



A grassroots campaign taking action against mammoth fuel bills and working towards an affordable, sustainable and democratic energy system

Email	fuelpovertyaction@gmail.com
Website	fuelpovertyaction.org.uk
Facebook	/fuelpovertyaction
Twitter	@fuelpovaction

Response to BEIS consultation: Future support for low carbon heat 7 July 2020

Name: Ruth London

Email address: fuelpovertyaction@gmail.com

Organisation: Fuel Poverty Action

Are you happy for your response to be published? Yes

Would you like to be contacted when the consultation response is published? Yes

Additional information about your organisation

Fuel Poverty Action is a small, grassroots organisation, working with many tenants and residents associations, pensioners, and other groups that are not in the loop of government consultations, energy think tanks, or climate campaigns. Over the past year, particularly the past few months, we have seen people becoming far more alert to the need for action on the climate, on poverty, and on housing; the UK's first Citizens' Assembly on climate change, and opinion polls, reflect the same priorities. We have also seen growing bafflement and anger about government decisions and intentions in relation to heating and housing.

The questions in the present consultation concern the details of how to implement proposals for supporting biomethane and heat pumps. On green gas, the document says you are seeking “Views on green gas support in the longer-term, including future mechanisms and support for other types of green gas such as hydrogen”. But this does not appear as a question. The consultation invites responses on administering a clean heat grant scheme, but not on the scale or time limit of the scheme, or on how it fits in with other initiatives, notably energy efficiency retrofits. However, we cannot answer the detailed questions without first addressing their premises.

On Green Gas:

- 1) We do not believe that inserting “green” gas into the gas grid represents good value for money for people to heat our homes. If gas is partially green, it still uses fossil fuels. If wholly green it requires massive disruption to alter pipes and appliances, and production of hydrogen which is carbon-producing and/or uses a great deal of electricity which will be needed and better used elsewhere, including for heat pumps. The use of agricultural land for fuel production also threatens to increase food prices and shortages. There are much better ways to bring down bills and carbon emissions, together.

- 2) We are also concerned about the idea of a “green gas levy”, especially in the light of the way costs can spiral out of control, leaving bill-payers to fund major projects that were not good value in the first place, as with Hinkley C and Sizewell C nuclear power stations. Levies are regressive, hitting poorer people hardest, because essentials are a higher proportion of our bills, and because we cannot afford alternative heating systems.
- 3) Especially since Grenfell, safety has been a primary concern, both within FPA and among all the groups that we work with. This remains an issue in relation to gas.
- 4) In relation to hybrid heat pumps you say (our emphasis), *“Given the limited funding available we believe that the targeted public support available under this policy should be directed towards the technologies that offer the greatest carbon savings, rather than those that may play an interim or transitional role, and which would **continue to involve the burning of fossil fuels for heating.**”* However, you do not appear to apply this criterion to gas. We are concerned that policies allowing and enabling biomethane use in the gas grid will also pave the way for introduction of hydrogen gas, potentially without conditions on how the hydrogen is produced. Marketing a gas as ‘green’ can mask the fact that it still involves the extraction of fossil fuel -- an energy and emissions intensive process in its own right -- and that the process to convert natural gas to hydrogen releases emissions. In any case both biomethane and hydrogen are expected to be burned together with natural gas. We therefore believe the criterion which rules out hybrid heat pumps should be applied to gas. Time is short and **public money should be directed to proven technologies that do not involve the burning of fossil fuels for heating:** technologies like energy efficiency measures, geothermal heating, solar, wind, and hydro-power, and extraction of heat via heat pumps from waste and the environment.

