

Sustainability First and Fuel Poverty Research Network Committee joint response to DESNZ review of the Fuel Poverty Strategy – April 2025

Introduction

Sustainability First is an independent charity that promotes change in the water and energy sectors for a fairer, more sustainable future. We are passionate about protecting and repairing the environment and promoting fairness for all, including future generations. We do this by undertaking research, convening policy discussions, making complex issues accessible to engage the public, promote unheard and under-represented voices, and develop solutions to influence government policies, legislation, regulation, and business practices. We will always act as critical friends, holding companies, government bodies, and regulators accountable, in the public and planet's interests.

The **Fuel Poverty Research Network (FPRN)** is a charity, overseen by the FPRN committee, that brings together students, researchers, policymakers and other professionals concerned with fuel poverty. Fuel poverty is an urgent societal challenge. A robust evidence base is needed to inform effective measures that are targeted at those who need them and informed by what works. We support the development of a vibrant community that gathers evidence, informs policy, and advocates for action to reduce levels of fuel poverty and support vulnerable people to move out of, or away from, fuel poverty. We do this by providing funding, organising opportunities for discussion and debate, and disseminating and promoting the work of a diverse and international research community to share learning and opportunities. Whilst FPRN routinely seeks the views of the individuals and organisations that form its wider network, this particular consultation response represents the views of the committee of trustees and not necessarily the whole network.

Summary of response

- We support the retention of the 2030 fuel poverty target. While recognising the challenges, given current progress on improving fuel poor homes, we consider it important the government strives to meet this goal. We consider the target relatively modest when compared with its target of decarbonising the grid by 2030.
- We recognise the value of framing the target in terms of meeting a minimum energy efficiency standard, integral to the LILEE measure. We support the proposal to introduce a new affordability indicator and suggest the government also measures progress on this indicator.
- We consider the government should start work on developing a successor, more ambitious fuel poverty target beyond 2030. Options include an EPC B target as is the case in Scotland, a target based on the proposed affordability indicator or a target relating to the inclusion of low income households in the transition to net zero.
- We suggest the vulnerability principle takes more account of vulnerability trends. The ONS and specialist health organisations project substantial increases in certain vulnerabilities, such as people over 75 and 85, people with dementia, people with chronic or serious illness and people with respiratory disease.
- We are concerned that people on low incomes risk being excluded from the transition to net zero due to the high costs of installing low carbon heating and related ancillary measures and exclusion from new smart technologies, flexible services and gateway technologies such as batteries and smart meters. We also consider more research is required on how low income families actually use heat pumps and the role of advice to optimise their use.

- We propose a new ‘fairness’ principle is added to the new strategy to encourage equitable access to smart energy markets, with metrics developed to capture the extent of equity in the transition. We also suggest a principle of enforcement with respect to the quality of energy efficiency installations and minimum energy efficiency standards.
- We welcome the Government’s intention to provide a more precise definition of ‘reasonably practicable’. We consider it important this incorporates the health and wellbeing benefits of action to tackle fuel poverty.
- We propose the main priorities for improving the energy performance of fuel poor homes are the provision of sufficient funding to meet the target and improving the design and coordination of energy efficiency schemes.
- We describe several options for energy bill support, including a social tariff, reforms to the Warm Home Discount scheme and a minimum energy guarantee. We consider it important that support is provided to fuel poor households not in receipt of means tested benefits, as well as those in receipt. New data matching procedures could help make sure the former group receives support.
- We set out two approaches to improving access to the energy market. One focuses on making sure new energy products and services are based on clear principles of ‘inclusion by design’ and ensuring low income consumers have access to quality, local, independent energy advice and support. The other focuses on reforming energy market structures such that they provide a fairer deal to low income consumers. This includes action to reduce profit levels in the distribution, extraction and generation sectors of the market and reforms to the pricing of electricity.
- We consider access to quality, independent and local advice and support is essential to ensure low income households benefit from energy efficiency schemes and understand smart energy systems. Many low income households prefer face to face or telephone advice to digital advice. We note the Scottish government funds energy advice through home visits for certain vulnerable households.
- We propose the government improves its understanding of fuel poverty by making greater use of ‘lived experience’ research and carrying out an annual survey of fuel poverty researchers.

Response to consultation questions

1. Should the 2030 fuel poverty target be retained? Please explain your reasoning.

Yes, we agree with the reasoning in the consultation document that retaining the target would ensure that a consistent focus on upgrading the energy efficiency standards of homes occupied by low income households is maintained. We recognise that the target is challenging, as the consultation document sets out: fuel poverty rates have remained static on the LILEE measure due to the rise in energy prices in the early 2020s and the reduction in energy efficiency installations carried out since 2019.

However, the government has set itself more ambitious targets in other parts of the energy system, notably bringing forward the target date for decarbonising the grid from 2035 to 2030. NESO estimates that this will require an investment programme of around £40bn pa to expand the electricity network, build new generating capacity and strengthen distribution networks as well as bring forward innovations in dispatchable low carbon technologies such as carbon capture and storage (NESO, 2025ⁱ). By comparison, the estimated £18bn investment (of which up to £8bn could potentially come from private landlords) required to meet the 2030 fuel poverty target is relatively modest (NEA, 2024ⁱⁱ).

Furthermore, investment in tackling fuel poverty as part of a strategy to improve energy efficiency in all housing will have multiple benefits such as maintain public support for net zero policies, reduce pressure on health and social care services, support economic growth and help reduce some of the requirement for new generation capacity.

2. What are your views on an alternative fuel poverty target objective and what this objective should be?

We favour maintaining the current fuel poverty target, as stated above. However, we consider the government should consider adopting complementary objectives, such as reducing the number of people living in poor health due to cold homes (this would cover a wider cohort than the fuel poor). We also favour the government starting work on developing successor objectives beyond 2030. The Scottish government, for example, has a target of improving fuel poor homes to Band B by 2040 (Scottish Government, 2021ⁱⁱⁱ). A new target could also relate to the inclusion of low income households in the transition to net zero. We suggest discussion on a successor target starts now with a view to setting new statutory target objectives similar to the current fuel poverty target.

3. What are your views on the objective date? We welcome views on the target date for the current 2030 objective and any objective date for any alternative target which could replace or succeed the 2030 target.

We favour retention of the 2030 target date.

4. What are your views on:

A. retaining the Low Income Low Energy Efficiency metric as a measure of structural fuel poverty and as the official measure of progress to the statutory fuel poverty target in England?

We recognise the value of framing the target in terms of meeting a minimum energy efficiency standard, integral to the LILEE measure. We consider DESNZ should adopt a complementary indicator, based on the proposed 10% indicator, to further track progress on reducing tackling unaffordable energy bills.

The 2024 FPRN survey of researchers, carried out in conjunction with DESNZ, found that some respondents favoured retention of the LILEE metric, albeit with some modifications, while others felt it did not adequately reflect the many facets of fuel poverty, particularly with respect to energy affordability (FPRN, 2024a^{iv}). Several commented that while the former 10% indicator was felt to be overly sensitive to changes in fuel prices, the replacement indicator (first LIHC, then LILEE) was overly insensitive to fuel price changes and lacked face validity as a result. A number of respondents referred to other countries adopting several measures of fuel poverty and adopting policies to meet targets based on these separate measures; the UK government should follow suit (FPRN, 2024a, *ibid*).

