

MAYOR OF LONDON



FUEL POVERTY ACTION PLAN FOR LONDON

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Executive Summary

Fuel poverty occurs when a household has a higher than average fuel bill and the household income falls below the official poverty line after spending the amount needed to heat the home adequately.

Between 2013 and 2014, 69 per cent of the national increase in fuel poverty occurred in London.¹ This was the result of underinvestment in new housing and rising housing costs in London coupled with the national trends of rising energy prices, declining incomes and reductions in benefits for the most vulnerable households.

Fuel poverty in London remains at unacceptable levels, with more than 335,000 households affected according to the latest available data.² The above issues facing Londoners have combined with a legacy of underinvestment in energy efficiency programmes in London: the Energy Company Obligation (ECO)³ persistently not providing London with a fair share of funding from energy suppliers; and the failure of the government's programme, the Green Deal. In its Fuel Poverty Strategy,⁴ the government has set policy initiatives and targets to address fuel poor households, but these actions have not met the capital's needs.

Many Londoners are therefore forced to endure fuel poverty: in 2014, 119,000 households with children and 59,400 households of adults aged 60 or over were living in such conditions. Ensuing health issues range from poor mental health, to childhood asthma and excess winter deaths.⁵ Yet, shockingly, the problem continues to not receive the attention it deserves.

In the face of insufficient national action, this Fuel Poverty Action Plan sets out what the Mayor will do to help Londoners to heat their homes, and overcome the health effects of cold, damp, draughty living conditions. It also explains what action the Mayor will take to improve collaboration and co-ordination among the wide variety of organisations that are working to tackle fuel poverty. This is part of the Mayor's Energy for Londoners (EfL) programme, which aims to make London's homes warm, healthy and affordable, and its workplaces more energy efficient, and to supply the capital with more local clean energy.

One of the main ways to bring people out of fuel poverty is to ensure they have incomes at the level needed to avoid choosing between eating and heating. This is an issue that national government should and could address. The Mayor, for his part, is working in several areas to ensure that Londoners have the incomes they need, from ensuring an

adequate London Living Wage to facilitating the retention and growth of well paid, secure jobs in London.

Energy companies too, have a major role to play – and a responsibility. London households pay for ECO through their energy bills, contributing more than 13 per cent to ECO nationally. However, ECO activity in London constitutes only 7 per cent of national installations. London's fair share of ECO is estimated to be around £80m per year excluding inflation both for the 2018-2022 phase and support from 2022 to 2028. For too long London has not received its fair share of ECO. This coupled with high tariffs and the use of prepayment meters mean that those who are in most need of warmth – the sick, the old and the young – are least able to access affordable warmth.

This plan identifies those areas where the Mayor can have the most impact. Through combining fuel poverty data with other social datasets, it has been possible to identify those people who are most severely affected by fuel poverty so that interventions can be targeted at those most in need. While the aim is to reduce fuel poverty for everyone, the Mayor will focus action on the private rented sector; those living in properties with Energy Performance Certificates rated F and G and those with a disability or long-term illness. Proposed actions include:

1. Boosting the incomes of people in fuel poverty in London by supporting benefits uptake campaigns, referral services and programmes that provide direct advice and support to the fuel poor.
2. Increasing the energy efficiency of London's homes so they are better insulated and use less energy. The Mayor will target the worst homes in the private rented sector by improving enforcement action against landlords who do not meet legal requirements. He will also invest directly in energy efficiency programmes and will prioritise those most likely to be in fuel poverty. These include those in owner-occupied homes or those in social housing whose incomes are inadequate to fund sufficient warmth.
3. Ensuring Londoners in fuel poverty are able to access fairer energy tariffs by tendering for the delivery of an energy supply company as soon as possible. In 2014, almost 100,000 of the total 346,000 households in fuel poverty in London used prepayment meters to pay for electricity which offer some of the most expensive energy prices in the market.⁶ Switching to more affordable tariffs or to smart meters will help affordability. The Mayor will indicate where more affordable energy tariffs can be found.

Improving the energy efficiency of homes remains the most sustainable, long-term solution to fuel poverty and is also an essential part of tackling climate change. The Mayor has set a target for London to be a zero carbon city by 2050, and to achieve this target there will need to be a step-change in the scale and pace of how existing homes are retrofitted to be more energy efficient. This plan will exploit the clear synergy between tackling climate

change and fuel poverty, by ensuring that the Mayor's retrofitting programmes prioritise the fuel poor.

A whole-house approach would ensure all the energy efficiency needs of the property are assessed and a comprehensive package of measures is implemented. If this was applied to achieving the energy efficiency targets in the national fuel poverty strategy the research indicates this would cost around £3 billion in London.⁷

Tackling fuel poverty will require action from government and the energy companies to address its causes. The Mayor alone cannot solve this problem and will therefore continue to lobby national government for improved funding support for fuel poverty programmes, an expansion of minimum energy performance standards for new homes, national infrastructure investment in home energy efficiency retrofit, and more responsible tariff provision by energy companies, including ending the use of prepayment meters. Only then will any substantial progress be made in reducing the number of Londoners that can't afford to keep warm - a source of shame in a city as rich as ours.

Summary of actions

The Mayor will build on current initiatives to design and implement a world-class homes energy efficiency programme which will:

- earmark over £10m over four years (2017/18 – 2020/21) for new energy efficiency delivery programmes (this money will be split between action to drive carbon reduction, and to support fuel poverty reduction). This includes the Mayor's Warmer Homes scheme, launched in January 2018, which will provide heating and insulation improvements for up to a thousand fuel poor households by 2020. Initially for owner-occupiers, a trial expansion will take place for private tenants from summer 2018
- provide a Fuel Poverty Support Fund of up to £500k over four years (2017/18 – 2020/21) to support the roll out of local advice and referral networks, including home visiting services, as a way of helping to improve the living conditions of fuel poor households. For the first phase, £250,000 of grant funding has been allocated to the boroughs of Croydon Islington, Kingston and Lewisham to deliver a pan-London referral network
- deliver an energy supply company for London offering Londoners fairer energy tariffs by winter 2019/20
- implement a programme to help Londoners, particularly the long-term ill and disabled, through ensuring that they are getting access to all of the income support they are entitled to, including Benefits Entitlement Checks
- target support to households in, or at risk of, fuel poverty, particularly vulnerable households, such as those with long-term illnesses or disabilities, as part of a wider effort to generate whole house retrofit
- create a new online database of landlords and letting agents who have been convicted of relevant criminal offences, the first phase of which was launched in autumn 2017

