

Untapped potential

Helping residents to manage energy bills



Bill Wright



National
Energy Study

23rd June 2015



SUSTAINABLE
HOMES

Agenda

- What do we know about behaviours and energy use?
- What did we study?
- What we found out
- Further work



Sustainable Homes

- Established in 1997
- We assist residents, Government, developers, planners, housing associations and others build or refurbish sustainably
- Training and consultancy
- Work with the: London Climate Change Partnership, WWF, UK Government, BRE, the UK Green Building Council, Existing Homes Alliance, Greater London Authority and others

Every home to encourage sustainable lives



Some of what we do...

- Benchmarking- **Independent assessment** of sustainability
 - Assistance with improving
- Influencing **One million homes** represented - helping make lower fuel poverty/lower carbon easier
- Training
 - **E learning** - Board briefings, fuel poverty, offices
 - Award winning new build & existing homes courses
- Research
 - Modeling steps to reduce **fuel poverty** (350,000)
 - National Energy Study with DECC



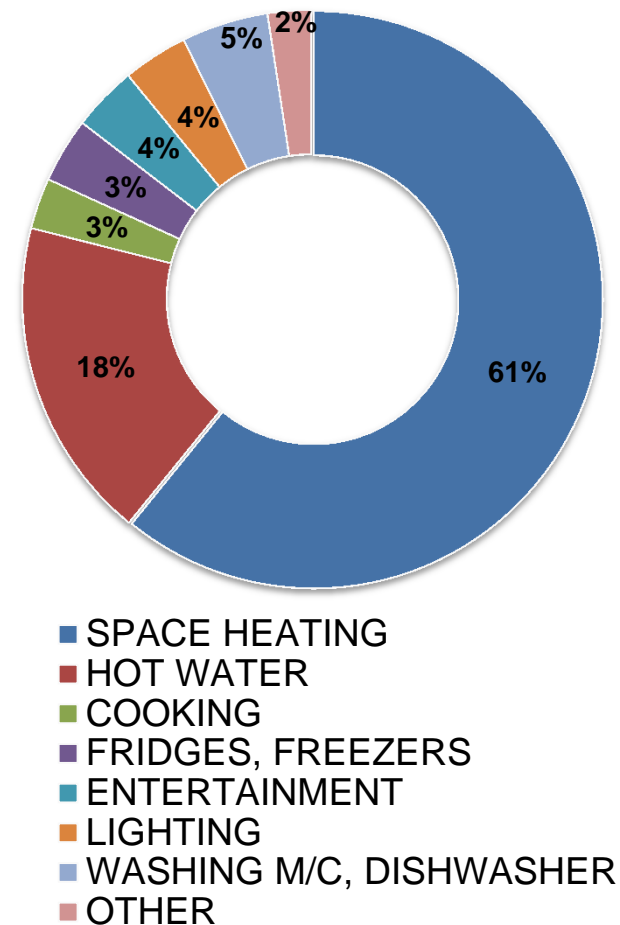
- **What do we know about behaviours and energy use?**
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How is energy used in the home?

- People think about electricity savings first
- Average spend per home
 - £800 gas
 - £600 electric
- Average CO₂ per home (UK):
 - 3.05 tonnes gas
 - 1.53 tonnes elec

Average UK Household Energy Consumption



Why do people understand electricity better than heating?



National
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Other general points

- People don't use energy
- People don't (usually) set out to waste energy
- People tend to think they are all 'average users'



What do we know about behaviour?

People are social.
Very strongly motivated
by what others do.....

....or what they perceive
others to do.

Strong power of
adopting new behaviour
rooted in approval of
other people.



1 World Cup = 2.72 million tonnes CO₂
(FIFA figures)

Habits are personal

Rooted in feelings of:

- routine,
- comfort,
- past success,
- perceptions of 'normal' behaviour,
- expectations of others.



Intrinsic values – where we think in terms of inherent worth, social good

Extrinsic values – more to do with what we gain from something – e.g. 'How much will I save?'