Several respondents felt that the LILEE metric should not include the Warm Home Discount (WHD) within the fuel price element of the measure. While they recognised the contribution of the WHD to tackling fuel poverty, they considered this could be adequately reflected in the income element of the measure. One respondent commented that this would also negate the need for a separate Fuel Poverty Energy Efficiency Rating (FPEER) scale (to EPCs). This would facilitate comparison of fuel poverty policies with a wide range of other policies based on EPC ratings. Furthermore, unlike the FPEER scale, EPCs are widely understood. Several respondents commented on the need for reform of the EPC methodology (the survey was carried out before the government's consultation on EPCs) (FPRN, 2024a *ibid*).

B. Whether to adopt an additional indicator to monitor the impact of energy prices on the affordability of energy?

Many respondents to the FPRN survey advocated the adoption of an additional indicator, with many favouring the 10% measure (After Housing Costs, equivalised incomes) (FPRN, 2024a, *ibid*). This suggests strong support from the research community for the Government's proposal to adopt this measure. The Government's undertaking to provide detailed breakdowns of the indicator, similar to those for the LILEE indicator, is also welcome.

C. the form of an energy affordability indicator, including whether this should include an income constraint and considerations on the basis on which to determine unaffordable energy requirements?

Several FPRN survey respondents supported the Scottish Government's use of 90% Minimum Income Standard (MIS) as an appropriate income constraint. The Scottish Government's review of its fuel poverty definition provided detailed evidence to support the use of this threshold (Scottish Government, 2017^v). In brief, it acknowledges other essential costs, such as childcare, disability and care, influence access to affordable warmth and is based on a robust, independent assessment of what constitutes an acceptable standard of living.

Sustainability First also made the case for defining minimum energy standards and drew parallels with the Welsh Government's minimum digital living standard (Welsh Government, 2022^{vi}). The setting of a minimum energy standard would benefit from a better understanding of how much electricity/heat is enough for people to live healthily and to participate with dignity in society.

A 10% indicator with a 90% MIS threshold would also allow some comparison with the Scottish Government's fuel poverty statistics. While there are other differences between the UK and Scottish Governments' measures, such as different temperature standards, they would allow some degree of comparison between the two countries. Sustainability First's work for SGN found strong support for comparable fuel poverty statistics (Sustainability First, publication forthcoming). It was felt this would allow the company to compare the impact of its fuel poverty programmes in the two gas network regions it covered (Southern England and Scotland). Other organisations carrying out fuel poverty work in both nations are likely to similarly welcome the ability to compare fuel poverty statistics across the two nations.

Several FPRN survey respondents also felt it would be useful for the UK government to work with European nations in developing a pan-European fuel poverty measure (FPRN, 2024a, *op. cit.*).

The original 10% definition of fuel poverty was based on Brenda Boardman's 1988 research which found that average household spend on fuel accounted for 5.1% of average income. She also found that the lowest three income deciles spent on average 10% of their income on fuel. She therefore proposed defining fuel poverty as those that spent twice the average spend on fuel (Boardman, 1991^{vii}). The government later adapted this 10% definition to reflect required fuel costs, rather than actual fuel costs. However, it did not equalise the income element, as is common practice in other poverty statistics.

The current use of After Housing Costs and equivalised incomes in both LILEE and the proposed 10% affordability indicator is therefore welcome. However, there is potentially a case for adopting an indicator based on twice mean fuel costs, rather than the fixed threshold of 10%. A parallel could be drawn with the international agreement to base the poverty threshold for individual nations on 60% of mean AHC income within each nation – a threshold agreed after extensive discussion and consultation with researchers and other specialists. A potential European measure of fuel poverty could be based on twice median energy expenditure within each nation,

albeit one based on actual, rather than required fuel expenditure (this would reflect practical expediency, given that few nations have required fuel expenditure data).

5. What are your views on adapting or implementing the Worst First principle, in order to maximise the number of fuel poor homes brought to Band C while ensuring that the worst homes are not left behind? Please provide any supporting evidence.

We support the ‘worst first’ principle, although note the consultation document’s comment that the number of fuel poor households in Band F and G has remained at 5.9% since 2014. The document suggests that many of these homes could not be upgraded due to technical or cost constraints. We consider more research is required to explore this issue. For example, it may be the case that homes could not be improved to Band C cost effectively. However, it may be possible to improve homes to Band D while other forms of support, such as income measures, are provided to reflect the higher fuel costs of these homes.

Research could also establish the extent to which the ‘worst’ homes also required wider home repairs, such as new pointing, replacement guttering, electrics upgrading, replacement window surrounds etc. In general, we consider much more research is needed on the association between poor energy efficiency standards and wider home disrepair.

With respect to the consultation document’s request for views on the balance between breadth and depth, we note that there are significant costs associated with finding and administering energy efficiency works in fuel poor homes. These costs can be duplicated if programmes focus on breadth only to return to the same homes at a later date to deliver further improvements, resulting in further search and admin costs. We understand that the requirement for ECO4 to carry out works that resulted in two SAP band improvements was informed by a drive to get ECO to focus on depth rather than breadth, as well as reduce duplicated search and admin costs. However, this led to a focus on larger, often rural homes with proportionately less help going to fuel poor households in smaller terraced, flats and urban homes, despite the latter representing a large part of the fuel poor population. There is also evidence that ECO was poorly suited to this form of delivery (E3G, 2024^{viii}).

These observations suggest that ‘worst first’ requires programmes to focus on depth rather than breadth, i.e. on more expensive improvements. However, it is also important that the full spectrum of fuel poor homes receive help with many only requiring ‘shallower’, less costly improvements, i.e. breadth. These conflicting aims could potentially be addressed through designing programmes that achieve both objectives by providing cost guidelines on the relative proportions spent on deep and shallow retrofits. It also suggests greater blending and synchronicity between ECO and publicly funded programmes.

6. What are your views on how we could better define or implement the cost effectiveness principle? Please provide any supporting evidence.

While we recognise the importance of ensuring programmes are cost effective, we consider it important that this is not at the expense of having installations of adequate quality. The recent finding that around 60,000 measures installed under ECO are substandard, with several installers being placed under special measures, is deeply concerning (DESNZ, 2025^{ix}). The work required to remediate or re-do these works is extremely expensive and not remotely cost effective. It also suggests that current procedures under PAS 2035 need more effective policing. CSE, for example, argues that retrofit companies should not be allowed to assess their own installations, i.e. the Retrofit Coordinator should work for an independent organisation rather than the installer (CSE, personal communication).

7. What are your views on how we could better define or implement the vulnerability principle? Please provide any supporting evidence.

Sustainability First has carried out a number of projects for energy companies designed to help inform their vulnerability and fuel poverty strategies. The work has involved profiling the distribution and extent of vulnerability and fuel poverty in company areas; providing a gap analysis of numbers currently receiving help, for example through Priority Service Register (PSR) services, and the potential number eligible for help; and producing projections of vulnerability and fuel poverty trends into the short, medium and where possible long term future.