- make available a new open-source pan-London Energy Performance Certificate (EPC) data model in 2018, to help boroughs drive better long-term planning of interventions at a property level
- provide guidance and support to boroughs on how they can legally and responsibly use data to identify households in fuel poverty

The Mayor will also work with others to:

- establish a high-profile cross-sectoral Fuel Poverty Partnership in 2018 and appoint the Deputy Mayors for Environment and Energy, and Social Integration, Social Mobility and Community Engagement as Co-Chairs
- support the rolling out of existing local authority and community advice and referral networks, as a way of helping to improve the living conditions of fuel poor households
- support local authorities to target enforcement efforts at the worst quality and most inefficient properties in London through the London Borough Private Rented Sector Partnership
- support Gas Distribution Networks and other stakeholders to ensure gas connections targets are met in the capital, to support the significant number of homes using expensive electric heating
- support an effective and inclusive smart meter rollout in London
- urge and work with clinical commissioners and Health and Wellbeing Boards to implement national public health guidelines on excess winter deaths and cold homes and in improving discharge procedures to address housing conditions
- improve identification of vulnerable energy and water consumers and ensure that they are aware of support available to them.

The Mayor will call on government to:

- develop fiscal incentives to increase the uptake of solid wall insulation
- urgently review the Minimum Energy Efficiency Standards regulations to remove exemptions and ensure that a greater number of properties can be remediated
- devolve to him responsibility for considering and approving selective licensing schemes for private rented homes
- devolve ECO funds for the Mayor to disburse including through his Energy for Londoners energy efficiency programmes
- enhance the current voluntary arrangements for households in fuel debt by making it a licence condition that vulnerable households are not disconnected and are offered a range of debt management options. This will ensure indebted customers of both established and newer energy suppliers receive the same degree of support.
- improve regulatory safeguards to protect against the negative consequences of “self-disconnection”, where low income households lack credit to put on their prepayment meters.

Introduction

Fuel poverty – the facts

Fuel poverty (Box 1) is caused by the combination of three factors: low incomes; poor energy efficiency of homes; and high energy prices.

Box 1: Definition of fuel poverty

The analysis informing this draft action plan has used the official 'Low Income High Costs' definition of fuel poverty. This finds a household to be fuel poor if it has:

- an income below the poverty line (including if meeting its required energy bill would push it below the poverty line)
- higher than typical energy costs⁸

This means that fuel poverty is a result of the overlapping problem of households having a low income and facing the highest energy costs. The Low Income High Costs indicator allows not only the extent of the problem (how many fuel poor households there are) to be measured, but also the depth (how badly affected each fuel poor household is). It achieves this by taking account of the fuel poverty gap, which is a measure of how much more fuel poor households need to spend to keep warm compared to non-fuel poor households. Looking at the fuel poverty gap gives a more sophisticated understanding of fuel poverty and, crucially, it enables efforts to be focused on the nature and causes of the worst levels of fuel poverty.

The national context

At the national level, targets to reduce fuel poverty are set out in the Fuel Poverty (England) Regulations 2014⁹ and the fuel poverty strategy for England, 'Cutting the cost of keeping warm' (2015).¹⁰

'Cutting the cost of keeping warm' sets a target of ensuring that as many fuel poor homes as is reasonably practicable achieve a minimum Energy Performance Certificate (EPC) rating of B and C by 2030. The government has also adopted two interim milestones, working to ensure that as many fuel poor homes as is reasonably practicable reach:

- band E by 2020
- band D by 2025

However, while this strategy sets out a clear rationale for acting on fuel poverty, the first report of the Committee on Fuel Poverty¹¹ (an advisory non-departmental public body, sponsored by the Department for Business, Energy & Industrial Strategy) sets out how there is a very real danger of these targets being missed. It concludes that only a small proportion of funding for energy efficiency measures is designed to reach households in fuel poverty and that there is currently a significant shortfall in the funding required to meet the above targets.

To reverse the current trend that would see targets being missed, the Committee's report sets out the following six priority outcomes for the government:

1. The strategy will be sufficiently funded and existing government and supplier programme spend must be significantly better focused than previously on helping households in fuel poverty.
2. There will be additional finance in place from other sources to help fund household energy-saving measures to meet the fuel poverty milestones and targets.
3. Health agencies, local authorities and practitioners will recognise the impacts of cold homes and must deliver solutions.
4. Regulatory changes will have positive outcomes for households in fuel poverty.
5. The energy market will function for households in fuel poverty.
6. Households in fuel poverty will be given information and advice on what assistance is available from different sources and the actions they can take.

The report underlines the critical importance of being able to identify individual households in fuel poverty to direct funding appropriately. It too identifies the private rented sector as a key target for ensuring their properties are energy efficient to a minimum standard through existing regulation. In line with this, it recommends that:

- appropriate measures are introduced to facilitate data sharing and to improve targeting of activity on those most in need
- the Private Rented Sector Energy Efficiency Regulations¹² and the Housing Health and Safety Rating System (HHSRS)¹³ are reviewed, and enforcement action is strengthened
- local authorities are empowered to support and deliver community-based initiatives and to act on the link between cold homes and ill health by taking appropriate action
- the government recognises the importance of providing high-quality energy advice and ensures adequate resources are in place to deliver significant targeted benefits to fuel poor homes¹⁴

Fuel poverty in London

In 2015, there were 335,201 households living in fuel poverty in London, which equates to 10.1 per cent of all households in England that are in fuel poverty.¹⁵ This is a decrease in the number of households in fuel poverty since 2014 but still an increase on the number in 2011 and not considered a trend. Further research will be undertaken to understand this decrease. Prior to 2015 fuel poverty had been on the increase - between 2013 and 2014, 69 per cent of the 30,000 increase of homes in fuel poverty in England occurred in London. On average in 2014, the fuel poverty gap - the amount needed to avoid falling into fuel poverty – in London was estimated to be £296 (Table 1).¹⁶

Fuel poverty in London (Table 1) has been assessed using the English Housing Survey data sets from 2011 (when the Low Income High Costs definition of fuel poverty was adopted and data was first published) to 2014.¹⁷

While the number of homes in fuel poverty increased from 306,000 in 2011 to 346,300 in 2014, the average fuel poverty gap has decreased slightly from £304 to £296.