Norms

Descriptive norm –
Young men often wear beards

Injunctive norm – It looks really good for men to wear beards



- What do we know about behaviours and energy use?
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Residents sent meter readings every 2 weeks:

Text message or our website

We sent them feedback on how much they used:

'Values' group

Between 3rd and 17th December you used 4.6 kWh electricity per day, and 36.4 kWh of gas

'Ranking' group

And your energy use puts you 4th out of 47 similar homes

You are in the lowest 50% of users for electricity
And the highest 25% of users for gas

'Smiley' group

- What do we know about behaviours and energy use?
- What did we study?
- **What did we find?**
- Further work

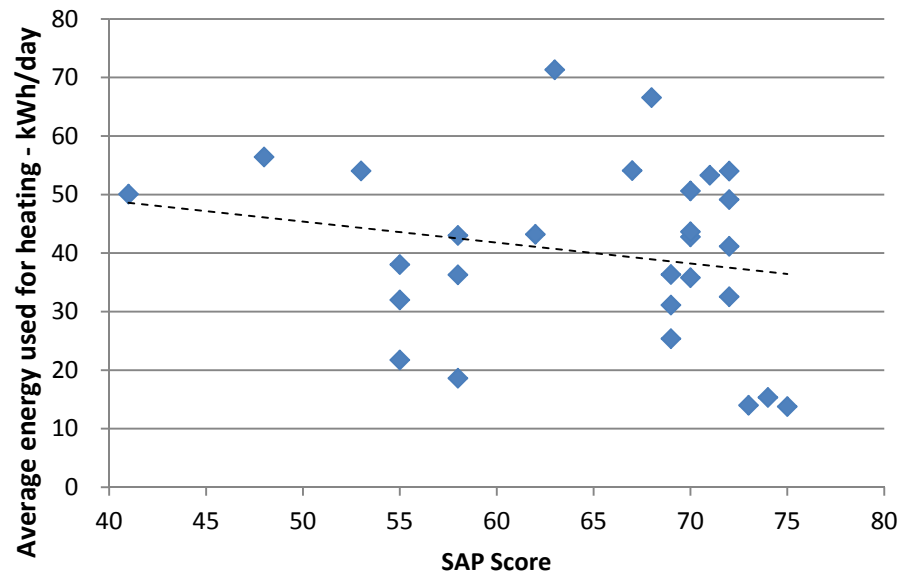


What did +6,000 meter readings, hundreds of questionnaires & +10,000 texts tell us?

1) Very little relationship between SAP & energy used

Home improvements may be little benefit unless people are taught how to use heating properly...

2-bed homes with 2 occupants - SAP vs actual heating used



◆ 2-bed homes with 2 occupants - SAP vs actual heating used

How do we know this is a problem?

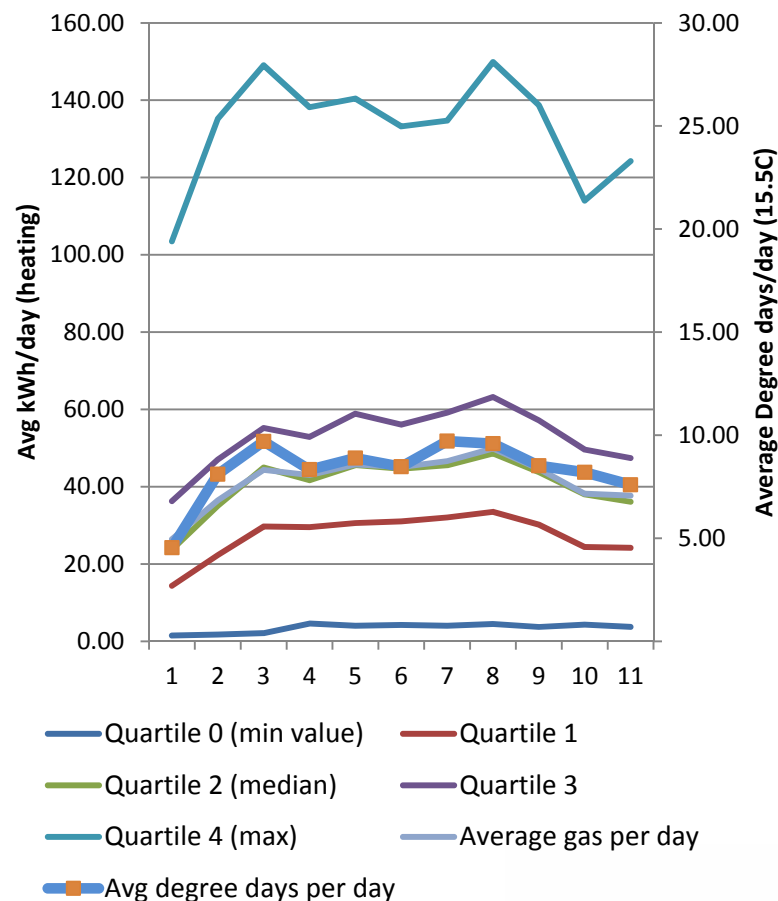
Energy use – low or high – follows weather data closely.