The consultation document comments that 67% of fuel poor households contain at least one member who meets the current vulnerability criteria (65 or older, below school age, living with a long term health condition). Our work for fuel companies suggests the figure is not much lower for all households, not just those in fuel poverty. The recent Ofwat consultation on Priority Service Registers suggests that on average 52% of English and Welsh households are potentially eligible for at least one PSR service (Ofwat, 2024^x). The figure is likely to be very similar for those eligible for fuel company PSR services, given the similarity in the type of households eligible for both water and fuel company PSR services.

The extent of vulnerability has inevitably resulted in companies assigning different levels of priority to consumer groups, for example assigning higher priority to those over 75 than those between 65 and 74, given the substantial increase in health and disability vulnerabilities associated with the older age cohort. The risk of dementia, for example, increases significantly with the older age cohort. It is important that fuel poverty policy recognises this given that dementia represents the third largest factor contributing to excess winter deaths (after respiratory and cardiovascular disease (ONS, 2019^x)).

We welcome the consultation document's emphasis on improving the integration of fuel poverty and health policy, given the impact of cold, damp homes on health. The FPRN survey of researchers referred to robust evidence that energy efficiency and heating interventions have a positive health and well-being impact, including better self-reported health, reduced high blood pressure and concomitant cardiovascular strain, reduced asthma (which led to fewer days off work and school), reduced falls and reduced use of health care services, particularly when interventions targeted people with existing health conditions. The survey also referred to evidence that energy interventions are cost effective with respect to wider social benefits; but this was less clear cut with respect to the use of health services alone. However, evidence also stresses the importance of retrofits including ventilation and heat recovery measures where necessary; failure to do so can result in adverse health effects. Sub-standard installation and technologies not functioning properly can also result in minimal or adverse health effects (FPRN, 2024a, op. cit.).

The consultation document comments that there are difficulties identifying and targeting households with cold/damp related health problems due to data protection issues. We note, however, that practice does vary considerably between health bodies in different parts of the country, with some taking a more restrictive approach to their interpretation of data protection than others (CSE personal communication). We consider the government/Information Commissioner should provide guidance to health organisations on data protection to help engender uniform practice, for example where data sharing will result in a large proportion of patients benefiting from a tangible improvement to their circumstances.

We also note that some projects have had much more impact on targeting people with cold related health conditions when the support worker is jointly employed by the project and a NHS service, such as hospital discharge. Use of an NHS email address appears to open many gateways.

With respect to targeting fuel poor households with health conditions, some GP practices have used data on patients with respiratory or cardiovascular diseases to inform them of potential help from a fuel poverty project, e.g. Warm Homes on Prescription. Others have used frequent health service user data, e.g. highest 5% (anecdotal evidence from local Citizens Advice offices). An important lesson appears to be use of practice managers, social prescribing workers and district nurses rather than GPs themselves in making referrals (although some local Citizens Advice offices have managed to engage local GPs).

We consider there are also important lessons for integrating health and fuel poverty policies from other countries. The WELLBASED project final report includes detailed recommendations for integrating policies targeted at individuals, communities, nations and pan-national institutions such as the European Union (WELLBASED, op.cit). See also the FPRN's report of the 2024 Right to Energy Forum event in Brussels which reflects on international examples of key issues for both fuel (energy) poverty and health inequality policies (FPRN, 2025^{xiii}).

We suggest that the revised fuel poverty strategy should also take more account of vulnerability trends. Sustainability First's work on projecting vulnerabilities, based on data from the ONS and specialist health and disability organisations, suggests substantial increases in certain vulnerable groups. For example, the number of disabled people is projected to increase by 28% by 2030, 43% by 2035 and 51% by 2040 (Sustainability First, publication forthcoming). Similarly, the number of people over 85 is projected to increase by 25% by 2030, 57% by 2035 and 68% by 2040. There are also substantial growths in people with dementia, diabetes, chronic or serious illness and respiratory disease. The only indicator that is projected to decline is people with heart conditions. Children under the age of 5 is expected to remain roughly the same over the short to long term (Sustainability First, *ibid*).

One final observation is that the Fuel Poverty Strategy's definition of vulnerability differs from the approach taken by Ofgem and other utility regulators. In brief, the former is based on a static definition of specific groups while the latter uses a more dynamic definition based on a recognition that for many people the risk of both falling into and out of vulnerability can change over time ('transient vulnerability') while for others it can be more long term (Ofgem, 2024^{xiii}).

How to better track the rates and impacts of fuel poverty on households with specific vulnerabilities

The government's existing fuel poverty statistics provide useful information on the extent of fuel poverty among households with specific vulnerabilities, although we consider more detailed breakdowns could be provided for certain groups, e.g. specific disabilities, different ethnic groups. The intention to publish breakdowns on the proposed affordability indicator will also be useful for tracking affordability issues among different groups. Future updates of the English Housing Follow Up Survey could also focus on households with specific vulnerabilities. This would be particularly valuable given the longitudinal nature of the Follow Up Survey.

Supporters of the Fuel Poverty Research Network often carry out detailed studies of fuel poverty among households with specific vulnerabilities. In our response to Question 18 we suggest DESNZ works with FPRN to carry out a regular annual survey of fuel poverty researchers. This could help capture studies that focus on particular fuel poor groups.

8. What are your views on how we could better define or implement the sustainability principle? Please provide any supporting evidence.

How the transition to net zero can be best implemented for fuel poor households

We are concerned that cost of installing low-carbon heating in fuel poor homes is out of reach for the vast majority of fuel poor homes. Research undertaken by Energy Systems Catapult as part of the Electrification of Heat trials reported a total cost per property of £14,800 including the heat pump unit, additional measures (e.g. thermal storage) and installation (Energy

Systems Catapult, 2022^{xiv}). When additional measures were excluded, the average cost of a low temperature air source heat pump installed through the project was £9,000, but with a minimum cost of £5,300 and a maximum cost of £19,600 – the latter over £10,000 above the average. A wide range of costs is also reported in another study by the UK Energy Research Centre (UKERC, 2023^{xv}) and research by E3G has also highlighted the higher upfront costs for retrofitting larger, leakier, detached properties in rural areas with a heat pump (E3G, 2023^{xvi}).

These costs are unaffordable for fuel poor households and will continue to be even if government policies such as the Clean Heat Market Mechanism reduce the cost of heat pumps. This is not just because of their low household incomes, but because they are also unlikely to have sufficient savings to afford the upfront capital costs. It is therefore essential that fuel poverty schemes fully fund the installation of heat pumps, including upgrading pipework, installing new radiators and fitting hot water tanks. Schemes must also provide advice on the optimal use of low carbon heating systems after installation.

