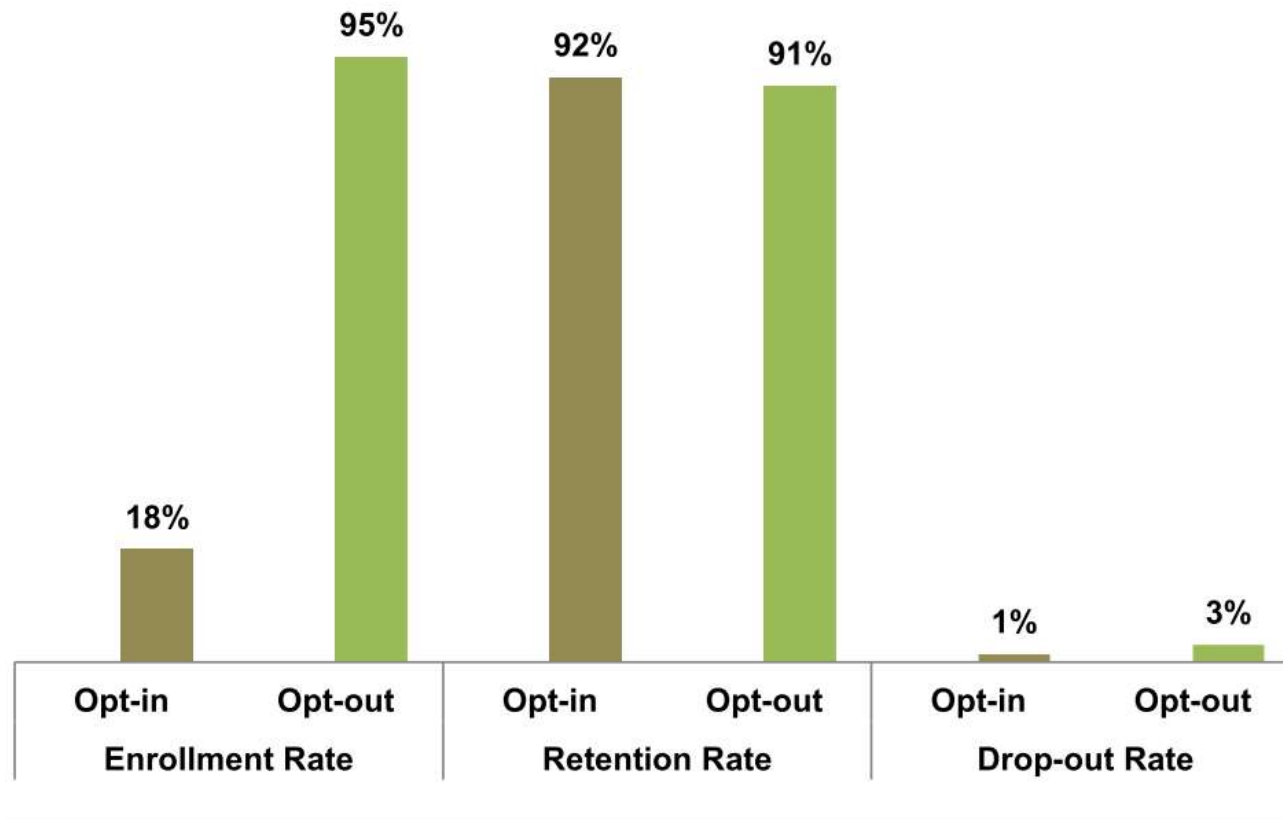
Opt-out organ donation 'in place by 2020' for England

Opt-out enrolment

Opt-outs don't account for variation in 'flexibility capital'

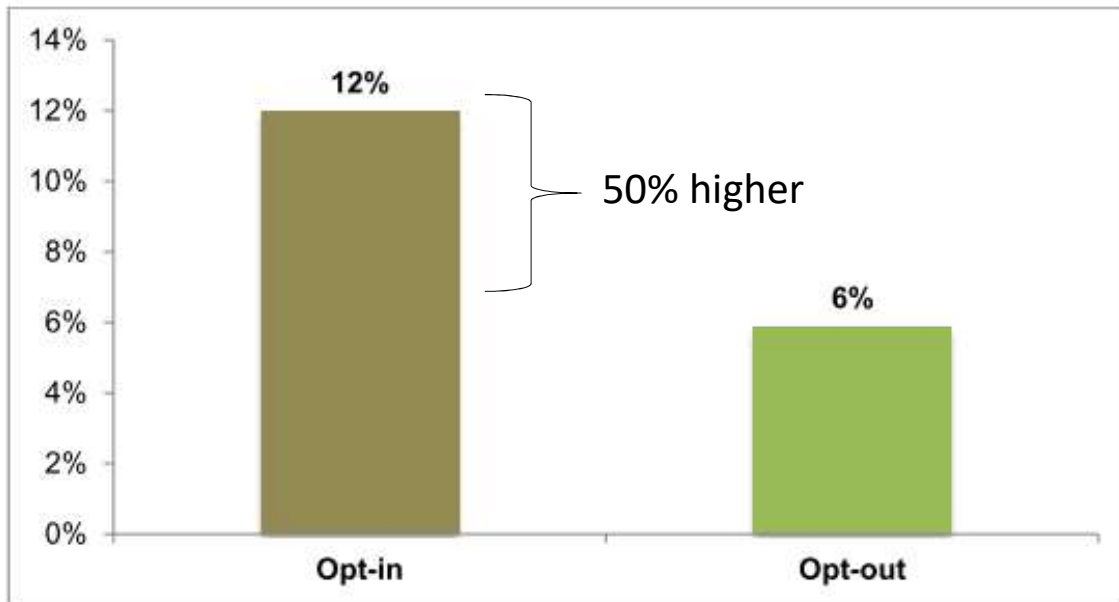
Opt-out enrolment is likely to overcome inertia and increase uptake of smart charging