So - some homes lose heat faster than others. **Either:**

- They just like their home warmer than others
- They are heating unnecessarily – e.g. When out
- The SAP score is misleading

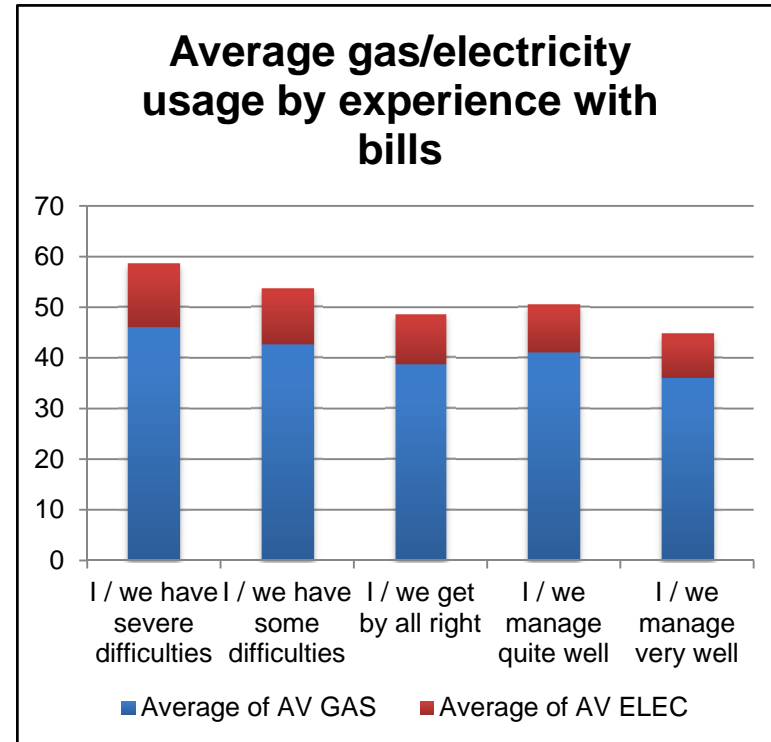
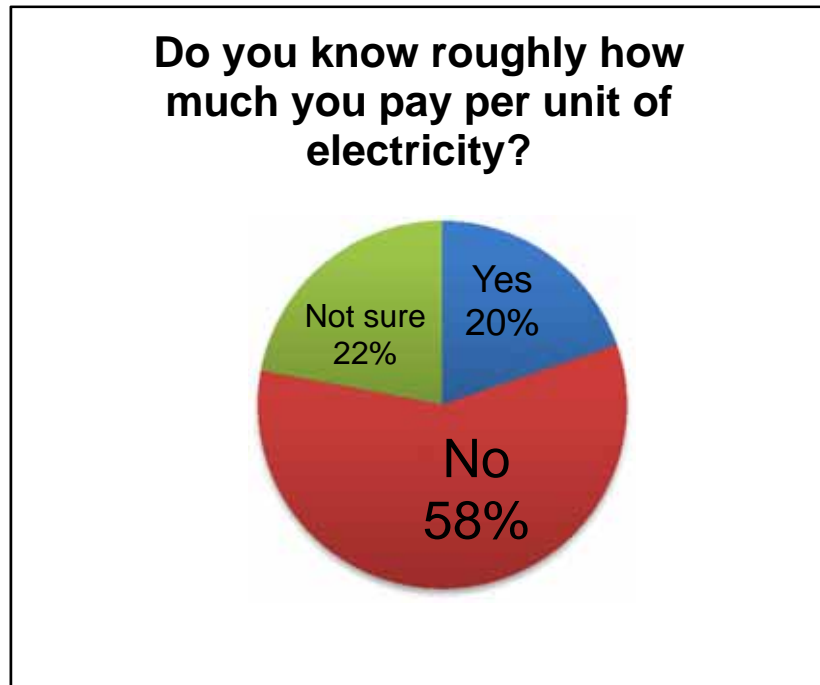
We are looking at this issue in NES2