We also have concerns that many low income households typically heat their homes intermittently or ration use to cut costs. These heating behaviour patterns can result in rocketing fuel costs for those with heat pumps, potentially causing some to stop using them altogether and instead rely on single point heaters. Research presented by Kate de Selincourt at a recent FPRN conference highlighted some of these problems (FPRN, 2024b^{xvii}). In-depth personal advice before, during and after installation may help address this; however, we suggest more research is required on how low income households currently use heat pumps, whether air to air heat pumps or even efficient storage heaters might provide a more suitable alternative and the undertaking of real time, rather than modelled, analysis of the impact of heat pumps on household fuel costs.

The reduction in electricity prices is also key to making the transition to low carbon heating more affordable (see also response to Q13 on energy markets). The Chartered Institute of Housing (CIH) informed us that a survey of social housing providers found that many providers were reluctant to install heat pumps in social housing until the price of electricity reduced significantly (CIH, personal communication). They were also concerned that installing heat pumps would increase tenants' fuel bills unless internal piping/radiators were optimised and measures taken to reduce energy demand.

Some organisations have called for some of the policy costs currently levied on electricity bills to be transferred to gas bills. However, many are concerned that gas heating costs are projected to already increase as more households transition away from fossil fuels. Sustainability First has carried out in-depth analysis of the potential impact of stranded assets on consumers' bills and raised concerns that gas heating will become more concentrated among low income and more vulnerable consumers least able to afford such higher costs.

Most of the costs in owning and running a gas network (investment, operational) are understood to be relatively fixed costs linked to ensuring safety. Many of the stakeholders Sustainability First interviewed for its research were worried that as more and more people switched to heat pumps and heat networks the costs of maintaining the gas network would be spread over a declining gas customer base with the potential for the most vulnerable to be hit hardest by rising prices. This was seen to be a risk that might start to hit during RIIO-3. The risks to gas customers of a declining gas network need to be better understood.

A number of stakeholders also expected there to be a steady decline in choice of gas energy deals, products and services. This is because gas suppliers will leave the market and focus on 'able to pay' electricity customers with more disposable income and with relatively lower debt risk. There's expected to be less competition and innovation in gas markets which in turn could result in higher prices and poorer customer service.

Stakeholders also raised the risk that gas customers will effectively be locked into more expensive fuels. Hydrogen is expected to be more expensive than electricity. It is also unclear how much alternatives such as biogas might cost. Gas customers may not be able to afford the upfront costs to switch away or may be confused by how to go about decarbonising their energy. At the same time boiler servicing and maintenance costs are likely to go up as parts become more scarce and qualified gas safety engineers increasingly retire.

The role of ‘fabric first’ in alleviating fuel poverty

Research carried out by the Passivhaus Trust makes a strong case for continuing to maintain a ‘fabric first’ approach (Passivhaus Trust, 2024^{xviii}). Not only does this reduce the sizing of heat pump installations required (and thus costs) it also makes it easier to keep homes warm, reduce draughts, reduce the likely incidence of damp and mould (providing ventilation is also installed) and hence reduce the risk of common health conditions associated with these issues.

‘Fabric first’ is central to the government’s approach to minimum energy efficiency standards in both the private and social rented sectors. We welcome the government’s intention to raise minimum standards although the problem is much more acute in the private than social rented sector. However, the FPRN survey raised concerns about lack of enforcement of existing standards often due to the severe cuts to local authority environmental health departments over the past 15 years (FPRN, 2023^{xix}). Similarly the Fuel Poverty Committee has commented on the mismatch between the small number of exemptions granted to private landlords and the actual number of private rented homes still with F and G ratings (Committee on Fuel Poverty, 2024^{xx}).

How smart technologies could be used to support fuel poor homes

Sustainability First has carried out research with key stakeholders on the transition to net zero (publication forthcoming). A number expressed concern that current trends are leading to a polarised energy market. They referred to suppliers targeting wealthy consumers with Electric vehicles (EVs), heat pumps and smart appliances with favourable tariffs and flexibility services.

CSE’s smart and fair research backs up this concern (CSE, 2024^{xxi}). It found that existing smart energy technologies and tariffs primarily cater to affluent households with high energy use and expensive low-carbon technologies, offering them greater financial savings. For example, suppliers are offering EV owners the lowest unit rates and standing charges across their entire domestic energy supply—rates that non-EV owners cannot access.

This creates significant disparities: for instance, as shown below, an EV owner using an electric mobility scooter can charge it for half the price of someone without an EV. Similarly, suppliers have refused access to the EV tariffs to night storage heater consumers, despite these consumers offering similar demand response flexibility to EV owners. CSE also found that many suppliers do not offer smart meter tariffs to prepayment meter consumers. Almost all new smart meter products require smartphone activation.

CSE’s *Demand Flexibility Service (DFS)* evaluation demonstrated that 1.6 million participants were willing to shift their energy use. However, their research found that low-income households—who generally use less electricity and contribute little to peak demand—gained far less than wealthier participants (CSE, 2023^{xxii}). Without access to high-cost flexibility-enabling technologies like EVs and battery storage which would enable them to move considerable electrical loads, fuel-poor households have seen little benefit from smart energy systems. Even when they own flexible technologies (e.g., mobility scooters, storage heaters), the market has yet to provide tariffs that fairly reward them for shifting their usage. Smart technologies will not automatically deliver fair outcomes - government and regulatory action is

needed to ensure fair outcomes. CSE also commented that flexibility services should expand beyond incentivising high-energy consumers to reduce usage, focusing more on enabling fuel-poor households to *increase* consumption during periods of excess generation and low prices.

Research by the Regulatory Assistance Project (RAP) found similar inequities in the UK and European countries. However, RAP gives examples of how community renewable energy projects can be tailored to help low income households benefit from flexibility and renewable supply (RAP, 2024^{xxiii}).

CSE has also raised concerns that the growth in smart energy offers in the UK market over the last decade: from almost none to over 30 and increasing technical complexity with a trend for offers to require more capabilities of consumers (CSE, 2024, op. cit.). For example, consumers may need certain technologies to be able to benefit from offers, they might need a level of digital literacy or the ability to absorb financial risk – all factors that discriminate against low income and vulnerable consumers unless proactive action is taken to address these inequities.

How home retrofit can support climate change adaptation

The FPRN report of the 2024 Right to Energy conference highlights the issue of summer heating (FPRN, 2025, op. cit.). It noted that this is giving rise to growing concern in Northern European countries and is of course already a major concern in Southern European countries (Thomson et al, 2019^{xxiv}. Research shows that four fifths of UK households already now report their home as overheating in hot weather, an increase from just one fifth in 2011 (Khosravi, 2024^{xxv}).

There is evidence that overheating exacerbates health and well-being risks, particularly for older people and the very young. However, the Right to Energy conference drew attention to the lack of evidence on over-heating in people's homes on residents' health when compared to the substantial body of evidence on the impact of cold homes (FPRN, 2025, op. cit.).