On heat pumps:

- 5) There is no suggestion that before installing heat pumps funding should be provided to bring properties up to a good state of repair and insulation -- without which it is impossible to know how much heat is actually needed. Even the limited requirements in the Renewable Heat Incentive appear to have been dropped -- are these to be added later? Repairs and retrofitting of insulation, in consultation with residents, are desperately needed and called for by people in cold, damp and draughty homes, and are an unavoidable first step. Equally important is to stop -- now -- building homes to a high-carbon standard. The Future Homes Standard still allows waste of heat that should have been outlawed four years ago under the cancelled zero carbon homes policy, and would even stop local authorities from bringing higher standards into their areas. With an emphasis on “build, build build”, homes are being built now that are not only expensive and wasteful to heat but will require retrofitting in future at around five times the cost of improving their standard now.
- 6) There is no provision or encouragement for renters or leaseholders, in private buildings or in social housing, to initiate -- still less, insist on -- installation of a heat pump with a Clean Heat Grant. This excludes many of the people who are suffering the worst fuel poverty. Private landlords in particular have little incentive to act, as legislation is very weak.

- 7) Given the state of the UK's housing stock and the difficulty of making many of them energy efficient, the proposed support for heat pumps is a drop in the ocean. It is just a fraction of what is being invested in other countries, even countries with much lower resources than the UK and/or many more heat pumps in place already. The Committee on Climate Change [suggests](#) a need for 2 million heat pumps by 2025, rising to 15 million by 2035. The Clean Heat Grant lasts only two years and proposes a capped £100 million budget which would support under 11 *thousand* heat pumps a year, for just two years. At this rate it would take over a thousand years to reach the 2035 target of 15 million. The stated focus of the grant is heat-pump-compatible properties within the 11% of UK homes, mostly in rural areas, that are not on the gas grid. We understand that priority, but what about the rest of the country?
- 8) Timing is crucial. If the Clean Heat Grant were to start immediately, instead of in two years, it could effectively double the rate of heat pump installation, instead of just continuing to install them at the RHI's slow rate, a small fraction of the rate of installation of gas boilers. There is no time for business as usual.
- 9) Other things too cause many people to question the government's intentions. We are asked, "Why aren't solar panels mandatory on all buildings?" "Why is the UK still charging VAT on low carbon heat solutions, and on insulation and double glazing, while VAT is not charged on new builds, encouraging demolitions?" "Why can't rent be capped for homes that are cold and damp?" "Is the promised £9.2 billion for energy efficiency really coming? Why wasn't it in or alongside the budget like the £28 billion for roads?" And, "if climate change and fuel poverty are priorities, why spend money on building roads when our homes need insulation?"
- 10) In the aftermath of the Grenfell fire, it cannot be repeated too often that all work on people's homes, in both new and old buildings, must be rigorously supervised, tested and certified, with clear lines of responsibility, well trained builders, and direct, immediate accountability to residents, who are the most reliable whistle-blowers when things go wrong. We see nothing in the consultation to reflect this imperative.

With climate change, as with a pandemic, inaction costs lives -- and so does delay. The number of lives that will be lost through climate change will put Covid-19 in the shade -- and many hundreds of thousands are already dying as a result of poverty, conflicts, and "natural disasters" resulting from the changing climate. Every step taken now to decrease carbon emissions will achieve many times the effect of the same action even a few years hence, when crucial tipping points have been reached and passed.

Meanwhile deaths through fuel poverty alone number around 10,000 each winter in the UK.

The initiatives in this consultation are said to be part of "an ambitious programme of work required to enable key strategic decisions on how we achieve the mass transition to low-carbon heat and set us on a path to decarbonising all homes and buildings". We are glad to see that this programme includes the Home Upgrade Grants and the Social Housing Decarbonisation Scheme, as promised in the Conservative Manifesto. We are also awaiting the National Infrastructure Strategy, the Heat and Buildings Strategy, the Fuel Poverty Strategy, the Treasury review of funding net zero, and more. As chair of the Committee on Climate Change, Lord Deben [says](#) successive governments have done "far too little, far too late" but this year presents an "amazing opportunity".

ANSWERS TO QUESTIONS

“GREEN GAS”

Q 9 What are your views on increasing the minimum percentage of waste feedstocks above 50%, now or in the future? What could be a suitable new threshold? Please provide evidence to support your response.