Table 1: Numbers of fuel poor households and average fuel poverty gap in London in 2011 and 2014 ¹⁸				
Year	Number of non-fuel poor households	Number of fuel poor households	Proportion in fuel poverty (%)	Average fuel poverty gap (£)
2011	2,796,600	306,000	9.9	304
2014	2,933,700	346,300	10.6	296

Health impacts in London

There is increasing evidence that living in a cold home is associated with poor health, including an increased risk of disease and death for all age groups. Health impacts include mental health issues, as well as respiratory and circulatory problems. Although not all cold homes have fuel poor households living in them, there is a strong link between the two.

Fuel poverty and cold conditions can significantly affect mental health. For example, evaluation of the government's Warm Front energy efficiency scheme found increases in room temperature were associated with a reduced likelihood of experiencing depression and anxiety.¹⁹ Another study found that young people living in cold homes were more likely to be at risk of multiple mental health problems, experiencing four or more mental health symptoms.²⁰

In terms of the physical effects, children living in cold, damp and mouldy homes are almost three times more likely than those living in warm homes to suffer from respiratory

illnesses.²¹ This can have a negative impact on educational attainment through increased school absence due to illness or inability to find a quiet and warm place to study.²²

Between 2012 and 2017, there were 14,010 Excess Winter Deaths (EWDs) in London (Table 2).²³ The Office for National Statistics defines EWDs as the additional number of deaths occurring during December to March in any one year compared to the number of deaths that occurred in the preceding August to November and the following April to July. The causes are complex. Estimates suggest that EWDs are almost three times higher in the coldest 25 per cent of homes than in the warmest 25 per cent of homes.²⁴ The Hills Review²⁵ estimated that some 10 per cent of EWDs are directly attributable to fuel poverty and a World Health Organization report estimates that as many as 30 per cent of EWDs can be attributed to cold housing.²⁶ This equates to between 1,400 – 4,200 deaths in London between 2012 and 2017 where the inability to heat homes adequately may have been a contributory factor.

Winter	London total excess winter deaths	London excess winter deaths attributable to:		
		fuel poverty	coldest quarter of homes	cold housing conditions
2011/12	2,800	280	600	840
2012/13	2,750	280	590	830
2013/14	1,700	170	370	510
2014/15	4,040	400	870	1,210
2015/16	2,120	210	460	640
2016/17 (provisional)	3,400	340	730	1,020
Latest 5-year average	3,360	340	720	1,010
Latest 5-year total	14,010	1,400	3,020	4,210

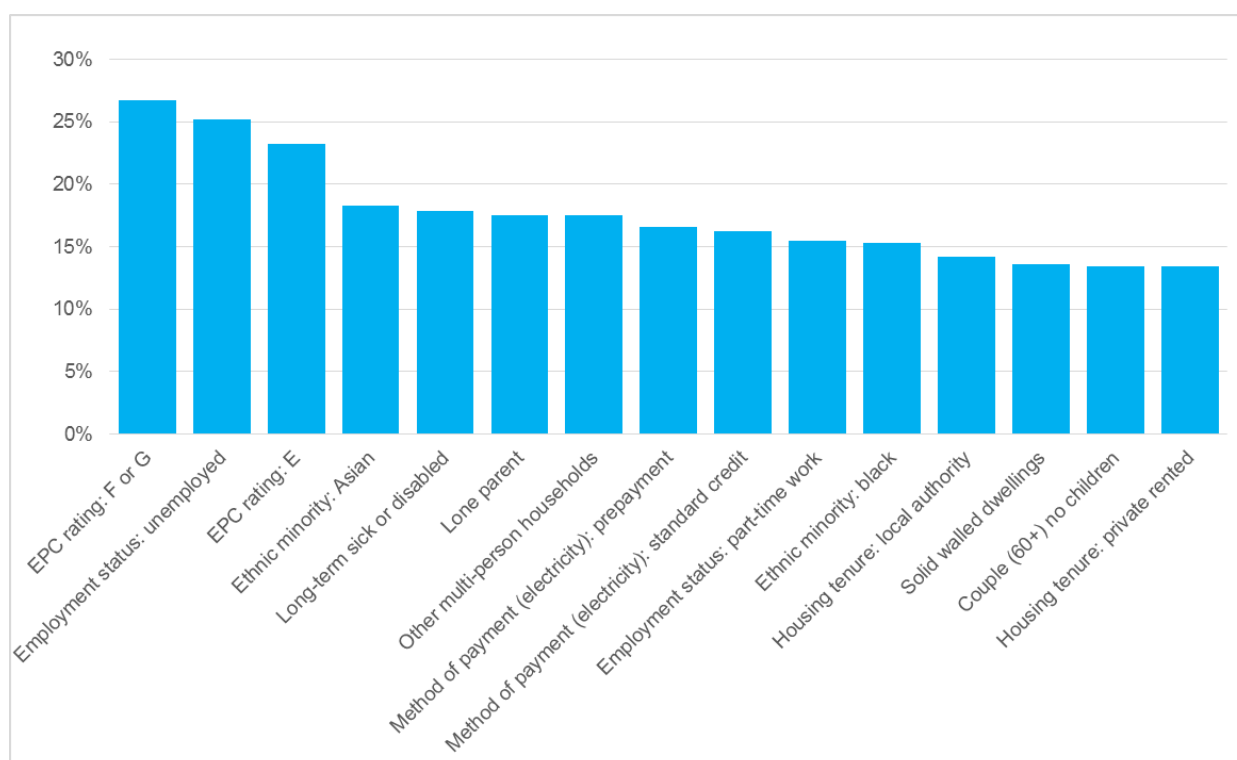
The increase in illness and death associated with cold homes and fuel poverty is also impacting health costs. In London, it is estimated that 82,000 privately rented properties are associated with excess cold, with the cost to the NHS as a result of not improving them being £18.9m per year.²⁸ Figures also indicate that each local Health and Wellbeing Board²⁹ spends around £27,000 per day treating the illnesses associated with cold homes due to cold-related hospital admissions and repeat GP visits, mostly from respiratory and cardiovascular conditions. Treatment can range from emergency hospital admissions for pneumonia to long term support and monitoring for chronic conditions such as asthma and bronchitis.³⁰

National public health guidance issued in 2015 (see Box 6) provides a clear set of actions that the NHS, local authorities and others should undertake to reduce winter deaths related to cold homes and local authorities have previously secured funding from public health programmes to support fuel poverty and referral schemes undertaken in partnership with local health providers and community organisations.³¹ However, this type of scheme is not universal and a sustainable source of funding is needed to ensure continuity. If government's fuel poverty target (that all fuel poor homes must achieve EPC band C by 2030) is not met, the cost to the NHS of treating the illnesses associated with cold homes in the capital is estimated to be more than £4 billion in the next 14 years.³²