9. Are there any additional principles that you think should be considered for inclusion in the new strategy?

CSE's smart and fair project makes a number of recommendations to address inequitable smart energy markets, under the umbrella heading of a 'fairness principle' (CSE, 2024, op. cit.). CSE suggests DESNZ adds this principle for inclusion in the new strategy – we consider there is a strong case for doing this. The evidence for adding a fairness principle draws upon the various research projects carried out by CSE through the smart and fair project. CSE proposes:

- Investment in independent smart energy advice and support services and the provision of comprehensive smart energy advice for anyone receiving a low carbon technology.
- A requirement for energy suppliers to install smart meters and inclusively designed accessible in home displays alongside all grant funded work (where the householder consents).
- Inclusion of gateway technologies such as batteries and smart meters in grant funded programmes.
- A requirement for the body delivering the grant (local authority, housing provider or the energy supplier in the case of the ECO) to demonstrate that the householder was shown, and given advice on, the cheapest tariff and signed up to the Smart Export Guarantee Tariff (if appropriate).
- The consideration of a "turn-up" offer within the Demand Flexibility Service, designed to benefit vulnerable customers.
- Development of robust methods to systematically assess the cost and benefit distribution of fuel poverty policies across consumer groups.

- A requirement for energy suppliers to proactively evaluate smart tariff inclusivity, and for energy providers to open smart tariffs up to vulnerable customers who could benefit from using their existing assets flexibly, such as mobility scooters and night storage heaters.
- Mandated standardised consumer information to help consumers compare products.
- Improved monitoring of smart meter functionality, especially for vulnerable customers. Development of robust methods to assess cost and benefit distribution across consumer groups.

We would also suggest the government develops new metrics to capture the extent of equality/inequality in the transition to smart energy markets.

Further, while we are not home retrofit experts, the recent finding of large numbers of sub-standard solid wall insulation works suggests that the current safeguards (PAS 2035 etc) are not adequate. Or it may be the case that the safeguards are adequate but there is insufficient enforcement of the safeguards (similar concerns arise with the enforcement of MEES standards in the private rented sector). We are concerned that publicity around the issue may dissuade low income households from having energy efficiency measures installed and further hamper progress on meeting the fuel poverty target. This suggests a new principle that addresses the effective enforcement of energy efficiency standards.

10. What are your views on the factors set out above which will determine what is ‘reasonably practicable’ in relation to meeting the fuel poverty target? Are there any additional factors that should be considered in the analysis of the number of homes that can achieve the target level by the target date? Please provide any supporting evidence.

We welcome the Government’s intention to provide a more precise definition of ‘reasonably practicable’. We note that the FOE/Help the Aged legal case against the adequacy of government efforts to reach the then 2016 fuel poverty target was principally dismissed because the judge ruled that ‘reasonably practicable’ was ill defined and didn’t allow him to reach a judgement on whether or not the government was making sufficient progress on meeting its fuel poverty target (Guardian, 2008^{xxvi}).

We note that NEA took a pragmatic approach to determining ‘*reasonably practicable*’ in its research on funds required to meet the 2030 target and chose a cost cap of £24k to determine which fuel poor homes would receive improvement (NEA, 2024, op. cit.). This related to data availability rather than a specific proposal (although 90% of homes can be improved to Band C within this cost cap). It may be the case that costs will exceed £24k yet still be justified on cost effectiveness grounds.

NEA also discussed the considerations that should influence how ‘reasonably practicable’ is interpreted, some of which are common to the consultation’s proposals. They include:

- Where measures are not cost effective
- Where measures are prohibitively expensive
- Where the cost of measures exceeds the value of the property
- Where ancillary measures are prohibitively expensive
- Where households refuse measures
- Where disruptive work is required in a household that includes vulnerable people
- Where the property would need to be demolished (NEA, *ibid*).

The consultation document’s discussion of factors that might influence the definition of ‘reasonably practicable’ are useful. However, we are not certain of the extent to which these incorporate health and well-being benefits as well as the ‘social benefits’ discussed. The final report of the WELLBASED project includes a number of examples of how health benefits can be adequately incorporated in energy interventions (WELLBASED, 2024^{xxvii}).

The consultation document refers to the potential role of more data sharing (such as the procedures currently used for matching WHD eligibility with supplier consumer records). We understand Scope has commissioned research to explore potential new data matching techniques that go beyond use of DWP benefit records. This is intended to help inform its case for a social tariff that benefits both benefit claimants and fuel poor consumers that do not claim benefits. This research could be valuable for informing the further extension of current data matching procedures in other areas of energy policy. However, they will require several government departments, such as HMRC (tax records) and MHCLG (local authority records), to proactively accept the case for the extension of current data sharing arrangements.

We also suggest that research is carried out to establish what fuel poverty data sharing arrangements may exist in other countries.

11. What are your priority recommendations for an updated plan to improve the energy performance of fuel poor homes?

Sufficient funding

We consider the updated plan must allocate sufficient funds to meet or get as close as possible to meet the 2030 fuel poverty target. The NEA research estimated £18bn of funding is required to meet the target, of which £8bn could come from private landlords meeting a new EPC C minimum standard (NEA, 2024). The government's proposal to raise MEES to EPC C is therefore very welcome in this context.

The Labour manifesto pledged a doubling of expenditure on energy efficiency compared to that spent by the previous government: from £6.6bn to £13.2bn. Sustainability First investigated whether this increased expenditure would be sufficient to meet the 2030 target (*publication forthcoming*). We estimated there would a shortfall of at least £2.55bn to meet the target – see calculations below:

- **£18bn of funding** is needed (public & private) to improve 90% of fuel poor homes in England to EPC C target by 2030 (NEA, 2024)
- Warm Homes Plan commits £12.2bn public expenditure on energy efficiency in England (£1bn allocated to devolved administrations)
- £3bn of the £12.2bn is allocated to the boiler upgrade scheme (BUS), assuming previous government's allocation is doubled (will mainly benefit non-fuel poor households)
- ECO will provide a further £5bn over the next parliament, £1.25bn contributed to fuel poverty (ECO impact assessment)
- Estimated £5bn contributed by private landlords to meet EPC C under MEES (following discussions with NEA we considered this a more realistic assessment of the likely financial contribution from private landlords)
- **£11.75bn of public expenditure is required to meet the fuel poverty target** (£18bn required minus £1.25bn from ECO minus £5bn from private landlords = £11.75bn)
- **However, only £9.2bn is available for fuel poverty schemes (£12.2bn minus £3bn for BUS), i.e. £2.55bn shortfall**

We considered this figure likely to be an under-estimate for the following reasons:

- It is very difficult to target schemes at fuel poor households
- Many private landlords may not meet their responsibilities under MEES, particularly if incentives are not provided to encourage this
- Many local authorities do not have the resources to effectively enforce MEES

- ECO and publicly funded programmes are currently not effectively coordinated, leading to duplication and some wastage
- Potential future energy price shocks, similar to those of the early 2020s, would further exacerbate the size of the task.
- Energy prices will remain higher than consumers are used to; the costs of decarbonisation are likely to increase prices at least in the short to medium term.