We are very concerned about the issues raised by Biofuelwatch in relation to biomethane production from energy crops. They say that while using biomethane from food waste for heating makes sense, as long as it does not conflict with food waste reduction or other green purposes, the UK should not be subsidising the use of land and crops for biogas or biomethane at all. We are already dependent on imports for nearly half the food we eat, and the Covid crisis has shown us how fragile our food supply chains are. Soil erosion and soil compaction are putting the UK's food security at further risk, and maize monocultures in particular are a significant cause of both problems.

With hunger now commonplace in the UK as it has not been for generations¹, we are forced to ask what will be the effect of turning over agricultural land to energy production. Already, food prices face pressure from climate change, short supply of labour for harvesting crops, increased cost of importing food from Europe, and potentially changes in meat factories in the light of what Covid-19 has revealed. And already many people are not just choosing between heating and eating, but cutting down on both, in many cases putting their health at risk.

BUILDING LEVEL TECHNOLOGIES

Q 22 Do you agree with targeting support at domestic and non-domestic installations with a capacity up to and including 45kW? Yes/No. Please provide evidence to support your response.

We understand that this particular grant is designed for small scale heat pumps, but we are very concerned about the uncertainty now facing those who are working towards larger, projects. Many such projects are already under way, with potential for a major impact on carbon emissions, local employment, and poverty. They include decarbonising refrigeration for retail; low carbon farming, schools and universities; sourcing heat from beneath public parks; and more. Such projects have long lead-in times. If they are to be excluded from the Clean Heat Grant, a firm, costed commitment to support larger heat pumps is urgent, even in advance of details, which could follow in other programmes later this year. Otherwise the ending of the Renewable Heat Incentive could mean that very valuable projects never see the light of day -- including some in which much has already been invested.

¹ Just three weeks into the lockdown, the Food Foundation said that 1.5 million Britons reported not eating for a whole day. Some 3 million people in total were in households where someone had been forced to skip some meals. But this scandal long predates Covid-19, with the Trussell Trust reporting in 2015 that one in five parents were struggling to feed their children, and in 2019 that food bank use had soared 23% in one year.

Q 23 Do you agree that support for buildings technologies should change from a tariff to a grant? Yes/No. Please provide evidence to support your response.

Yes, we think an upfront grant is suitable for this purpose. The alternative is simply further reliance on finance, which may be unavailable, expensive, or mis-sold.

Q 24 Do you agree with our proposal to offer a technology-neutral grant level? Yes/No. Please provide evidence to support your response.

No. You are clear that the effect of this proposal would be to encourage the use of air source as opposed to ground source heat pumps. ASHPs are less expensive, but it is not true that they are therefore “best value for money”. GSHPs last longer, are more efficient, quieter, and can often offer better value. They also do not require to be replaced as often -- leaving retrofitters free to work elsewhere. Choosing to encourage the cheapest option is indicative of the short-termism that pervades this consultation, with its two year Clean Heat Grant.

You say you are “put[ting] the onus on the market to find which of these offers the most cost-effective low carbon technology for each property.” “The market” cannot do that job -- it requires skilled, and *disinterested* assessment by people who know what they are doing and do not have a product to plug.

Q25 Do you agree that £4,000 is an appropriate grant amount to meet the aims of the scheme? Yes/No. Please provide evidence to support your response.

No. The low level of support, related to the totally inadequate size of the total budget, will lead to more people investing in poor quality, short life, and cheaply installed heat pumps, which prove to be unreliable and often noisy. We will not get the benefit of good quality long lasting installations, and we also will not get the benefit of large numbers, as the numbers will be very small. In addition, the sum proposed seems to be based on average costs, ignoring the fact that costs are likely to be higher in the rural areas which are the focus of this programme.

We would also ask the government to put pressure on heat pump manufacturers to reduce their costs. The same companies make air conditioning units which are very similar equipment for half the price. While the price of solar panels has fallen dramatically, the same has not been true of heat pumps. If they are to be installed at scale, the price must come down.

