Environmental *Change* Institute

Finding the fuel poor and framing better policy

ONE lecture 23 January 2024

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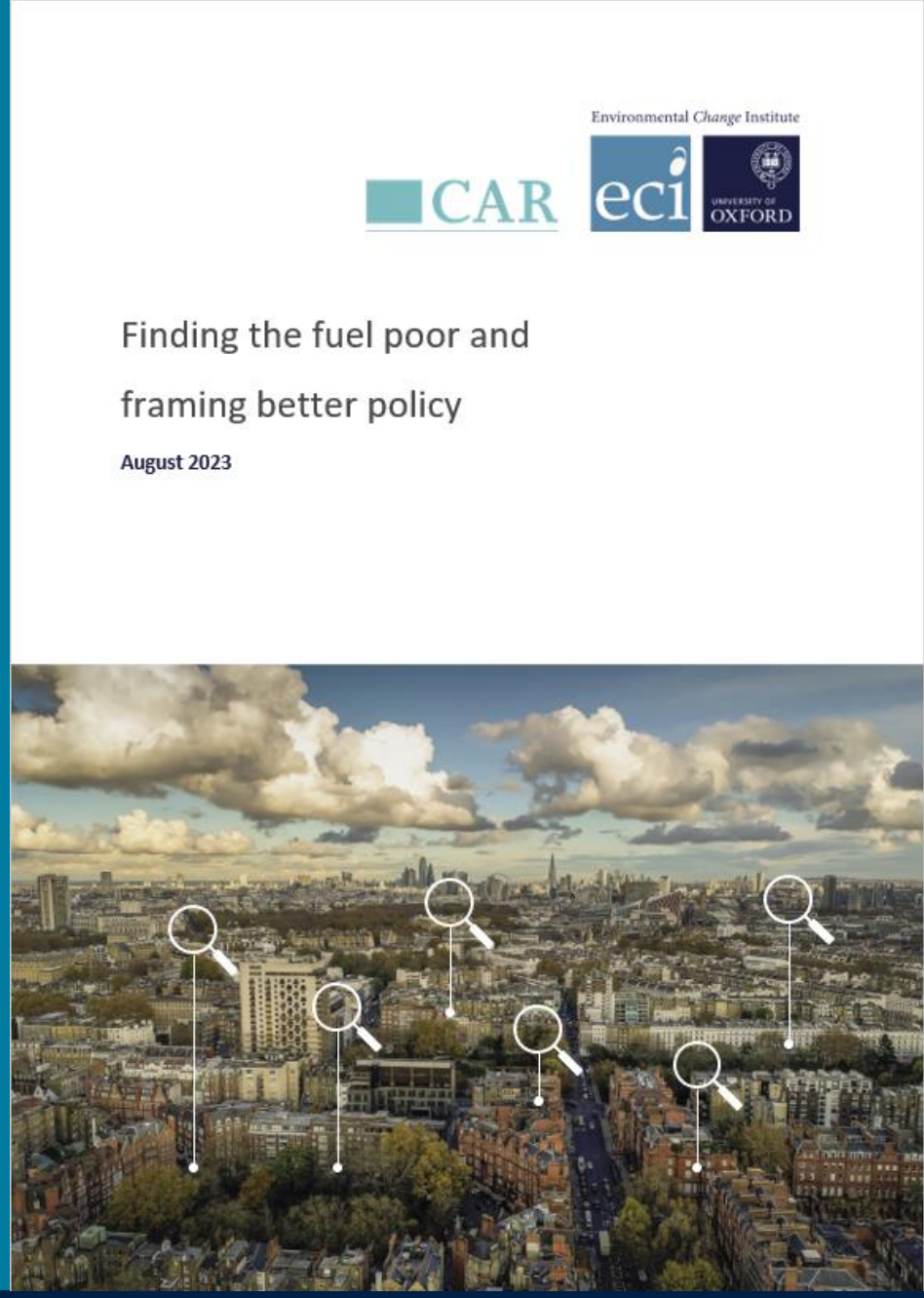
(based on research with Jason Palmer, Nicola Terry and Uttara Narayan)



Background/context

- Clear consensus that fuel poverty is getting wider and deeper – and a major policy deficit
- The #8 energy supplier, Utilita, had good access to data from smart meters
- Objectives: explore how smart prepay customers have been affected by price rises and government grants, and how to support this winter (2023/24)

Prepayment meter users – existing research

South Africa and the UK are the two countries where PPM technology is most prevalent

More than 4 million UK households have one or more prepayment meters (>15%)

A nationally representative poll showed 86% of customers chose this method of payment; a minority were switched to it as a result of debt

PPM users often not represented in research - e.g. only 1% of Smart Energy Research Lab households have PPMs - missing evidence

Pros and Cons of prepayment meters (customer point of view)

Pros:

useful way to budget and control expenditure, to avoid going into debt, or to pay back a debt to the energy company over a manageable period, instant feedback

Cons:

significant seasonal variations in energy expenditure, higher costs per kWh (recently 'banned' in the UK), customers who run out of credit 'self-disconnect' from energy supply = energy insecurity, difficult to top-up (non-smart meters only)

Evidence: "despite its drawbacks, prepayment metering remains a popular payment method among consumers"

Self-disconnection & self-rationing

Ofgem defines self-disconnection as something which “occurs when customers experience interruption to their gas or electricity due to lack of credit on their prepayment meters.”