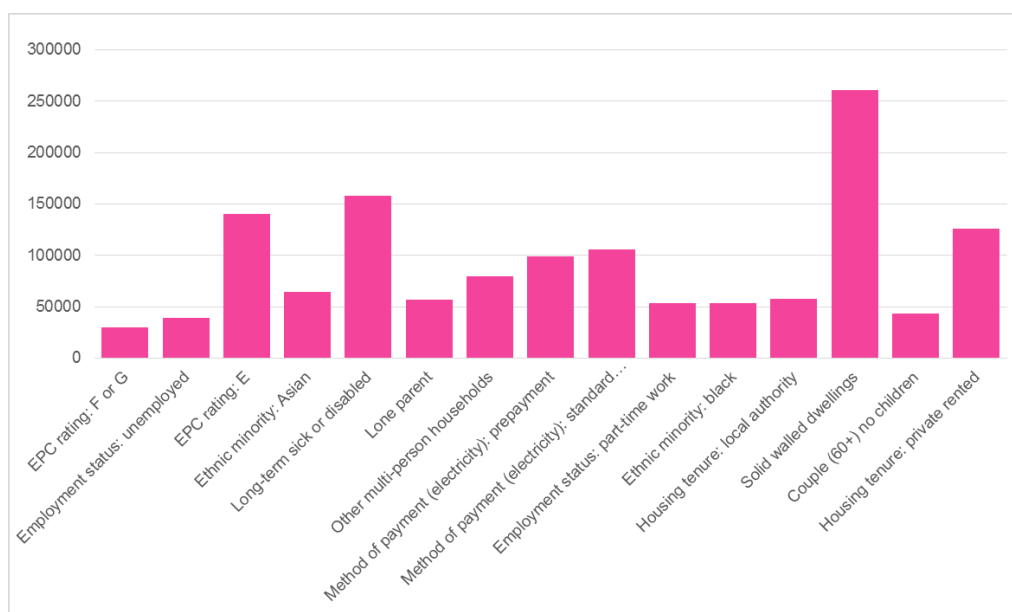
Profiles of fuel poor households in London

Some London households are affected by fuel poverty more than others. Figure 1 shows the types of dwellings that were most affected by fuel poverty in London in 2014 (as measured by the percentage of each group that are fuel poor). Figure 2 shows the total number of fuel poor households in each group.

Figure 1: Proportion of households in fuel poverty



Source: Fuel poverty in London: Research and policy report; CAG Consultants working with CSE, ACE and SE2, 2017

Figure 2: Number of fuel poor households


Source: Fuel poverty in London: Research and policy report; CAG Consultants working with CSE, ACE and SE2, 2017

Energy efficiency

The energy efficiency ratings of homes have a significant association with the likelihood of a household to be living in fuel poverty. Those in the least energy-efficient homes – rated F or G – are most likely to be in fuel poverty, closely followed by those in homes rated E. In 2014, more than half of households living in homes rated in EPC band G were fuel poor, compared to just 0.2 per cent of households living in homes rated in EPC band C. The average fuel poverty gaps were £708 for F-rated homes and £1,300 for G-rated homes.³³

The highest total numbers of fuel poor are those living in solid-walled homes, which are less energy efficient than cavity-walled homes. Around 60 per cent of London's homes are solid walled,³⁴ which explains the high total number of fuel poor associated with them. In 2014, those living in solid-walled properties represented over three-quarters of all fuel poor households, with a fuel poverty gap (£332) that was more than double that of fuel poor households living in insulated cavity wall dwellings (£161).

Rented accommodation

The tenure of homes is also a factor, as well as an indicator of households in fuel poverty. While fuel poverty affects all housing tenures, in 2014, households living in rented accommodation experienced disproportionately higher levels of fuel poverty. This is likely

to be a result of low incomes, inefficient homes and a lack of control over the standard of the home. The evidence shows:

- 36 per cent of all fuel poor households live in private rented accommodation. The private rental sector also had the greatest fuel poverty gap of £385
- local authority housing (dwellings owned and managed by individual London boroughs) had the highest proportion of households in fuel poverty, with 14.2 per cent (or 57,300 households) living below the income line and experiencing higher than average fuel costs
- the proportion of households living in fuel poverty in housing association homes (those owned and managed by private, non-profit-making organisations) was 10 per cent. This sector saw the most significant rise in fuel poverty between 2011 and 2014 – an increase of 13,300 households, or 58.4 per cent, in that time

Employment status

Dwellings in London with an unemployed head of household were most disproportionately affected by fuel poverty in 2014, with more than one quarter (25.2 per cent) living on low incomes and having high energy costs. However, fuel poverty also affected significant numbers of homes where the head of household was in part-time employment – 15.5 per cent (53,500) of these households were in fuel poverty.

Those homes with the head of household in part-time employment also experienced one of the most significant increases in fuel poverty in recent years, with 30 per cent more households in fuel poverty in 2014 compared to 2011.³⁵ This was a result of falling incomes and benefits, increasing levels of unpredictable work, rising energy costs and increasing housing costs in London. In addition, these households' average fuel poverty gap increased by £124 over that time to £353.

Households with a retired head of household also saw a similar proportional increase in the number of fuel poor households between 2011 and 2014 (32.3 per cent). However, the rate of fuel poverty in this group (10.3 per cent) was still slightly below the London average of 10.6 per cent in 2014.

Although there was a low proportion of households in full-time work in fuel poverty in 2014, overall these 120,900 households comprised more than one third (34.9 per cent) of all fuel poor households in London.³⁶

Health

Households that include a person with a long-term illness or disability are significantly more likely to be fuel poor than others. Almost one in five of these households were living in fuel poverty in 2014 in London, compared to fewer than 1 in 12 households with no long-term illness or disabilities. There were 158,500 households with a person with a long-term illness or disability in 2014 that were in fuel poverty, comprising nearly half (45.8 per cent)

of all fuel poor households in London. Those people who have limited mobility or a health condition, such as heart or lung disease, are recommended by the NHS to heat their home to a warmer temperature, which has the potential to exacerbate fuel poverty.

The problem intensified between 2011 and 2014, during which time the number of people with a long-term illness or disability living in fuel poverty increased by more than 50 per cent and the average fuel poverty gap increased by £47. The increased prevalence of fuel poverty among some disabled people is due at least in part to changes to eligibility criteria, and cuts to welfare benefits and fuel poverty support.³⁷

By contrast, fuel poverty numbers decreased for households with no disability concerns – there were approximately 16,000 fewer households with no long-term illness or disabilities living in fuel poverty in 2014 compared to 2011. Those that remained in fuel poverty in 2014 experienced on average a fuel poverty gap that had reduced by £37 since 2011.