Q 28 Please provide any relevant views to help inform development of the delivery mechanism.

We are concerned about the plan for people to apply for vouchers without any need to determine whether the heat pump should and will be installed. This would seem to encourage high-pressure salesmanship. First, “all you need to do is put your name and postcode here”, then the salesman can build on the fact that you’ve applied for the money, or even received a promise of it. Please see below, Q35 for more on this point.

We are also concerned that the installers' cash flow problems that you refer to could force out of business many small local installers who may be excellent and relatively low cost, leaving the field wide open to large, remote and uncaring operators who will find themselves in a monopoly position, accompanied perhaps by some shysters who solve the cash flow problem by cheating their customers. It should not be forgotten that in both the building and the retrofit industries, many "cowboys" are huge corporations, household names like Rydon which are guilty of scandalous workmanship and the use of unsuitable materials, not only on Grenfell Tower but all over the UK.²

Q 29 Do you agree with the minimum efficiency requirements for heat pumps and evidence requirements? Yes/No. Please provide further evidence to support your response.

We do not have the technical expertise to respond to this question, but suggest that requirements include the replacement of harmful refrigerants in heat pumps, which has been proceeding too slowly - inconsistent with the purpose of mitigating climate change.

Q 33 Please provide views on the appropriate requirements for the heat loss calculation, as well as the minimum heat loss value that should need to be demonstrated.

Heat loss due to poor design features and/or repair and maintenance of the building should be considered before embarking on retrofit of *any* kind. Heat loss due to poor insulation, and or a need for other energy efficiency measures, should be considered before embarking on a heat pump.

We note that your proposals do take account of heat loss in homes off the gas grid, in considering whether biomass would be suitable for heating. Yet we can see no equivalent for heat pumps, and the voucher proposal suggests heat loss assessments for biomass installations only. We see no commitment to ensure that homes are repaired, draught-proofed and insulated BEFORE a move to heat pumps is considered, or even to ensure that improved energy efficiency is taken into account when a heating system is designed and sized. The heat required by a well insulated home is a small fraction of what is required by the same home with poor insulation. Even bringing homes up to a good standard of repair can make a huge difference, including for instance dealing with broken and ill-fitting window frames. If this requirement is not written into the scheme, a great deal of investment -- public and personal -- is therefore likely to be wasted.

Q 35 What do you consider to be the main consumer protection risks of providing support through an upfront grant and how might they be mitigated? Please provide evidence to support your response to question

As noted in Q 28 above, we are concerned about the plan for people to apply for vouchers without any need to determine whether their homes will be suitable for a heat pump. Not only could this encourage high-pressure salesmanship -- it could also lead to people freely and enthusiastically embarking on a project which brings them nothing but cost and grief.

² See Stuart Hodgkinson, 2019, *Safe as Houses, private greed, political negligence, and housing policy after Grenfell*.

We've searched the proposal on vouchers for any requirement of certified evidence before works go ahead, to cover *for example*,

- suitability of the property for the product proposed
- what alternatives have been discussed or installed, beginning with repairs and insulation
- whether the product is the right size
- how it can impact the building
- what other changes may be required (eg underfloor heating, adjustments to radiators)
- what such adjustments will cost, and how they will be financed
- in the case of installation by landlords, whether the tenants or leaseholders occupying the premises have been consulted and have agreed..

All such questions require the householder and occupant to understand and agree to what is proposed, with access to independent information, and there should be evidence of that.

Instead, we see nothing between the first stage (provide your postcode) and the second - voucher redemption. The second stage requires technical evidence relating to the installation, commissioning and building eligibility, using e.g. MCS certification and heat loss assessment (for biomass). But that second stage potentially takes place after great damage is done. And even then, evidence is supplied by the installers themselves.