Whole study - gas use vs heating demand



2) Those who don't know.... are those who can't afford not to

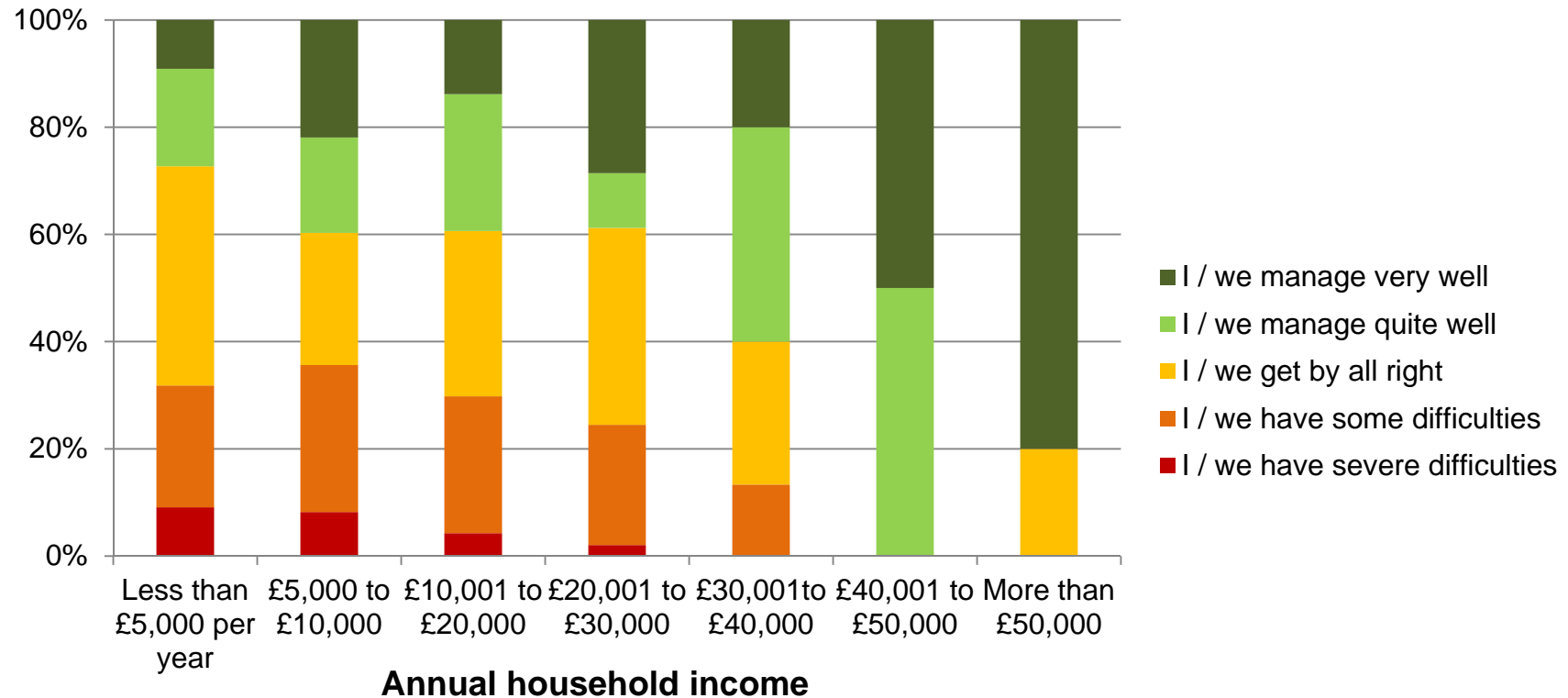
- The people who don't understand how much it costs.....