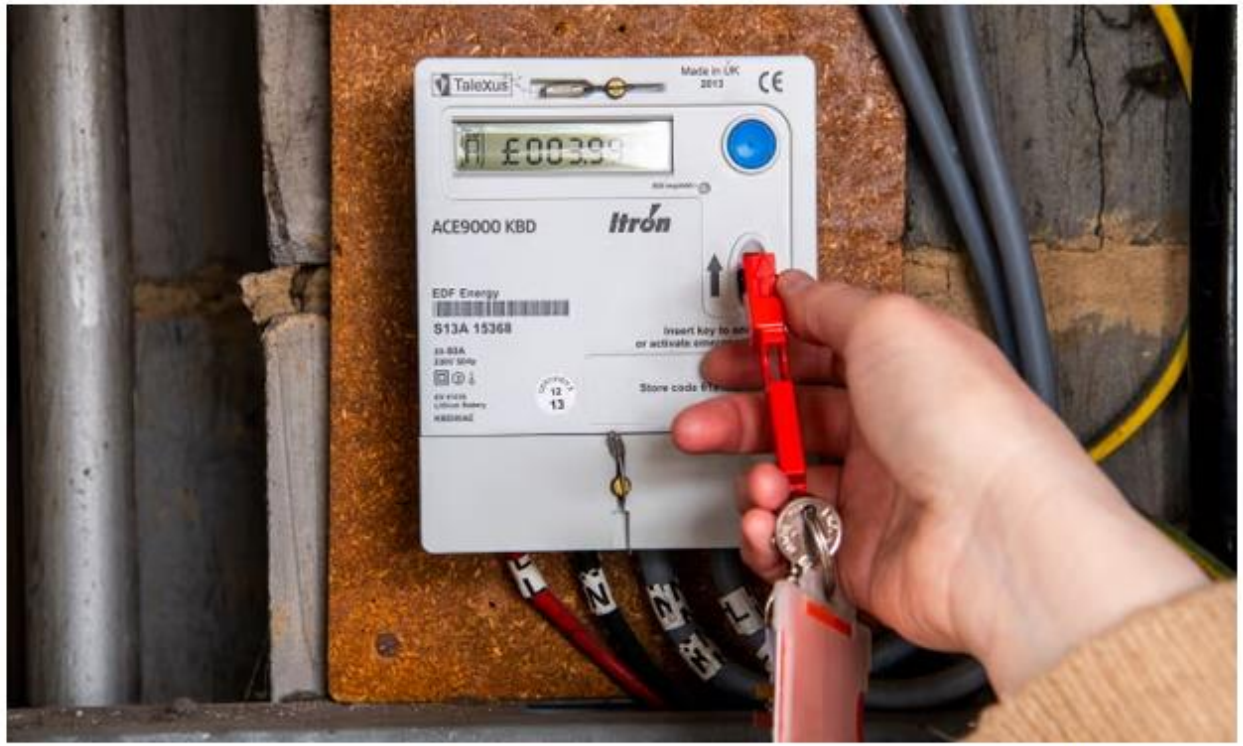
Disconnection has serious impacts on mental and physical health. 63% of prepayment users who had disconnected in the last year said that disconnection had had a negative impact on their mental health (Citizens Advice, 2023). Nearly half (47%) reported a negative impact on their physical health.

Closely related to this is self- rationing, where customers may deliberately limit their energy usage to help their credit last longer, or save money for other essentials.” (Ofgem 2019:33)

This cannot be determined from smart meter data alone.

More than 2m UK prepay meter users to be cut off from gas or electric this winter

Citizens Advice anticipating busiest winter ever for helping people who cannot afford to top up



Energy suppliers were banned last year from force-fitting prepayment meters for elderly people and those with infant children. Photograph: Jill Mead/The Guardian