In the present section you propose “rigorous testing standards” and required membership of a consumer code. We are glad to see the reference to MCS, but are surprised to see no reference to PAS 2035, which should be fully in force by that time, requiring among other things a deep assessment to determine kinds of what retrofit are needed³. You also propose that “*Ofgem should have the ability to: • Carry out on-site checks before a grant is paid, as well as after payment has been made. • Require corrective action where non-compliance is identified. • Have the ability to recoup grant payments where corrective action is not taken, or in cases of serious non-compliance.*” Ofgem’s independence from the retrofitting industry is crucial, as monitoring bodies that are funded by, staffed by, or otherwise connected with an industry routinely fail to put consumers first. At the same time it is essential to ensure that they are sufficiently expert, and resourced, to perform this role.

In any case, the resident of the home is still potentially seriously disadvantaged, even if a grant is recouped. It is essential to lay down in advance how they are to be compensated, and in some cases how they are to be *housed*, until satisfactory restoration work is completed. No one should be expected to live without heating. Nor should they be forced to allow back into their homes a firm that already caused them huge problems, as has happened with removal and replacement of cladding and removal of cavity wall insulation.

³ Of course, such assessments should be routine. But experience shows that in practice they must be rigorously enforced and policed to ensure they are genuinely independent. Even PAS 2035 specifies very little in terms of accountability to residents, and we understand there is little about how modern building materials can impact on air quality and on the fabric of the building as a whole.

A scheme that is serious about customer protection will look carefully at how it has failed in practice, even in places where efforts have been made. See for example,

- The nightmare following installation of cavity wall insulation in homes where it was manifestly unsuitable due to the building structure and the prevailing weather conditions. Desperate householders report how their health has been destroyed by cold and damp and their homes rendered uninhabitable, in two Parliamentary debates. The latest debate, [16 March 2020](#), illustrates how easily well intentioned schemes like the Cavity Insulation Guarantee Agency (CIGA) can be both disempowered and corrupted by slippery retrofitters with a product to sell. It tells how firms can go into liquidation, or “phoenix” into another company to avoid being held to account, and how the CIGA was staffed by self-serving members of the industry. This blog, by one of the victims of this scandal, lays out how [even the Trustmark scheme](#) has been corrupted by these conflicts of interest. More information is available from the victims’ organisation, CIVALLI.
- Our report on lack of accountability in a District Heating scheme in south London, [here](#). The heat provider, E.ON, is a prominent member of the customer protection agency, the Heat Trust, and a hard-won Heat Trust audit failed even to report to residents. For the past four years we have worked with residents in social and private housing estates and blocks all over London who have been confronted with similar obstacles when their heating does not work, or is not affordable, year after year. (We expect legislation to help to a degree but it will not solve the problem.)
- The 2019 book, *Safe as Houses, private greed, political negligence, and housing policy after Grenfell* by Stuart Hodgkinson, documents how Camden and Islington local authorities, both highly regarded for energy efficiency, were unable or unwilling to protect residents whose homes were effectively vandalised by major retrofits.

In this context “smaller” infringements, like biomass boilers installed in heat networks to get them through planning and never commissioned, have little chance of being even brought to light. And disasters in individual homes have even less chance of ever being fixed.

Like heat networks, heat pumps are entirely dependent on appropriate design, installation, commissioning and maintenance if they are to work properly. Instead, to date, thousands of residents have lived with installations that fail to keep them warm, but destroy their quality of life. If not installed by well-trained workmen, the noise alone can be overwhelming. Some models, even if correctly installed, have fans running constantly. For this reason, we have found that heat pumps have a very bad name among people we work with, for example on social housing estates.

. . . how might consumer protection risks be mitigated?