.....Are the same people as those who can't really afford it

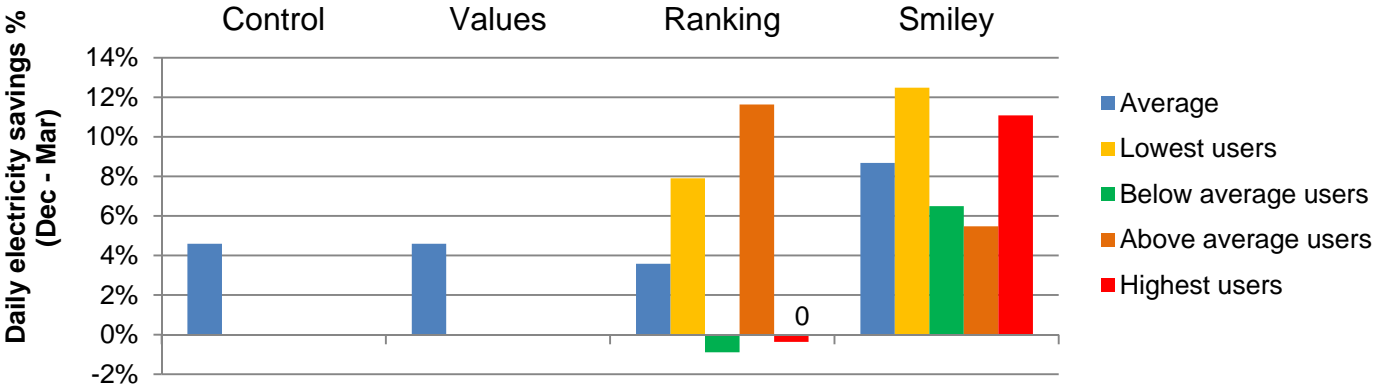
Some surprising findings

How well are you and your household keeping up with energy bills at the moment?