Enrolment, retention and drop-out rates amongst US Consumer Behaviour Smart Grid trials of time of use tariffs

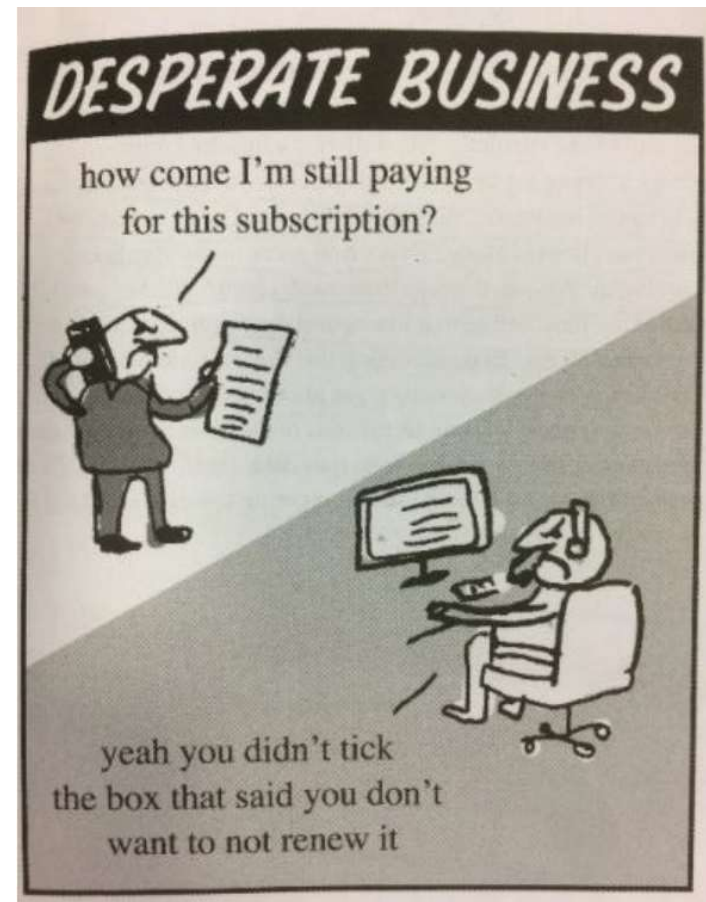


Not everyone is able to respond to price signals – there is variation

Peak load reduction across opt-in and opt-out groups (Sacramento Municipal)



US Department of Energy, Interim Report on Customer Acceptance, Retention, and Response to Time-Based Rates from the Consumer Behavior Studies, p 31.



A different approach to nudge – effective and selective

Choice architecture should be about getting people ‘into the right box’ by being effective and selective (Johnson, 2016)

	Population sub-group	Tariff A Smart charging tariff	Tariff B Flat-rate tariff
Increase adoption amongst them →	Have flexibility capital	X	
Not them →	No flexibility capital		X

Approach

Bring together government officials and other experts working on the application of behavioural insights in the energy field to

- enable the sharing of knowledge and experience;
- develop guidance based on case studies and theory on the
 - application of behavioural insights (for example from behavioural economics and psychology);
 - development of trials, including how to move beyond pilot projects to broader policy implementation; and
 - evaluation of the energy savings / efficiencies associated with energy behaviour change programmes; and
- disseminate guidelines and examples of best practice

Next steps

- Development of proposed work plan by IRE, UK, AUS & NL
- Outreach to potential participants
- Identification of prospective Operating Agents
- Possible side meeting at IEA conference in Dublin (June)
- Possible side meeting at BX conference in London (Sep)
- Work with IEA to define ways to jointly lead the Task

*Thank you.
Any questions?*