Method of payment for energy

21 per cent of Londoners are on electricity prepayment meters (which provide less access to good deals), compared to 17 per cent nationally. Only 45 per cent of Londoners pay for electricity by direct debit, which is the second lowest rate in the UK. London also has the lowest proportion of gas customers paying by direct debit. Those on prepayment meters and standard variable tariffs are particularly correlated with fuel poverty – 16.6 per cent of those households on prepayment meters are fuel poor, compared to just 7 per cent of those paying by direct debit.

Debt and disconnection: between 2007 and 2017 the number of gas and electricity consumers in debt fell by around half. However, the average level of debt amongst indebted customers is steadily rising. Many energy suppliers are failing to intervene at an early stage to avoid debts escalating. Many small and medium energy suppliers have entered the market in recent years and often lack the infrastructure to deal with debt. They may often have billing accuracy problems.³⁸

Disconnection rates have declined in large part due to significant numbers of indebted households being provided with prepayment meters to clear their debt whilst paying for ongoing usage. Low disconnection rates obscure a considerable number of households “self-disconnecting”, essentially unable to put credit on their prepayment meters. Citizens Advice estimate that 16 per cent of prepayment meter users have gone without credit at least once in the past 12 months. With around 720,000 households in London using prepayment meters for at least one fuel this would amount to around 115,000 households and these are very likely to be families with children or containing individuals with a long-term illness or disability.^{39 40}

Smart energy

The move towards smart energy metering presents opportunities for the fuel poor (accurate bills and the ability for consumers to cut their bills through changes in energy use), however safeguards and measures will be essential to protect vulnerable households during the installation process and ensure they can take advantage of the information provided by the smart meter. The government's Early Learning Project found that low income households were the least likely to engage with the information from their smart meter.

Off-gas homes

An estimated 564,000 households (19 per cent of London's total households) are not served by mains gas. Only the South West region and Scotland have a higher rate of off-gas homes.⁴¹ Many these homes will be heated using conventional electric heaters, which can result in much higher energy bills than those with gas boilers. Consequently, households that do not have a gas connection are around 50 per cent more likely to be fuel poor than those supplied by gas, with their fuel poverty gap being twice as high.⁴² Whilst heat networks and low or zero emission forms of heating are preferable natural gas will continue to play a valuable role in the short to medium term for heating.

Other factors

Various other factors make it more likely for households to be in fuel poverty. These include:

- people living in lone parent or pensioner households, and
- those households inhabited by black and Asian minority ethnic groups.

Figure 1 and Figure 2 illustrate only the experience of these discrete groups. They do not quantify the status of households that are made up of more than one of these groups, as the data does not permit such analysis.

Detailed tables accompanying this section are contained in Appendix 1.

Challenges to addressing the causes of fuel poverty

There are several challenges in addressing the causes of fuel poverty, which are specific to London (Box 2). These have been identified based on the Committee on Fuel Poverty's findings, the research commissioned for this plan and experience gained from previous London activity on fuel poverty.

Box 2: London specific challenges to addressing fuel poverty

London is different to the rest of the country due to challenges around energy use and efficiency, higher costs, and borough funding and resources, making it harder to tackle fuel poverty.

Higher costs in the capital:

- housing costs - when these are taken into consideration, London has the highest rates of poverty in the country. In the three years to 2013/14, 27 per cent of people in London were in poverty after housing costs were considered, seven percentage points higher than the rest of England.⁴³ High housing costs and benefit cuts are making it increasingly difficult for low-income households in London with many households, in and out of work, spending a greater share of their income on housing and sacrificing other spending, including on energy, to stay where they are⁴⁴
- higher living costs mostly due to the high costs for housing, but the prices of food, petrol, utilities, and other necessities have also been increasing in recent years
- higher costs to delivering energy efficiency measures including labour, materials and scaffolding, as well as travelling and parking. This has impacted on London's share of ECO, compared to other regions

London's homes are far more likely to be:

- solid walled – the large number of solid walled homes are more expensive and physically challenging to retrofit than homes with cavity walls
- flats – 50 per cent of all London's homes (compared with 16 per cent in the rest of England) are flats. Flats are harder to retrofit than a single dwelling with measures such as external wall insulation and energy efficient glazing often needing to be installed in all dwellings within a building at the same time. This requires agreement from tenants, leaseholders and freeholders
- privately rented – around 29 per cent of all London's homes (compared with 18 per cent in the rest of England) are privately rented, including a greater number of Homes in Multiple Occupation (HMO). Landlords often have little incentive to improve the energy efficiency of their properties as they do not receive any benefit from the savings on energy bills
- in a conservation area – half of England's total are in London. Planning requirements can also act as a barrier for making some of these improvements and even outside conservation areas, permitted development rights and planning policy, for example in relation to external wall insulation, are not applied consistently

Box 2: London specific challenges to addressing fuel poverty

- off the gas grid – 16 per cent of London homes do not have a gas connection, compared to 13 per cent across England as a whole⁴⁰

High use of pre-payment meters and low levels of energy switching:

- as well as large numbers of Londoners being on prepayment metres, London also has the lowest levels of switching of all regions in the UK for gas and is below the national average for electricity. Londoners are therefore missing out on discounted introductory offers that can be obtained through switching

Challenges for boroughs:

- lack of funding and resources – London boroughs are inadequately resourced, particularly in the face of the one per cent rent reduction in social housing rent,⁴⁵ to meet the demand for fuel poverty services and take enforcement action to tackle cold homes
- lack of evidence to make the case for and to target fuel poverty action. Interventions can deliver clear and direct savings to healthcare services in the medium to long term. Identification and targeting of fuel poor homes remains difficult; both data coverage and the way data is used need to be improved
- difficulty in engaging households – vulnerable households need to be made more aware of the support that is available
- supply chain – Each Home Counts⁴⁶ (the Bonfield Review) sets out the need to improve quality standards across the supply chain to reduce the likelihood of poor performance from installations of energy efficiency measures

Despite the challenges, experience in London shows that:

- local authority and community-led initiatives can, and do, deliver diverse and significant benefits to fuel poor households (see case studies on SHINE (Box 4) and Kingston Warm Homes (Box 5)). Given the often-complex nature of individual cases, services need to be properly resourced in a variety of ways to suit different circumstances
- careful targeting of fuel poor households with grant-funded measures can make important changes to people's lives (for example, The Mayor's Better Boilers scheme⁴⁷ (Box 3))
- where necessary, referral and outreach services must be backed up by the enforcement of regulations to ensure that fuel poor households do not have to live in inadequate accommodation

Box 3: Better Boilers Scheme

The Mayor launched his Better Boilers pilot scheme in January 2017. This has replaced and repaired 483 inefficient and broken boilers, and installed new heating controls in homes in receipt of benefits. The scheme has reduced annual energy bills by around £150 per household, among other benefits such as improved air quality and reduced risk of carbon monoxide poisoning.