Improved scheme design

The Energy Company Obligation has for many years represented the largest energy efficiency programme for fuel poor households. For many years, following the abolition of the Warm Front programme in 2013, it was the only energy efficiency programme for fuel poor households. The UK government, unlike the Scottish and Welsh governments, did not provide any public funding for energy efficiency programmes in England until 2020 with the short-lived Green Homes grant programme, later followed by Local Authority Delivery and Home Upgrade Grant programmes. The Scottish and Welsh governments have had the benefit of being able to continually evolve and develop their programmes, learning from past experience, while the UK government had to start almost from scratch when it re-introduced public funding in 2020. This has arguably led to problems with delivery of the new programmes.

The substantial re-design of the ECO4 programme from previous iterations has also caused problems, not least a sharp fall in the number of installations (as the consultation document refers to). While the intention for the programme to install deeper retrofit measures in fuel poor homes is laudable, in practice this did not play to ECO's strengths, namely the delivery of high volumes of retrofits in a variety of settings. Integration of the next iteration of ECO with the Warm Homes Local Grant scheme could potentially lead to the two programmes together providing both deep retrofit to those homes requiring this and 'shallow' retrofit to a larger number requiring more modest upgrades.

However, research has also found evidence of poor geographic distribution of ECO measures. Research by Bridgen & Robinson 2023^{xxviii} identified five groups of local authorities with different levels of susceptibility to fuel poverty, termed Sustained Energy Affluence; Fluctuating Energy Affluence; Changeable Middle; Fluctuating Energy Deprivation; and Entrenched Energy Deprivation. The research found that the distribution of ECO measures was disappointing: local authorities with entrenched energy poverty typically received less support compared to areas where energy poverty fluctuated or was less severe.

There is evidence that innovative area-based approaches, for example based on the bottom two deciles of the Index of Multiple Deprivation (IMD) or the 'income domain' within the IMD, can bring about cost economies in the delivery of energy efficiency measures to fuel poor households. Local authorities could play a coordinating role in bringing together housing associations, private landlords, contractors and other stakeholders in deprived areas to deliver measures across all tenures (Newcastle University, NEA and Energy Audit Company, 2023^{xxix}).

With respect to local delivery, E3G has similarly argued the government should commit to:

- a long-term infrastructure investment pledge, with a ten-year plan outlining the commitment to public funds to upgrade low-income homes.
- Flexible, needs-based funding allocation, and revenue funding to bolster and upskill authorities who need support to level-up their capacity to deliver.

- Support for skills and supply chains through direct support for further education courses and guidance on authorities' role.
- Regulation and resource for heat and energy planning to ensure every local area benefits from flexible energy use and efficient heating solutions (E3G, 2024^{xxx})

12. What are your priority recommendations for the design of energy bill support for fuel poor households?

Who should receive support

We consider it important that fuel poor households not in receipt of means-tested benefits should receive energy bill support. This will require the extension of data matching procedures, for example the use of HMRC and local authority data. With respect to the latter, we note that a number of water companies have shared data with local authorities in their area to provide a social tariff to low income water consumers (Sustainability First & CSE, 2021^{xxxi}). The tariff is provided automatically to eligible consumers. We understand Scope's ongoing research on energy social tariffs is investigating the potential for extended data sharing.

Should the government legislate for an energy social tariffs, we consider it important that the delivery of the tariff is designed so that support is tapered according to need and hence avoid potential 'cliff edges'.

We understand that the Government has previously been reluctant to provide all recipients of disability benefits (including those receiving non-means tested benefits) with energy bill support. However, the government's recent proposals to reform disability benefits means a much narrower cohort will receive benefits in the future and is more likely to comprise those facing real hardship. We should note, however, that the government's own impact assessment of the reforms predicts poverty levels will increase substantially among disabled people (DWP, 2025^{xxxii}). We suspect fuel poverty rates are also similarly likely to grow among this group.

What form that support should take

The FPRN survey highlighted a number of research reports that provided evidence to support the case for improved help with energy bills for low income households, including suggestions for the form of support provided (FPRN, 2024a, op. cit.), e.g.

- The Environmental Change Institute (ECI) proposal for an emergency tariff to address the extreme hardship faced by many low income households due to high prices. It goes on to argue that the tariff could be implemented quite speedily (ECI, 2023^{xxxiii}).
- Age UK's proposal for a social tariff based on a 50% discount on unit rates (Age UK, 2023^{xxxiv}). This sets out the number of households that would benefit from a social tariff; the annual cost of the tariff; and the annual increases in energy bills for households if the costs of the tariff were levied on energy bills.
- Citizens Advice similarly advocates the introduction of a social tariff and has also called for reform of the Warm Home Discount scheme with different levels provided according to the level of energy efficiency of recipients' homes (Citizens Advice, 2023 & 2024^{xxxv}).
- The National Energy Foundation has proposed a national energy guarantee in which all energy consumers receive sufficient energy, free or low cost, to cover their basic needs (NEF, 2023^{xxxvi}). The costs of this would be met through higher tariffs for consumers with high consumption. It also proposes measures to protect low-income consumers with higher needs for energy due to, for example, poor health or disability.

The Scope research into a possible energy social tariff favours the tariff taking the form of a 30% discount on unit rates. This has the advantage of the tariff keeping track with current fuel prices as well as reflecting individual consumers' actual fuel bills. We understand many suppliers prefer a social tariff based on the current Warm Home Discount. However, we note that the level

of the Warm Home Discount has barely changed since it was first introduced in 2011 (originally £140, now £150). It has thus failed to keep pace with the substantial rise in fuel prices since that date.

Any additional policies which would contribute to the updated fuel poverty strategy to support fuel poor households with the cost of energy

Research by Sustainability First has highlighted the substantial detriment faced by Britain's 3 million households paying Economy 7 and other multi-rate tariffs, a large proportion of which are on low incomes (Sustainability First, 2023^{xxxvii}). Tackling this is a relatively easy win. For example, Sustainability First estimate that around 1.5m customers are on multi-rate tariffs who do not have storage heaters and hence have relatively low night-time usage. These customers are almost certainly paying substantially more for their electricity than they would if they were on a single rate tariff. Their position has been made worse by the widening gap between day and night rates (which benefits those with storage heating) and by the limited advice and information available – including on their rights to switch to a single rate tariff.

The research calls for urgent action by Ofgem to address the issues. This includes enforcing existing licence conditions. Ofgem should carry out a Market Compliance Review of how suppliers are treating Economy 7 customers including: a) the clarity of their price change notifications (and whether they are in line with SLC 31F Encouraging and Enabling Engagement); b) whether their “treating customers fairly” obligations (SLC 0) require them to be more proactive in contacting customers where they are evidently not on a suitable tariff for their patterns of usage; and c) looking at how customers are being treated where complex meters (such as Total Heat Total Control) are replaced as part of the smart meter rollout. We also consider the government and Ofgem should undertake more work to make sure low income consumers take advantage of flexible services and associated tariffs, as stated in our response to Question 8 above.

13. What do you think are the priorities for government to support fuel poor households in accessing the energy market fairly and effectively?