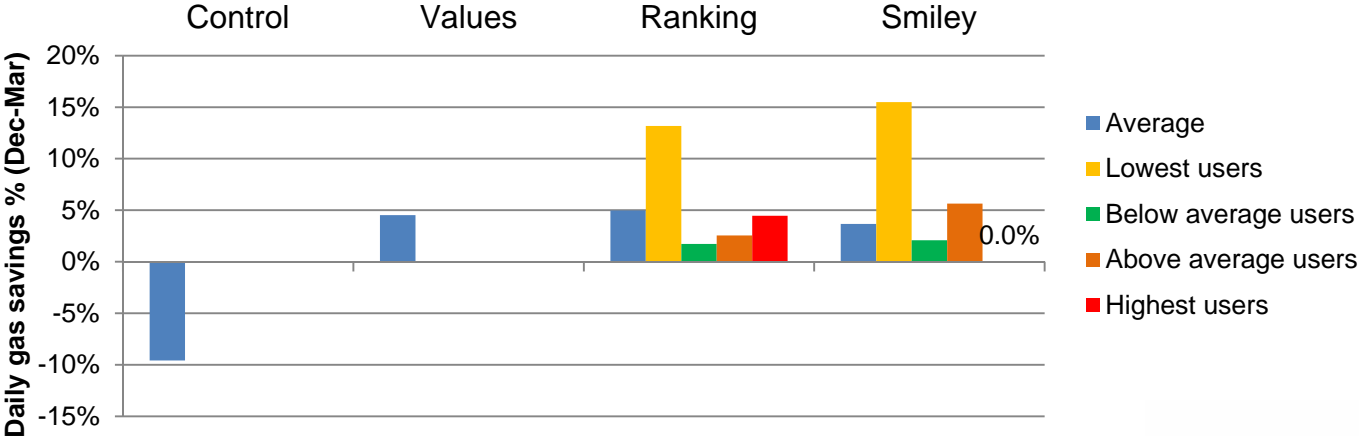


3) Feedback helps people save..... smileys help more

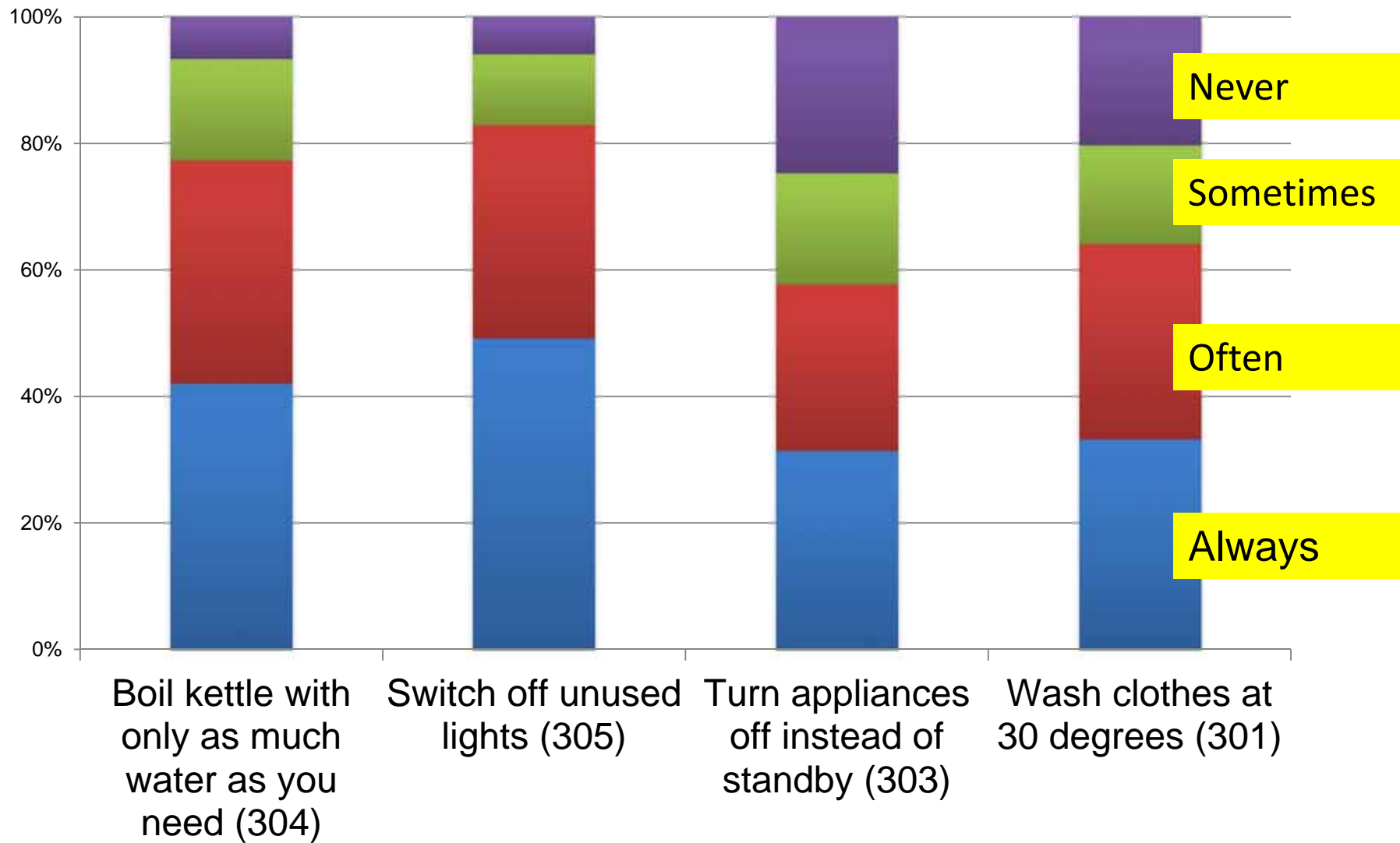
Average daily electricity savings during study (%)