Better Boilers has also removed harmful asbestos from many fuel poor homes, which had previously insulated old pipes and heating systems.

Surveyed users of the scheme registered a high satisfaction rate of 91 per cent.

The scheme has provided important learnings in relation to delivering fuel poverty support in London and the type of support vulnerable people need, which is helping to inform the development of new initiatives, including the Mayor's Warmer Homes scheme, which launched in January 2018.

Key learnings and recommendations included:

- provision of advice on low cost energy tariffs, fuel debt and the use of heating controls has been assessed as the most valuable advice by recipients of the scheme
- future schemes should consider:
 - combining boiler replacement and repairs with other energy efficiency measures, such as loft and cavity wall insulation
 - supporting properties which do not have gas central heating systems (based on data from the English housing survey it is estimated that between 116,000 and 184,000 dwellings in London have storage heaters, and as such do not to have gas central heating)
 - accounting for more flexibility over delivery, such as the type of boilers to offer, and delivery timescales (i.e. working around hospital appointments or scheduling boiler works when carers or family support were available)

Partnering with other organisations, such as NGOs and charities, can add value to schemes addressing fuel poverty, as it can ensure customers with special needs are referred to the right organisations and are informed about other initiatives supporting fuel poverty.

The Approach

The rationale for action

The Mayor wants renewed focus to tackling fuel poverty in London. For too long, the capital has experienced a chronic lack of investment in affordable housing, driving up the cost of living coupled with falling real incomes and high energy tariffs for those less able to pay. This has resulted in many Londoners experiencing fuel poverty. These are systemic issues that need to be addressed.

With more than 350,000 homes needing support, and levels of government/private funding that are currently inadequate to pay for the measures required to bring these households out of the worst fuel poverty, concerted and systematic long-term action will be needed across the health, environment, business and government sectors.

But there must be no delay, as the health implications for those in fuel poverty, especially for the young and vulnerable, are too severe. The Mayor therefore embarked on several initiatives in 2018.

The goal

To support the national fuel poverty targets, the Mayor will play as active a role as he possibly can in:

1. Alleviating fuel poverty
2. Reducing the fuel poverty gap

The Fuel Poverty Action Plan sets out the development of indicators and targets for each of the Mayor's programmes that relate to fuel poverty. These will be published alongside the Mayor's London Environment and Health Inequalities Strategies.

The approach

The Mayor will tackle the three drivers of fuel poverty side by side: energy efficiency, low incomes and high energy tariffs.

As recommended by the Committee on Fuel Poverty, the plan will utilise new government data that identifies the location of houses with poor energy performance. This information, together with new research commissioned to inform this plan, will be used to direct support at those living in the greatest fuel poverty. This is the first time this data has been used in this way at the London level.

Maximising the impact of existing support to increase energy efficiency in homes and improving the take-up of eligible benefits

Some support currently exists in London to tackle fuel poverty. The Mayor will aim to maximise the uptake of this support by assisting referral services as well as by making better use of data to target support for the most fuel poor households.

Action will include:

1. supporting existing borough services, focusing on those households in the worst fuel poverty so they receive, for example, income maximisation advice, debt advice and referrals for free insulation measures
2. providing focussed support to help improve energy efficiency of homes
3. using data to help better target support for the most fuel poor households
4. securing more ECO funding for London
5. directing action to help those most in need, with emphasis on housing costs, employment status and health.

1. Supporting the roll-out of borough referral mechanisms

Historically, London boroughs have been a key provider of fuel poverty support programmes.

They have been particularly successful in seeking to understand the often-complex circumstances of fuel poor households and how fuel poverty is linked not only to energy efficiency, but income, health, wellbeing and general housing issues.

As a result, schemes have tailored actions to individuals rather than taking a blanket approach. This has delivered outcomes that go far beyond the focus of energy saving and helped to provide referrals for other public services. Examples of services offered through London borough schemes include:

- referrals to energy efficiency schemes
- energy and water saving advice
- installation of free water saving measures
- support to eliminate fuel and water debt
- benefits maximisation for those eligible
- surveys to identify hazards in the home
- referrals to adult social services for home adaptations
- referrals to health services including flu clinics
- referrals to the London Fire Brigade to fit free smoke alarms and to the Police to carry out home security checks

Box 4: Seasonal Health Interventions Network (SHINE)

Islington council launched the Seasonal Health Interventions Network (SHINE) in 2010 and now offers energy advice and fuel poverty interventions to all London boroughs. Since inception, it has delivered interventions in more than 20,000 homes, including energy advice, homes visits, benefit checks, debt advice, energy efficiency grants and referrals to health services, the London Fire Brigade and police.

Targeting low income households and those comprising older people, those with respiratory or cardiovascular disease, limited mobility, or young children, SHINE has delivered more than 60,000 interventions.

Box 5: Kingston Warm Homes, Better Health 2016-17

Starting in 2010 Kingston has run its Warm Homes, Better Health (WHBH) programme for more than seven years, targeting vulnerable and older residents to improve health and alleviate fuel poverty. It has visited over 2,000 homes during this time. As with SHINE (Box 3), it provides a broad range of actions to help improve the circumstances of fuel poor households. As well as helping to refer people to funded energy efficiency schemes, WHBH provided referrals to wider health services, energy advice, assistance in relieving fuel and water-related debt and income maximisation.

The programme relies on strong partnership working between Kingston's sustainability and public health teams, health and social care services, the voluntary sector and the delivery agent. Relationships between partners have been developed over several years, demonstrating the importance of continuity in developing successful fuel poverty services. Referrals for the service come from a wide range of sources, including GP surgeries, outreach events and direct contact through texts and mailings.

In 2016-17, this service visited 300 homes, installing more than 1,200 measures. For every pound spent on the scheme, there were confirmed savings to fuel poor households of £5.30. Using the HACT (Housing Associations' Charitable Trust) methodology for calculating social value, the potential lifetime savings of the scheme, including healthcare savings, amounted to £58.50 for every pound spent.