Steps in the right direction include the enforcement of MCS standards, the deep assessment promised as part of PAS 2035, concentrating responsibility in the hands of one person as retrofit coordinator, and the involvement of Ofgem. However the stories above make clear how difficult it is to achieve real protection in a system dominated by powerful interests, where residents are powerless. As principles which could lead to more accountability FPA suggest:

- A genuinely independent and well-informed body to advise residents and householders before, during and after the decision to purchase and the installation, and to check up on progress during installation and after a period of one and then two years.
- Fact sheets for owners and for residents that are easy to understand but lay out pros, cons, and risks.
- Sufficient funding and support for local authorities to monitor projects and take action where necessary.
- Guarantees to cover reliability, noise level, and (allowing for obvious variables) cost of operating the system: enticing claims of huge savings may fail to materialise.
- Accreditation of specialists who can step in to correct bad installations.
- Where grants are to private or social landlords, particular protections must be written into the scheme to protect tenants and leaseholders, before, during, and after installation. Residents must be informed of their rights from the beginning, along with information about who they should turn to if things go wrong and what procedures will be followed.
- The first conclusion of the Hackitt review was “listen to residents”. Yet leaseholders and tenants of social and private housing have been disempowered over decades. Even on housing estates, tenants and residents associations have found themselves locked out of their buildings’ community rooms and sidelined in favour of handpicked “representatives”. Respect for elected bodies, clear channels of communication, and accountable action on residents’ complaints can be key to making any building or heating project successful, and safe.
- Compensation, not just to landlords but to end users, must be available without unnecessary obstacles. It must be enough to both cover all costs resulting from inappropriate or badly-performed installations, and provide an additional element for pain and suffering. There should also be provision for punitive compensation to deter persistent bad practice.
- Ensuring that companies guilty of bad practice should not be involved in further installations until they have either made good the problems they have caused, or paid for others to do so.
- Restoration of legal aid for both tenants and homeowners to pursue cases. Support for residents needing to pursue a claim for fraud.
- Clear lines of responsibility with named individuals including landlords, management agents, local authorities, contracted parties and subcontractors.
- Good accredited training for retrofitting specialists all levels, including in technical and further education colleges as well as professional bodies.
- A public and publicised website where people considering having heat pumps retrofitted, and those who have already had the work done, can post their experience or questions, and hear any relevant announcements from the government or the industry. Multiple roles / conflicts of interest could be posted here, too.

Customer protection in retrofitting has been a huge failure so far. While the measures proposed above clearly come at a cost, heating is a health and safety issue. And without the needed protections, the Clean Heat Grant will be rejected by the public, and end up being a waste of precious time, like the Green Deal.

FINANCIAL MANAGEMENT OF FUNDING DELIVERY

Q 36 Do you agree with the proposed budgetary control mechanisms as a means of preventing scheme overspend? Yes/No. Please provide evidence to support your response.

No. As laid out in our introduction, we do not agree with setting a very small budget and then limiting “overspend”. In addition we are concerned that the cliff edge created by first come first served could lead to pressure selling.

TECHNOLOGIES AND USES NOT SUPPORTED THROUGH THIS POLICY

Q 39 Do you agree with not supporting biogas combustion under the new policies? Yes/No. Please provide evidence to support your response, including any wider detail on decarbonisation opportunities for biogas combustion in rural areas.

Yes. For the same reasons laid out in Q 9 above.

Q 40 Do you agree with not supporting solar thermal systems under the Clean Heat Grant? Yes/No. Please provide evidence to support your response.

No. Solar thermal and PV are the technologies we are most often asked about. Most of the people we are in touch with are tenants or leaseholders who are not in a position to initiate this themselves, but many certainly want it. We do not accept the arguments on which you have dismissed it.

- a) While it may not be a “stand-alone solution” it combines very well with other technologies, particularly heat pumps, and could be supported e.g. by a combined grant. (It is also useful in homes with very high energy efficiency.)
- b) We do not understand your point about costs not falling. Costs of solar technology *have* come down, far more than heat pumps.
- c) If take up were low, it would still be important to have this option on offer.

COMPLIANCE

Q 43 and Q 44

We have laid out in questions 28 and 35 some of the risks from consumers’ point of view, and some possible ways of mitigating these risks and ensuring compliance.

In relation to what appears to be the focus of this section we would single out this principle:

- Ensuring that companies guilty of bad practice should not be involved in further installations until they have either made good the problems they have caused, or paid for others to do so.