Source: The Guardian, 23 Jan 24

Summary of ongoing energy-related income support measures

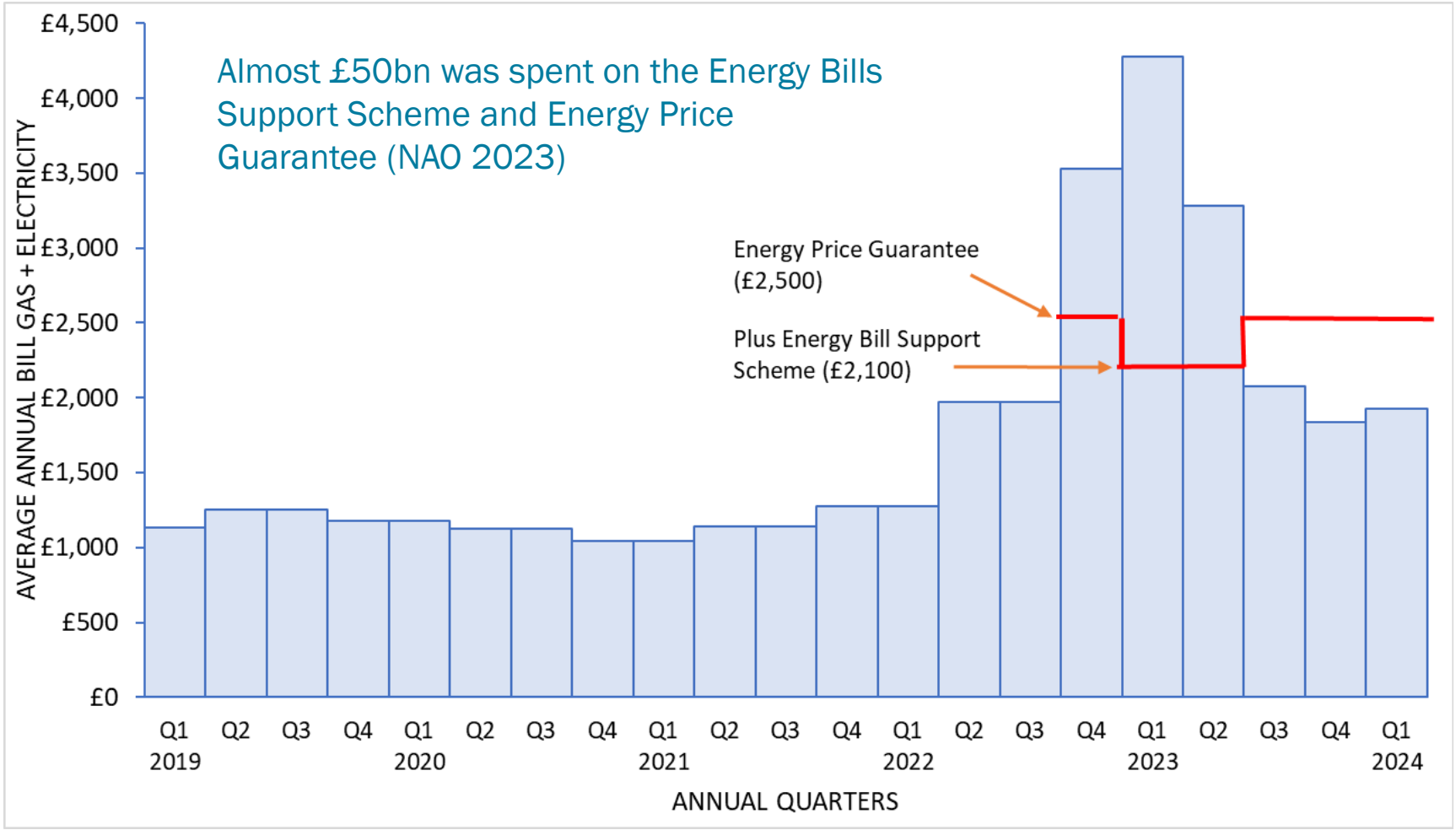
Name of scheme	Countries	Amount	Eligibility	Payment type
Cold Weather Payment	England, Wales and Northern Ireland	£25 per week	People on certain MTBs, paid after a week of weather below 0°C	Automatic, paid to bank accounts, within 14 working days of cold weather.
Winter Heating Payment	Scotland	£50 annually	People on certain MTBs	Automatic, paid to bank accounts
Warm Home Discount	Great Britain	£150 annually in 2022	People on certain MTBs 2.2 million recipients in 2022	Discount on electricity bills, PPM credit / voucher. Automatic in England & Wales, by application in Scotland
Winter Fuel Payments	Whole UK	£150-300 annually	All pensioners, 11.3 million in GB, 2021-22	Automatic, paid to bank accounts

Additional energy price support, 2022/23, all GB households

Name of scheme	Amount	Payment type
Energy Bills Support Scheme (EBSS)	£400	Paid via 6 monthly payments direct to bills / smart prepayment meters from October 2022 to March 2023. Traditional PPM customers got vouchers through the post.
Energy Price Guarantee (EPG)	Limited Energy Price Cap to £2,500 per annum in GB, £2,100 in NI	Customers faced lower than market price unit costs per kWh of gas and electricity, either through bills or via meters. From 1 October 2022.