There are two approaches to addressing this issue:

1. improving access to the current energy market
2. Reforming the energy market to make it fairer for low income and fuel poor consumers

Improving access

Many organisations have raised concerns about the growing complexity of the energy market and the move to digitalisation of energy services. Research compiled by the Good Things Foundation found that 8.5 million households in the UK lack basic digital skills; even those with digital skills may lack sufficient access to data or IT technology that would allow them to access new energy services (Good Things Foundation ^{xxxviii}). Citizens Advice research similarly shows that many low income and vulnerable households are not able to effectively participate in the energy market due to lack of alternatives to digital access, such as telephone lines and hard copy information (Citizens Advice, 2022^{xxxix}).

The potential for increased consumer confusion, particularly for those on low incomes and in vulnerable circumstances, may well increase with the introduction of half hourly settlement enabling a proliferation of time of use tariffs, further development of demand flexibility services and initiatives such as heat-as-a-service. Ofgem acknowledges that ‘where innovative products and services are not accessible to all consumers, some consumers can experience harm by missing out on energy and cost saving benefits (Ofgem, op. cit.).

To address these issues, we suggest government works with Ofgem and suppliers to make sure energy products and services are based on clear principles of inclusion by design. This can benefit all consumers, as well as those facing difficulties accessing the energy market. We also consider it important to make sure that consumers have access to local, independent advice and support services that provide tailored advice to consumers, particularly those in fuel poverty or in vulnerable circumstances. We return to advice in our response to Question 16 below.

Reforming the energy market

Many organisations consider major reforms are required to make energy markets fairer and better able to deliver affordable energy to consumers, particularly those on low incomes. While profit margins within energy supply companies are relatively modest, the profits accrued in other sections of the energy sector, e.g. distribution companies and generation companies, are considerable. For example, Citizens Advice recently drew attention to a windfall of £4bn accruing to the distribution companies, largely arising from flaws in Ofgem's price control mechanism (Citizens Advice, 2025^{xi}). Citizens Advice highlights that this is in addition to the investment required to meet net zero objectives, i.e. the price control had already accounted for these costs.

Looking specifically at policy costs levied on energy bills, Leeds University research concluded that current carbon policies in the British energy market result in low income households paying disproportionately more (Owen & Barrett, 2021^{xii}). The research found that households comprising women of retirement age living alone; lone parent families; and households who have never worked or are long-term unemployed were particularly adversely affected. It concluded that many of these costs should be moved to general taxation to achieve fairer outcomes. We have already commented on the implications of transferring electricity policy costs to gas, yet electricity costs will need to come down if we want to be sure of a fair transition to net zero. The current system of basing wholesale energy costs on the marginal price of gas appears to result in unnecessarily high electricity costs (House of Commons Library, 2023^{xiii}). Many consider reform is urgently required.

Sustainability First is carrying out an ongoing work programme as part of its 'Fair for the Future' project, which began in 2021 (Sustainability First, 2021^{xiiii}). The project is concerned to make sure that the critical dual goals of de-carbonisation and maintaining affordability of energy (given it is an essential service) are not jeopardised by the cumulative impact of detailed market reforms. This requires:

- the need to look at the full picture, taking account of the cumulative distributional impacts of the wide array of changes taking place and how they will feed through into end-use tariffs;
- the need for a wider public debate on fairness and the principles for cost recovery in this new world (rather than having any discussion buried deep in the annexes of technical consultations);
- the need for clarity on the respective roles of government and Ofgem, in particular on distributional impacts (given government seems to see these technical regulatory changes as being strictly for Ofgem and Ofgem sees re-distributive actions such as social tariffs as being for government);
- the need for better data to underpin policy making and regulatory oversight in this new data-driven world;
- the need for radical, strategic thinking from a consumer perspective including being willing to consider some very different models of how we pay for our energy in the future

Initial thinking suggests there are a range of possible more far reaching options to recover the energy system's fixed costs – from more reliance on general taxation or the use of council tax bands as a basis for charging through to some sort of universal service charge with exemptions for certain groups of customers or for certain business models, or, having a fixed charge creating an entitlement to an essential level of energy at free or reduced rates.

The current reforms being discussed through the REMA project, for example, will have long term implications for consumers, particularly those on low incomes. Zonal pricing, for example, will have a substantial impact on prices charged to consumers in different parts of the country, yet there is substantial disagreement between key stakeholders as to the pros and cons of moving in this direction. However, there is no analysis to date of the projected impact of REMA or more specifically zonal pricing on fuel poor or low income consumers.

14. What are your views on how to improve targeting of fuel poor households? Please provide any supporting evidence.

Alternative ways to set criteria to verify the eligibility of fuel poor households

We have already commented on the potential future role of improved data matching processes to identify low income households. Coupled with EPC data, which now covers around 60% of homes, there is potential to more precisely identify those in fuel poverty, although reform of EPCs and improvement in their quality must be undertaken to allow this.

The local flexibility arrangements within ECO allow for referrals from local authorities, health organisations and local Citizens Advice offices. Fuel companies can meet up to 50% of their obligation through this route, although the current rate to date is only 14% (ECG, 2023, op.cit). Advice agencies could play a more significant role in making referrals but it is essential they are funded to carry out this role.

Views on tools that can support better targeting of fuel poor households

We have already suggested that the integration of DWP/HMRC data with EPC data could help better target fuel poor households, although improvements to the EPC rating system are important for ensuring such an approach is robust. Smart meter data could also be useful. It is already possible to identify smart prepayment meter consumers who regularly self disconnect or use the emergency credit facility frequently, indicating issues of hardship. Similarly, analysis of consumption patterns may indicate hardship, for example, little change in consumption during winter or unusually low levels of consumption in general. If this could be married with information on household and housing characteristics, there is considerable potential to identify under-spend/rationing of energy use and hence fuel poverty.

How to improve the targeting of support for children and people with health conditions

The WELLBASED project includes a number of recommendations for improving referrals from health professionals for those with health conditions, such as integration with hospital discharge systems or systematic analysis of patients with cold-related health conditions (WELLBASED, 2025^{xliv}).

15. What else could improve partnership and learning to support the fuel poor?

National

Respondents to the FPRN survey called for a high-level cross-departmental working group or taskforce led by a minister with power and budget (FPRN, 2024a, op. cit.). The government's current review of the fuel poverty strategy and intention to produce an action plan to address fuel poverty is therefore welcome.

One respondent commented that aligning fuel poverty solely to DESNZ carbon reduction policies results in insufficient attention to housing and local govt and income/welfare drivers, solutions and issues. Fuel poverty strategy should straddle such Government departments as DESNZ, MHCLG, DHSC and DWP.

Several respondents suggested the government should assess the co-benefits of reducing fuel poverty e.g. with respect to improvements in education, health, employment and skills and local enterprises.

Several respondents referred to the important role DWP and Treasury plays in the setting of benefit levels and tax credits. The DWP could also improve its data matching processes to ensure more support is delivered automatically to fuel poor households.

One respondent called for an investigation into how employment, economic and urban regeneration policies interact with fuel poverty: could they be targeted to try and help the fuel poor more, what is needed for those who can't work?

Other policy improvements proposed by survey respondents included reforms to new build housing standards, improved MEES policy and enforcement, person-centred area-based delivery, retrofit skills expansion and a strategy for public engagement with net zero.