However, boroughs are under considerable financial pressure, and have not been able to maintain support for many of their initiatives. Staff and resources have also decreased significantly: approximately half of London's boroughs no longer have an officer responsible for fuel poverty alleviation.⁴⁸

This leaves significant gaps in the provision of support for households struggling to keep their homes warm and pay for their energy bills.

Based on existing best practice in London, the Mayor will provide up to £500k, through a Fuel Poverty Support Fund between 2017 and 2021, to support the creation or roll out of local advice and referral networks, including home visiting services, as a way of helping to improve the living conditions of fuel poor households.

These referral services will look to take advantage of existing services provided across London – for example home visits⁴⁹ offered by London’s Fire Brigade.

Box 6: Fuel Poverty Support Fund

The Fuel Poverty Support Fund is a £500,000 fund for boroughs to help those Londoners who are affected by fuel poverty. In the first phase of the fund, £250,000 has been allocated to the boroughs of Islington, Croydon, Kingston, and Lewisham to take the first steps in establishing a pan-London fuel poverty advice and referral service including access to income maximisation and energy efficiency schemes. During 2018/19 these four boroughs will roll out their existing services to cover every London borough.

2. Improving energy efficiency of homes

The energy efficiency of homes has generally improved in recent years and this is likely to be the result of energy efficiency improvement programmes, and higher standards of new build properties, over that time. While these improvements will not necessarily have lifted fuel poor households out of fuel poverty, it is likely that they do reduce the depth of fuel poverty that those households experience (since energy efficiency measures logically reduce energy consumption and therefore energy bills).

As has been stated previously, there is a direct link between fuel poverty and those living in solid-walled homes. This is perhaps unsurprising as solid-walled properties are significantly less energy efficient than either insulated or uninsulated cavity walls. Most of these homes remain uninsulated for financial reasons: it costs between £8,000 and £22,000 to insulate a solid-walled home.⁵⁰ This is currently considered by most to be too high a figure to invest in.

While fuel poverty has increased for dwellings of all wall types since 2011, the greatest increase in terms of absolute numbers has occurred for households living in solid-walled dwellings. This emphasises the need for a solid wall insulation programme across the city. The Mayor will lobby government to develop fiscal incentives to increase the uptake of solid wall insulation. The Mayor will also issue planning guidance on external wall

insulation by the end of 2018 to increase boroughs' awareness of the technology and help householders and social housing providers provide good quality, safe applications.

Finally, the Mayor will be providing advice on how landlords' planned or existing energy efficiency programmes can be targeted at the most affected in London. Energy for Londoners will target support to the least energy efficient homes in an effort to generate deeper energy efficiency retrofit, and it will support households in properties at risk of fuel poverty as a result.

3. Using data in a more targeted way to assist fuel poor households

While new government data is available that identifies the location of houses with poor energy performance, it remains a challenge to combine this data with information that can accurately identify fuel poor households.

The Mayor will work to remove this barrier, developing for the first time a London built environment model which displays information at an individual building level. This high level of granularity will transform the approach to the targeting of energy efficiency and fuel poverty programmes, giving a street by street view of London's buildings.

As part of this work, the Mayor will make available a new open-source pan-London EPC data model in 2018, to help boroughs drive better long-term planning of interventions at a property level. The Mayor will also provide guidance and support to boroughs on how they can legally and responsibly use data to identify households in fuel poverty.

By combining a range of data sets, including EPCs and energy consumption data with socio-economic data (such as benefits data), we will start to identify patterns in fuel poverty at a much more detailed level and provide a resource for London boroughs to do the same. However, benefits data is currently held with the Department for Work and Pensions (DWP). The data sharing provisions of the Digital Economy Act do not allow local authorities, public sector health bodies and energy network companies to undertake a direct data matching process with the DWP, independent of licensed gas and electricity suppliers. The Mayor therefore urges the government to make this data easily accessible for local government enabling better fuel poverty targeting to take place.

4. Securing more Energy Company Obligation (ECO) funding

ECO is a government energy efficiency scheme in Great Britain to help reduce carbon emissions and tackle fuel poverty. ECO has long been one of the primary sources of funding for energy efficiency improvements. However, energy suppliers, who deliver ECO, have not provided enough ECO funding for energy efficiency measures in London due to a range of factors, including the difficulty in retrofitting the prevalent housing types in London, and the higher costs and complexity of delivery. The government has committed to continuing ECO until 2022, and has recently re-focused activity primarily on insulation for low-income households, and those likely to be in, or at risk of, fuel poverty.

These changes mean that the amount of funding available per energy efficiency measure is likely to increase.⁵¹ This is likely to provide greater opportunities for Londoners to receive their fair share of ECO which would equate to a total of £80 million a year. The Mayor will therefore work with the energy companies and boroughs, using analysis of EPC and deprivation data, to target their heating and insulation measures at those low-income households that have not previously benefited from ECO (or other support).

ECO now has a new 'flexible eligibility' mechanism, which allows boroughs to identify those households that need support but are not in receipt of the qualifying benefits. The Mayor will work with the boroughs and the Association of Local Energy Officers London to develop an agreed London-wide definition of eligible households under the flexible eligibility mechanism, which will make it easier for installers and suppliers to deliver in London (for example, by allowing uniform delivery across multiple boroughs).

Gas Distribution Networks (GDNs) are also under an obligation to extend the gas network in London until at least 2021. First Time Central Heating (FTCH) can make a profound difference to reducing energy costs but slower progress across London has been made compared to the other parts of Great Britain.⁵² The constrained funding landscape for in-house measures was identified as one of the primary reasons for this slower progress. This has prompted the £150m National Grid Warm Homes Fund. Coupled with the development of a new interactive mapping solution for off gas grid homes⁵³ this is a key near-term opportunity to tackle fuel poverty in homes. The Mayor is committed to working with GDNs and other stakeholders to make the most of the National Grid Warm Homes Fund and ensure gas connections targets are met in the capital. He will do this by encouraging boroughs to bid to the Warm Homes Fund and by facilitating gas connections for off gas grid homes through his own fuel poverty programmes. In the medium to long term the Mayor will work to reduce the heating bills in off gas grid homes through promoting a switch to low carbon and renewable heating.

5. Directing action to help those most in need

A key factor behind London's increasing level of fuel poverty is the ever-rising cost of living. A portion of those households on low incomes are likely to be eligible for some state benefits that they do not currently claim. Raising the income of these households through increased benefit uptake could lift some of them above the low-income threshold and remove them from fuel poverty.