Source: (NAO 2023)

Ofgem price cap for average gas and electricity dual fuel customers, GB, Q1 2019 – Q1 2024

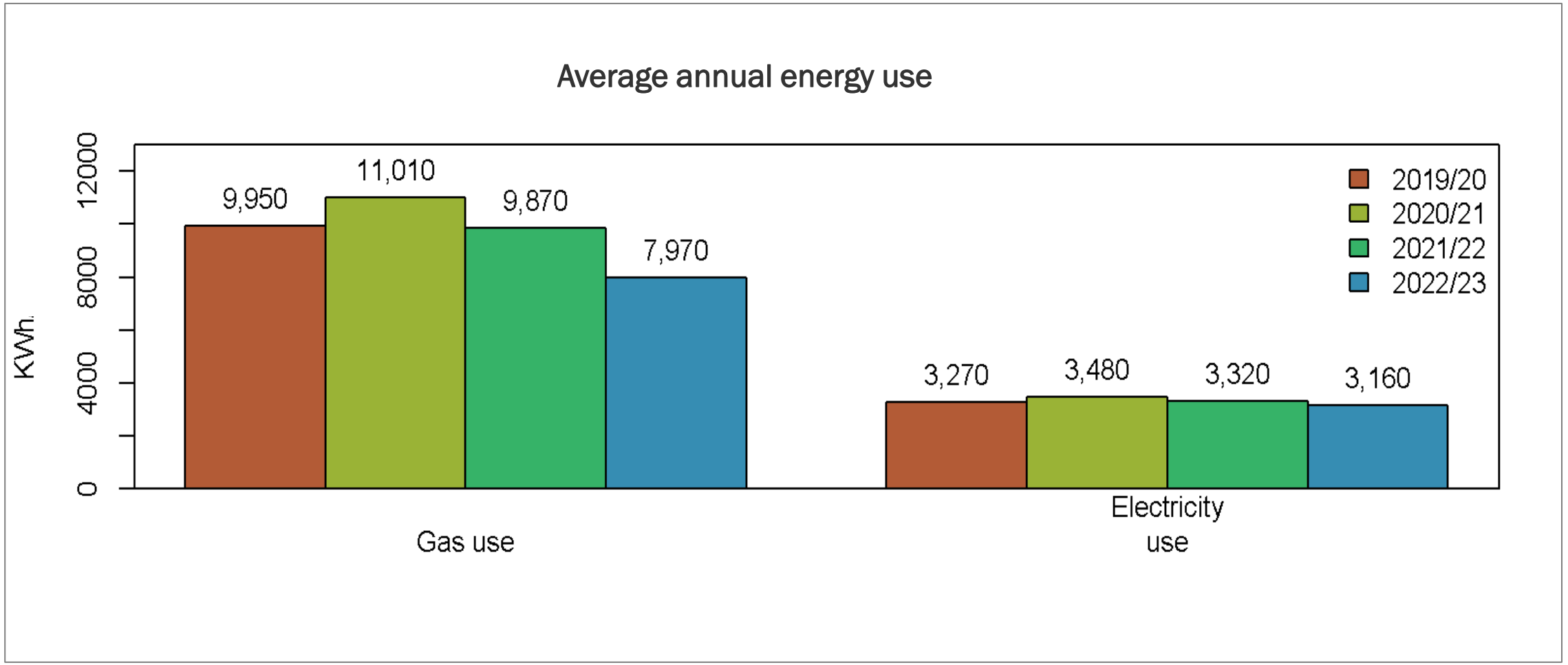


Our research, ECI and Cambridge Architectural Research (CAR)

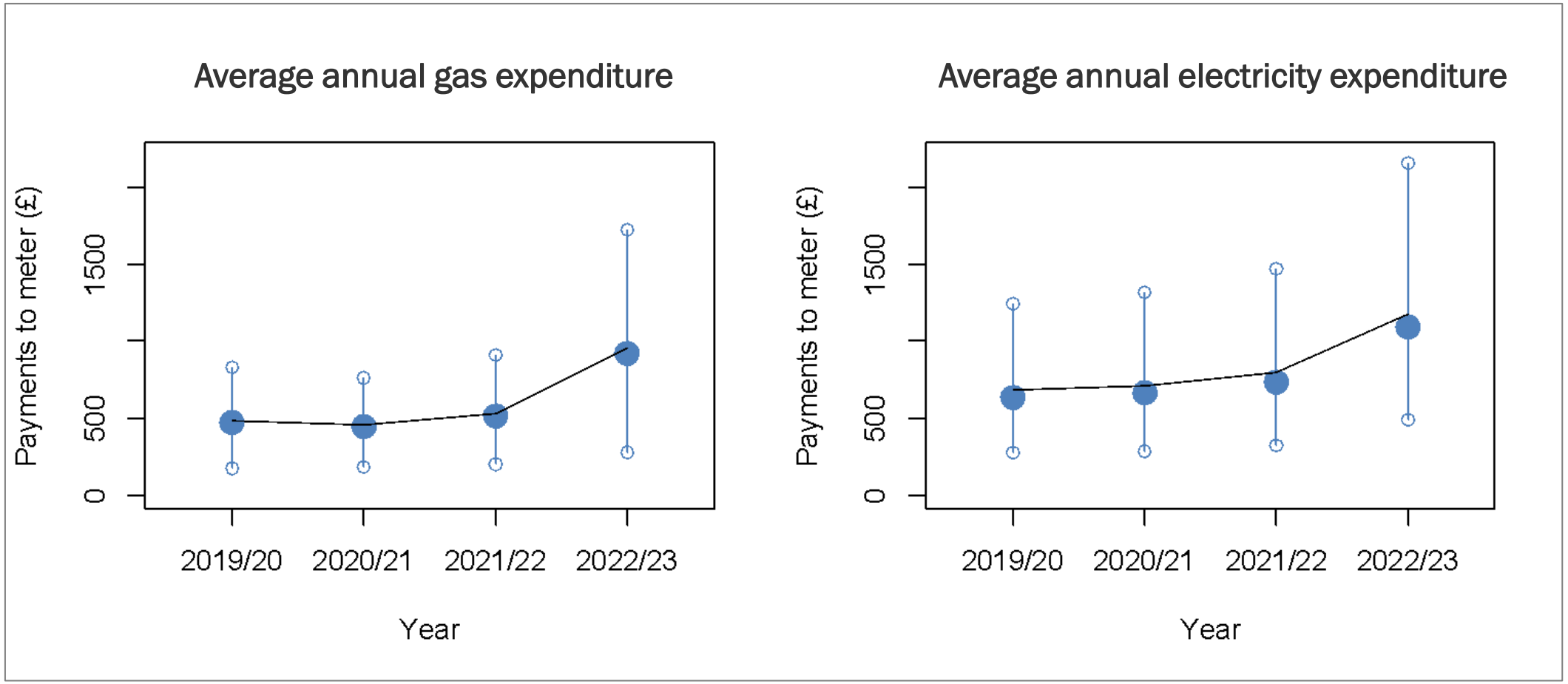
Finding the fuel poor and framing better policy