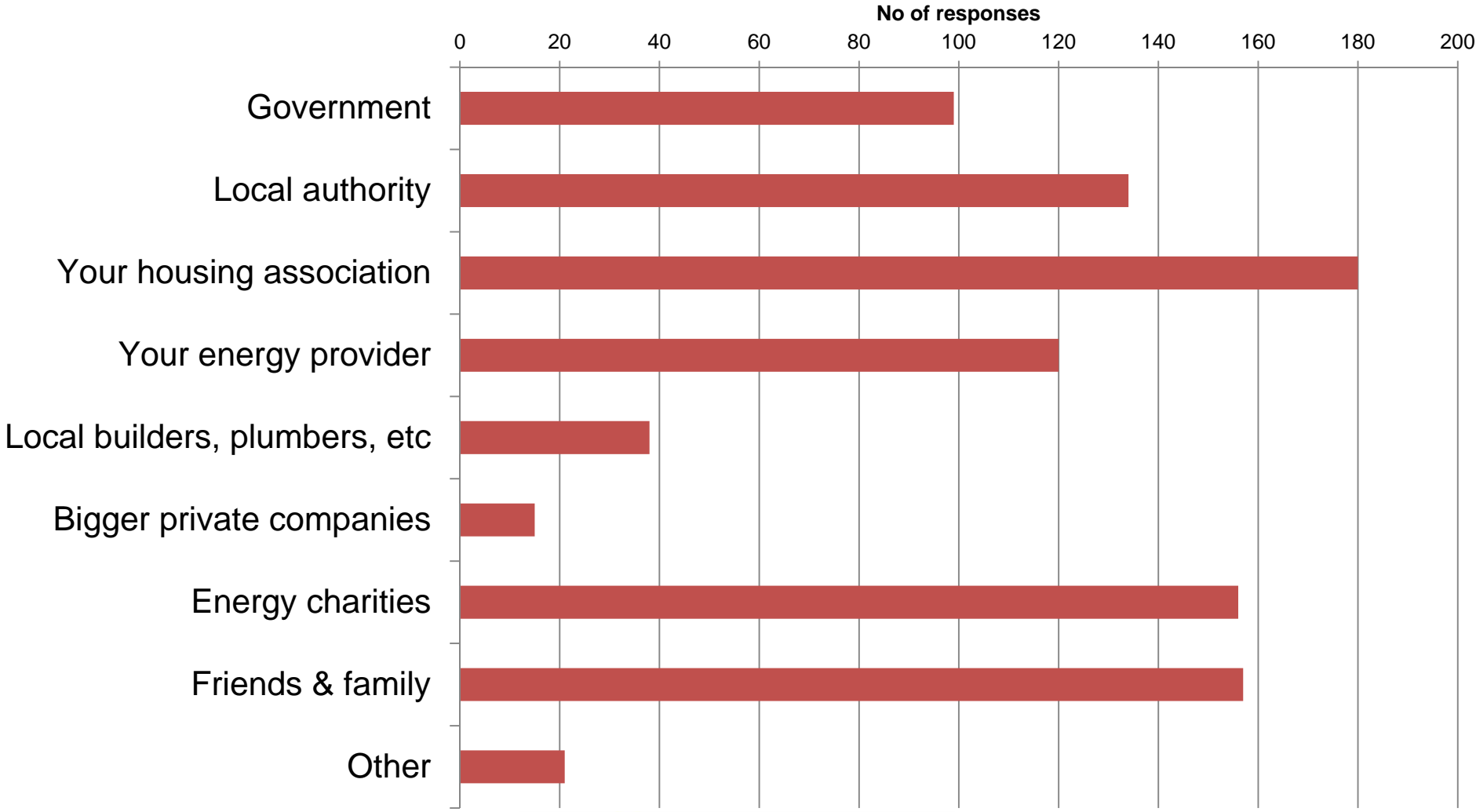
Average daily gas savings during the study (% - weather compensated)



4) There are still many easy wins



5) Who will people listen to for advice



An indicator may be more powerful than lots of information



VS

Page 2 of 2 visit us online at www.msmpower.co.uk

Need Help?
0845 123 4567

Mon-Fri 8am-8pm
Saturday 9am-4pm
Sunday 10am-4pm

Your call may be recorded for training purposes. Please read page 2 before calling us.