Local

Several respondents to the FPRN survey advocated a funded (capital and revenue) statutory duty on local authorities to produce a fuel poverty strategy and action plan for meeting the 2030 fuel poverty target at a local level. Councils should work in partnership with the NHS, other statutory agencies, housing associations and the voluntary sector in meeting this duty.

Many commented that central government should allocate resources to local authorities according to the spatial-temporal distribution of fuel poverty, rather than through use of competitive processes. The current approach to the Warm Homes local grant scheme is therefore a welcome move in this direction. One respondent suggested the introduction of “a duty to refer” households in fuel poverty, in a similar way to those at risk of homelessness.

Respondents also highlighted the financial straits most councils are in after years of austerity. They went on to advocate a long-term strategy to build local authority capacity on energy matters, particularly in those locations where fuel poverty is greatest.

16. How could access to quality advice be improved to support the fuel poor? Where should advice be targeted?

Energy Saving Trust research draws attention to the diversity of housing and household characteristics in England (EST, 2023^{xlv}). They argue that access to impartial, personalised advice to help households who are looking to make changes to their homes is a key enabler. The biggest gap in retrofit advice provision in Great Britain is in England, where only parts of the country have access to local services, meaning overall provision is inconsistent. The EST argues that retrofit advice must be delivered at both a local and national level to ensure all households in England have access to independent and personalised advice.

The consultation document refers to the LEAD pilots as providing valuable lessons in providing personalised advice and stresses the value of this to low income and fuel poor households. However, it then goes on to refer to on-line resources and the intention to bring these resources together. While this will undoubtedly have benefits, it doesn't make clear whether the government will endeavour to make sure people throughout the country have access to in-

person advice at a local level, as provided through LEAD in the pilot areas. It is also not clear whether the government will evaluate the value of in-person advice provided by the LEAD pilots vis a vis on-line advice for low income and vulnerable consumers.

Research by Simcock and Bouzarovski found that tailored, in-person advice can help to partially ameliorate fuel poverty, but its impacts are limited by structural factors that are beyond the immediate influence of advisors or individual citizens (Simcock and Bouzarovski, 2023^{xlvi}). Energy advice should be seen as a supplement to, not a replacement for, more ambitious and transformative political action that addresses the structural and institutional drivers of inequality.

Particular issues of concern are the sheer quantity of old, low efficiency housing in England and the extent of financial hardship faced by large numbers of low income households. Citizens Advice, for example, report that 5 million households are in a negative budget, i.e. their monthly income doesn't cover their basic needs and they have exhausted all wider support available (Citizens Advice 2024^{xlvii}). The End Fuel Poverty Coalition reports that a worrying number of households with energy debt are using illegal money lenders to pay off debt, quoting research that suggests around 18% of people in energy debt are resorting to this route (EFPC, 2024^{xlviii}).

We note that the Scottish Government funds the EST to provide energy advice in the homes for particularly vulnerable households and suggest the UK government considers a similar approach as part of a more general strategy to overhaul energy advice in England (EST, 2019^{xlix}).

17. How could vulnerable households be supported to access advice? Is there a role for the health and social care workforce or other professional groups supporting vulnerable households?

The WELLBASED project provides detailed proposals for how health and other professionals can support vulnerable households (WELLBASED, 2025, op. cit.). The NICE NG6 guideline includes many valuable recommendations as to how front line health and other workers can support vulnerable households (NICE, 2015ⁱ). However, NEA research shows that the response from health bodies around the country is very variable, with many not adhering to any of the recommendations (NEA, 2019ⁱⁱ). The government could take action to make sure implementation of the guideline is consistent throughout the country and may need to update the guideline to take account of current NHS structures.

18. How else can government improve understanding of fuel poverty and its impacts?

Responses could include views on:

Any evidence gaps which need to be filled to improve our collective understanding of fuel poverty and its impacts

There has been increased emphasis within fuel poverty research on capturing the lived experience of fuel poverty. This has led to a much more nuanced picture of the issue than was hitherto the case (see for example Middlemiss & Gillard, 2015ⁱⁱⁱ). The Scottish Government has sought to build on this approach through commissioning 'lived experience' research to help inform its fuel poverty strategy (Scottish Government, 2020ⁱⁱⁱⁱ). We suggest the UK government follows suit.

Respondents to the FPRN survey suggested a number of topics for future fuel poverty research (FPRN, 2024a, op. cit.). They included:

- how energy interventions actually work: what kinds of interventions are most effectively coupled to best effect;
- the fuel and transport poverty faced by people in rural, outer cities and marginalised estates;
- the impact of fuel poverty on babies and young children;

- the growing problem of summer overheating;
- addressing the disadvantage faced by Britain's three million Economy 7 consumers.

The full survey report includes detailed suggestions as to how research on these topics might be carried out (FPRN, 2024a, op. cit).

Sustainability First has developed a prototype tool for predicting fuel poverty into the medium term by inputting current data on energy efficiency installation rates, fuel prices, incomes and the government's fuel poverty statistics. This can be updated as new data becomes available. We intend to seek peer review for the work but would welcome DESNZ's feedback on the approach.

Examples of best practice which could improve our understanding of fuel poverty

The March 2024 FPRN survey of fuel poverty researchers, carried out on the request of DESNZ, proved a useful opportunity to gather data on some of the recent research on fuel poverty. However, the response rate was limited due to the very tight timescale within which the FPRN had to work. The FPRN would be happy to work with DESNZ to carry out the survey on a regular basis, say once a year, but with a longer timescale allowed to conduct the survey and analyse the results.

19. Are existing arrangements sufficient to meet our commitments to review and scrutinise Government action on fuel poverty?

The existing arrangements for scrutinising the Government's work are welcome. However, we consider they could be supplemented by establishing formal arrangements for input from a wider range of stakeholders, such as that formerly provided by the former Fuel Poverty Advisory Group (this included representatives from key NGOs, energy companies and energy efficiency organisations).

We also consider the UK government could deploy Citizens Assembly type mechanisms to gain bottom-up feedback on key issues relating to energy affordability and net zero.

20. Do you have any further views or evidence on how the 2021 fuel poverty strategy should be updated?

At the national level respondents to the FPRN survey called for:

- a high level cross-departmental fuel poverty working group that straddles Government departments DESNZ, DLUHC, DHSC and DWP;
- assessment of the co-benefits of reducing fuel poverty e.g. with respect to improvements in education, health, employment and skills and local enterprises;
- improvements to DWP data matching to ensure more support is delivered automatically to the fuel poor;
- a national strategy for public engagement with net zero (FPRN, 2024a, op. cit.).

At the local level respondents called for:

- a funded (capital and revenue) statutory duty on local authorities to produce a fuel poverty strategy and action plan for meeting the 2030 fuel poverty target at a local level;
- a requirement for councils to work in partnership with the NHS, other statutory agencies, housing associations and the voluntary sector in meeting the local fuel poverty duty;
- the allocation of resources to local authorities according to the spatial-temporal distribution of fuel poverty, rather than through competitive processes; and "a duty to refer" households in fuel poverty, in a similar way to those at risk of homelessness (FPRN, 2024a, op. cit.).

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