- 28,728 customer records, gas and electric smart ppm, and EPC data
- January 2019 – May 2023
- Know about: energy use, payments, self-disconnections, PSR, WHD
- Don’t know about: income, household members, when vacant

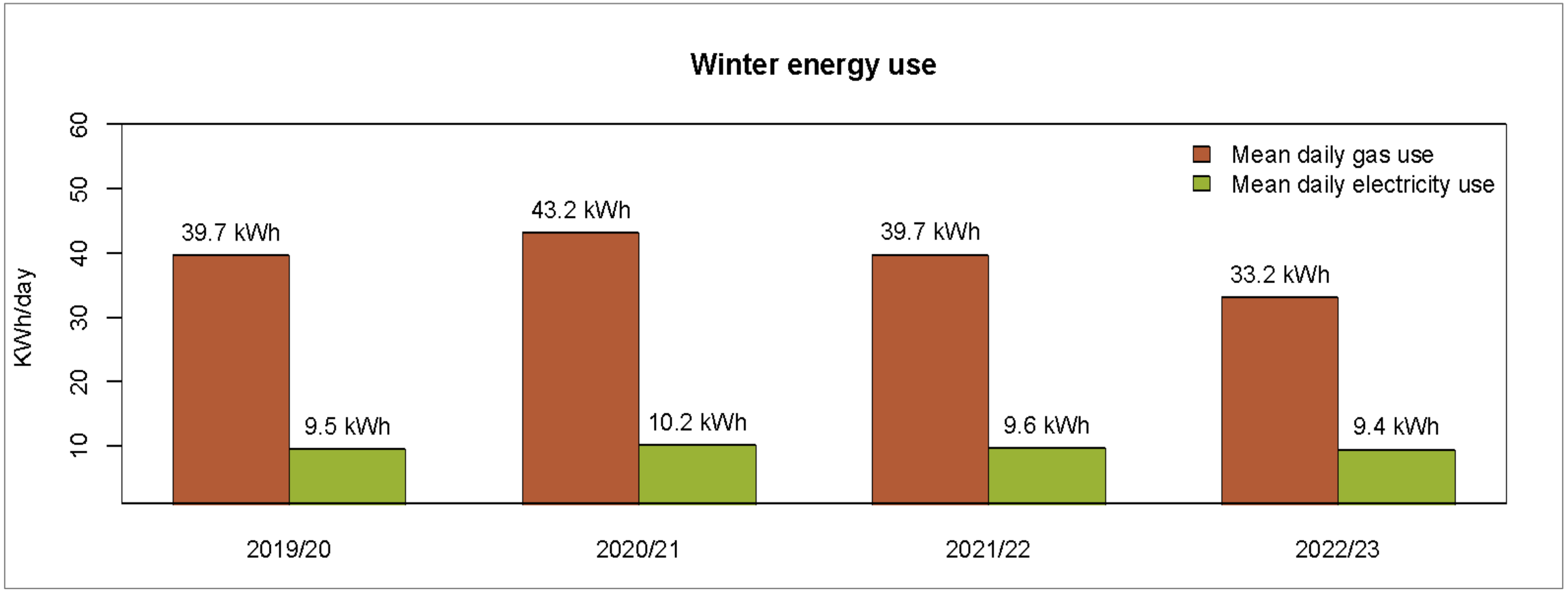
Energy use per household drops



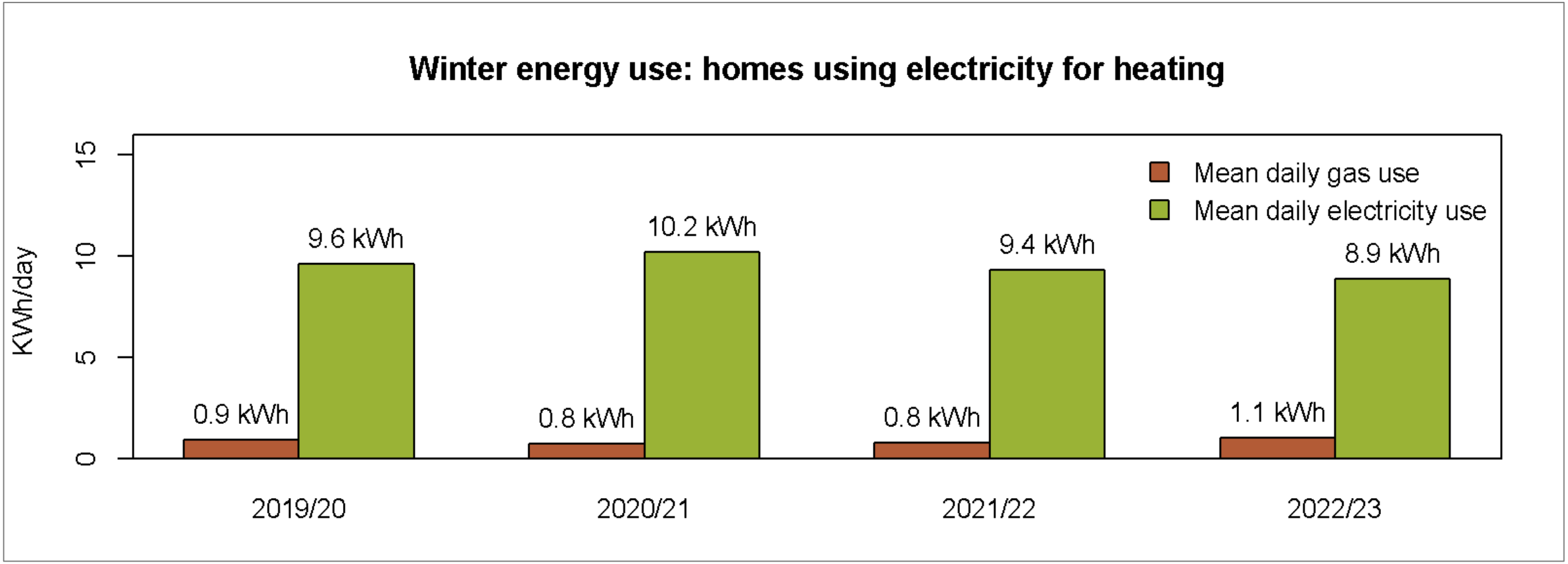
But expenditure increases