Are you the account holder?
We can only speak to the person named on the bill. If you wish someone to deal with us on your behalf, please inform us that you gave granted them permission to do so.

Moving home? Take us with you!
0845 123 4567
To give us your meter readings on the day you move.

Energy efficiency
electricpower.co.uk/ee/
0845 123 4567
For advice and help on saving you money by becoming more energy efficient.

24-hour Gas Emergency Service 12
0800 123 4567
If you have a gas leak or need to report a dangerous situation call us immediately.

24-hour Electricity Emergency Service 13
0800 123 4567
If you have a power cut or need to report a dangerous situation call us immediately.

11 **Your usage - in detail**
For more information about this calculation, go to www.msmpower.co.uk/billing/
Meter readings for meter number 12345678901234
Your current tariff is **Electro Saver 100**

Previous reading	Recent reading	Units used	Units as kWh	Pence per kWh	Charge for energy used
3223	3425	202	6349 over 54 days	First 1177 kWh @ 3.717p Next 5172 kWh @ 2.100p	43.75 108.61
66112 (electricity)	66909	N/A	797 over 54 days	First 222 kWh @ 16.430p Next 572 kWh @ 9.657p	36.49 55.53

15 Dec 2009 (reading) 20 Mar 2010 (estimate)

10 **Total Charge 244.36**

How we calculate your energy charges
Gas
3.717 pence for the first unit 12.312 kilowatts used a day, then 2.100 pence per kilowatt for the next.

Electricity
16.430 pence per kilowatt for the first 2,408 kilowatts a day, and 9.657 pence for the rest.

Estimated meter readings 17
Our estimated reads are based on our records of your previous usage. Where we do not have this our estimated reads are based on average consumption levels.

16 **Services for customers with specific needs**
We'll help if you have specific needs. For example, we can send you bills in large print format or Braille, or on audio tape.
To find out about the range of services we can offer, simply call us on 0845 123 4567

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17 **If you have a complaint**
Please call us on 0845 123 4567 - we will aim to resolve your problem straight away.
If you are still unhappy after speaking with an advisor, please ask to speak to a manager. You can write to our Compliance Manager, Tony Hancock, at MS&M Ltd, Hampton Road, London, NW11 1HB

5 NutEast Energy payment slip **Bank Giro Credit**

Reference (customer account number) Credit account number Amount due By transfer from NutEast account number

Customer's stamp and initials

Your signature Date

30.00 00

Total cash

Cheques

£

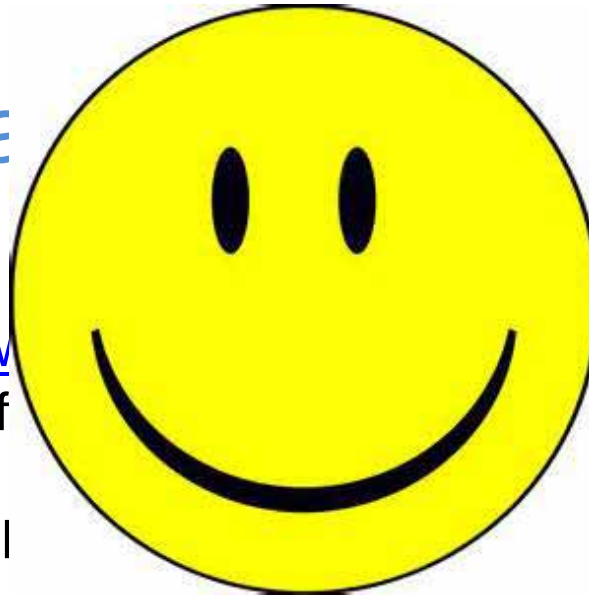
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Very grateful thanks to:



National Energy Study 1 (2013-14)



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Two reports available

- Part 1 – A study of
- Part 2 – Providing energy use in the l

available as free PDFs from

www.sustainablehomes.co.uk

in domestic energy use
ours: Understanding

National Energy Study 2 (2014-15)

A further study of residents energy use, using more detailed information about the expected thermal properties of their homes.

530 homes - running from December 2014 to June 2015



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Energy Study

Bill Wright

bill@sustainablehomes.co.uk



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