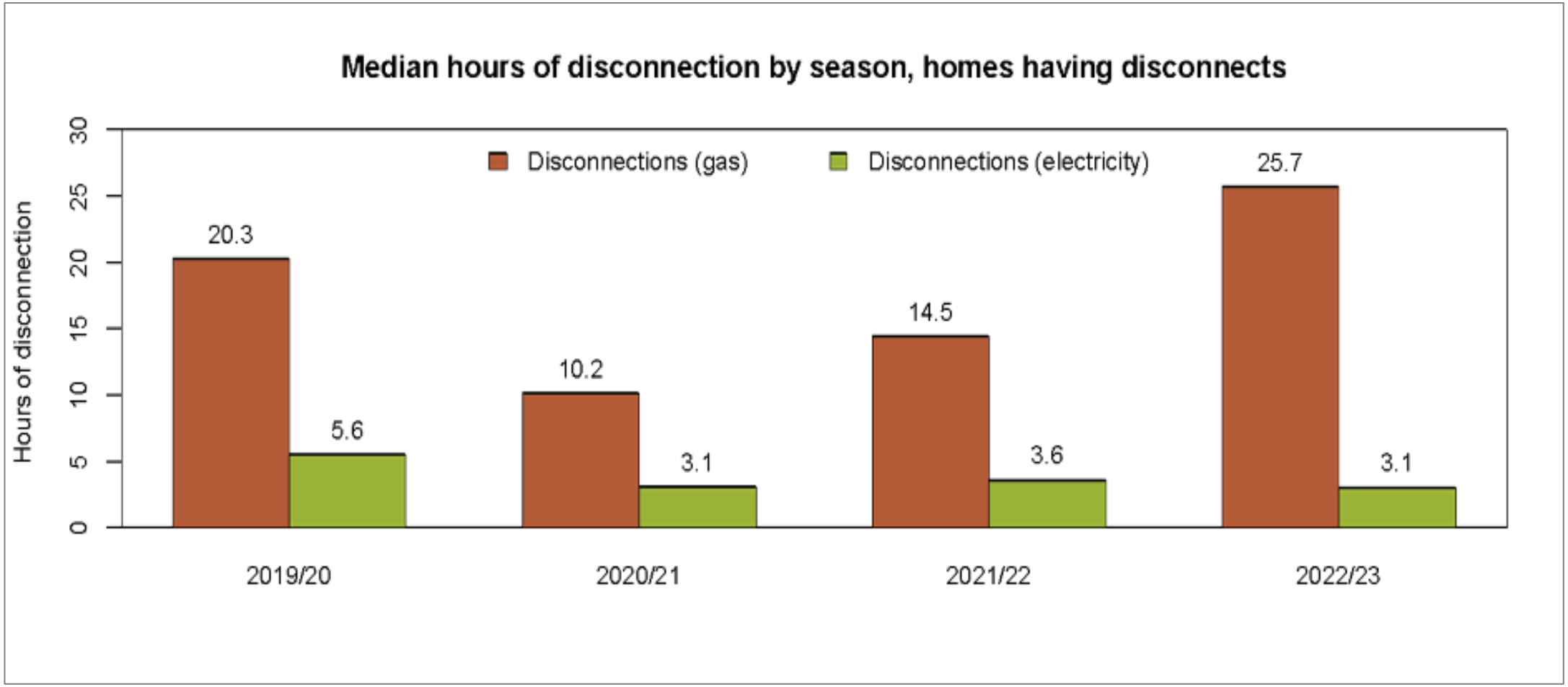
Winter energy use, whole sample



Winter energy use, with electric heating



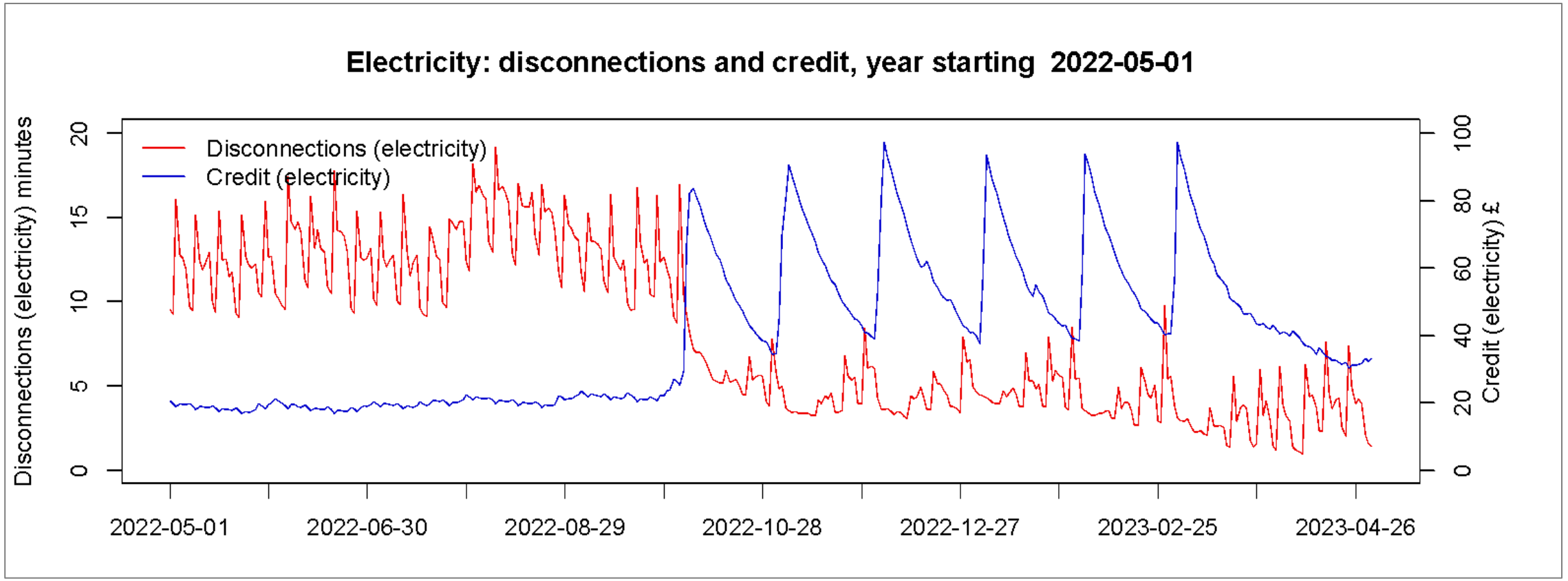
Self-disconnections – how long?



Households self-disconnecting pa

Group	Percentage	Median (interquartile range) – total hours of disconnection over the year for those self-disconnecting	Median (interquartile range) - number of disconnections over the year for those self-disconnecting
All	63%	28 (5.3 – 164)	5 (2 - 17)
Age 65+	31%	7.7 (2.3 –42)	2 (1 - 5)
Priority service register	66%	41 (6.0 – 55)	7 (2 - 23)
Switching to electricity for heating*	63%	63 (6.7 – 965)	3 (1 - 10)

Effect of EBSS £400



Energy Cost Support Scheme – ECSS why it is needed

Household unable to afford adequate energy services

- Focus on heating, major use of energy
- Also hot water, lighting, appliance use

Cap: lowest October 2020 @ £1042, when 3.16m fuel poor in England

Now £2023 from January @ same TDCV ≈Doubled since Oct 2020

Government help with energy costs ended 31 March 2023

Our evidence – fuel poverty getting worse

Cost of Living vs fuel poverty

- Government supporting 8m households with Cost of Living via MTB
- Into bank account for food, rent, school uniforms, getting to work
- Virtually none used for energy in the home

- To reduce fuel poverty help through energy accounts
- Directly and automatically

Cash or unit rate?

- Energy supplier cannot give cash/lump sum to a legacy prepayment meter
- So fuel vouchers winter 2022-23 for £400 EBSS payment
- 4.5m households on ppm, half still with legacy = 2.25m
- 13% vouchers uncashed = 325,000 households (£130m)
- Supplier can remotely alter the unit rate, all tariffs, including legacy ppm
- Easy for supplier to do in 5 weeks, with every new cap
- Our recommendation

How much?

- EBSS put £400 onto electricity bills
  - Halved self-disconnection with smart ppm users
  - £400 is not sufficient, so £500 for electricity
- Matched by £500 for gas ≈ £1000 in total
- Lowest cap in October 2020 was £1042
- Now cap is £1928 (£2023), approx. £1000 higher
- Unit rates from October 2020 would halve energy bills

Proposal

- Eligible households pay:
  - 3.5p/kWh for gas
  - 12.5p/kWh for electricity
- October 2020 there were 3.16m fuel poor households in England
- These rates would relieve the pressure, not eliminate fuel poverty

Who is eligible?

- Work from what the supplier knows:
  - All on a prepayment meter 4.5m
  - WHD recipients getting £150 3.0m
  - Where electricity is the main metered fuel, but using < 4200kWh (old Ofgem Ec 7 rate) 1.0m
  - On PSR with medical condition 1.0m

  - Some double counting so about 8m households

Our proposal – for all fuel poor

Supplier puts the fuel poor onto October 2020 cap prices:

- 3.5p/kWh for gas
- 12.5p/kWh for electricity

Halves the amount they should pay: from £2000 to £1000

Helps with fuel costs, directly through energy account

Aim for 8m households x £1000 = £8bn

Paid for by £8bn+ in the accounts for EPG and not needed, this FY

In future

- Improve targeting
- Fund through Green Power Pool – electricity from renewable sources cheaper than electricity from fossil fuels
- Fuel poor homes insulated and given heat pumps
- Then, each fuel poor household only using cheap electricity
- Fuel poverty under control

Outreach 1

Data received and cleaned early June 2023

Press release through Utilita 28 June – interview with Utility Week

Preliminary report 30 June – BB on Money Box 1 July

Report and PR 17 July before Parliamentary recess – Tina and UW

Caroline Lucas asks PMQ

23 August – submission to DESNZ select committee, written evidence

ECI press release 24 August – no responses

26 August – Scottish and English reports posted on CAR website, with a tweet ('X post') to publicise

Outreach 2

5 October – EFPC/BB meet Amanda Solloway, Minister for fuel poverty

16 October – presented to Committee on Fuel Poverty (CFP)

9 November – presentation to Catapult Energy group, + UCL

15 November - Adopted by EFPC as Emergency Tariff, for this winter

16 November – CFP write to Minister, supporting our work

29 November – FPRN debate FFP vs social tariff, RBT, free allowance

30 November – EFPC call with Ofgem, explained GPP

Conclusions

There has been insufficient research and policy attention paid to pre-payment meter users

This research has increased the evidence base and we will continue to build on this via journal paper(s) & other publications

Findings from this research will inform design of the sample for the Energy Demand Observatory & Laboratory (www.edol.ac.uk)

Good, evidence-based policy proposals with support from stakeholders are not necessarily adopted by government. A different government might be more receptive. Politics matters.

Our policy proposals can be improved e.g. more work on how smart meter data & energy companies can help target support payments swiftly to those most in need

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Thank you

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Research questions / topics

Are smart PPM users less likely to self-disconnect than traditional meter users (Utilita says this is the case – any other evidence?)

Develop thinking about use of smart meter data to help with targeting of future price support

Social tariff proposals, green power pool, future electricity market design – more research needed

Percentage of homes by EPC grade Utilita (where known) and English housing stock

	Number of cases (Utilita)	A/B	C	D	E	F/G
Utilita 2019/20	10,260	3.9	41.2	40.8	11.8	2.1
Utilita 2022/23	11,100	3.3	45.8	40.6	9.3	1.1
English housing stock, 2021	n/a	3.0	44.5	42.7	7.1	2.7

Source: DLUHC 2023