The Mayor will look at implementing a programme to help Londoners, particularly the long-term ill and disabled, through ensuring that they are getting access to all the income support they are entitled to, including Benefits Entitlement Checks. Support and advice will also cover areas such as debt management, energy tariffs, energy efficient behavioural advice, and referrals to other support services including those run by boroughs, charities and installers undertaking work to deliver the ECO.

Further interventions

Maximising the uptake of existing support will not be enough to address fuel poverty effectively. In the short term, therefore, the Mayor will support further targeted interventions to help fuel poor homes, and ensure that his broader economic and energy efficiency programmes provide support too. These programmes will target those households most likely to be in fuel poverty. This will include, for example, enforcing legal standards and new funded schemes to increase energy efficiency in the private rented sector where fuel poverty is highly prevalent.

1. Supporting boroughs to improve energy efficiency standards in the private rented sector

As social housing becomes increasingly difficult to access for all but the most vulnerable, and home ownership drifts out of reach for all but the most fortunate, the private rented sector has become the only option for many Londoners. In turn, the increased demand for private rented housing has pushed up the price of rents and created a 'sellers market' whereby landlords have little incentive to improve the quality of their properties.

While there are no comprehensive local authority powers specifically addressing the problem of fuel poverty, London boroughs do have powers through the 2004 Housing Act and the Housing and Planning Act 2016. These regulations relate to enforcing the health and safety of rented properties and include powers to ban rogue landlords. If properly enforced, such regulations could help many fuel poor households, particularly those in privately rented homes. For instance, local authorities can require landlords to carry out remedial works and using new powers they will be able to fine or even ban landlords who do not comply. Resourcing is a major barrier that prevents effective enforcement of standards and conditions in many London boroughs due to employment costs and a lack of qualified Environmental Health Officers. The Mayor is therefore calling on the government to provide funding to strengthen enforcement capacity and skills within local authorities.

2. Minimum Energy Efficiency Standards (MEES)

The government is also introducing Minimum Energy Efficiency Standards (MEES) under the Private Rented Sector Energy Efficiency Regulations (Domestic). These seek to prevent private landlords from letting domestic properties with an EPC of F or G from April 2018.

However, the government has agreed several exemptions to this requirement, including a provision that landlords will not have to meet this requirement if, after installing cost-effective measures,⁵⁴ the property remains below an EPC rating of E. While housing stock analysis carried out by Parity Projects on behalf of the UK Green Building Council (UKGBC) and WWF⁵⁵ indicates that the costs of compliance are likely to be under £1000 for approximately 70 per cent of properties, compliance costs for nearly 15 per cent of properties are estimated to be more than £4,000 per property, with higher associated payback periods. For properties with higher compliance costs, it is less likely that the

criteria for cost-effectiveness would be met, meaning they would be exempt from meeting the MEES standard and the housing stock continues to be a fuel poverty trap.

As the regulations stand, landlords will also be exempt from meeting the MEES requirement if they face upfront or net costs for the required improvement works. Instead, government is relying on grants such as the ECO or finance through the Green Deal to fund the required measures.

While the regulations include provision for local authorities to take enforcement action against non-compliance, there is no guidance as to which officers within local authorities should take on the responsibility for enforcement or how enforcement action should be conducted. In practice, this enforcement is likely to be undertaken by a combination of Trading Standards and Environmental Health officers.

Considering the above, as it stands it is highly likely that, even after the Private Rented Sector Energy Efficiency Regulations come into force, a significant proportion of private tenants will be forced to continue to live in cold and inadequately heated homes.

During the winter of 2017/18 the government consulted on removing the exemption available to landlords where they were faced with upfront costs. Instead they have proposed that a cost cap is introduced on landlord spend. The Mayor believes that government's cost cap of £2,500 per property is too low, particularly as the government's own impact assessment⁵⁶ suggests that less than a third of the worst homes will be improved to an EPC rating of at least E and many of the least energy efficient homes will see little improvement. The Mayor has made the case that the cost cap should be set at a higher level of at least £5,000 and has asked government to clarify enforcement requirements and provides the necessary resource for already stretched London boroughs to police them effectively. The Mayor has also called for the Minimum Energy Efficiency Standards to be extended to Houses in Multiple Occupation (HMOs). London currently has 39 per cent of England's HMOs⁵⁷ and changes to Housing Benefit means that increasing numbers of vulnerable individuals are being faced with moving into HMOs.

3. The Housing Health and Safety Rating System (HHSRS)

The 2004 Housing Act changed the way that local authorities assess housing conditions. Local authorities now look at the condition of properties using the HHSRS risk assessment approach. This approach applies to privately rented accommodation, including Houses of Multiple Occupation (HMOs). It considers excess cold to be a Category 1 Hazard (usually the case if a house has an EPC of F or G), which means that local authorities can issue orders to landlords to improve their properties.

Although in some instances local authorities can recoup the costs of enforcement from the landlord, this is a resource-intensive activity and securing adequate personnel and funding for enforcement remains challenging. The Mayor has established the London Borough

Private Rented Sector Partnership with the London boroughs to enable collaboration on enforcement of standards in the private rental sector in London. One aim of the Partnership is to improve the private rental sector across the capital, including the energy efficiency of homes, by enabling local authorities to share intelligence and best practice, as well as developing pan-London approaches to common issues wherever possible. The Partnership is a new and exciting initiative and the GLA is looking forward to exploring its potential to advance several of the Mayor's priorities, including tackling fuel poverty in the private rented sector. The Mayor through the London Borough Private Rented Sector Partnership will support local authorities to target enforcement efforts at the worst quality and most energy inefficient properties in London.

Boroughs without borough-wide licensing schemes are reliant to a large extent on tenant reporting and complaints to gather intelligence about properties in poor condition, so the work of the Partnership will focus on supporting local authorities to proactively identify homes that might be breaching HHSRS, without having to rely on tenants to make a complaint to the borough. The Mayor will also support the Partnership's work by seeking funding from government to strengthen capacity and skills in councils, including in Trading Standards, to improve enforcement of private rented sector standards.

4. A new online database of landlords convicted of relevant criminal offences

At present, many renters are not aware of their right to complain to their local authority about poor property conditions, or are unaware of how to do so. Furthermore, there is at present no easy way for a renter to check whether their landlord has been convicted of a crime relating to poor property conditions or other relevant offences. To help address both issues, the Mayor has created a new online database of landlords and letting agents who have been convicted of relevant criminal offences, the first phase of which was launched in autumn 2017. This database will allow renters to see details of landlords who have been convicted of relevant offences, helping tenants to avoid the worst criminals who keep properties in poor condition. The database will appear on the GLA website alongside a tool to allow renters to centrally report landlords and agents that are renting out a property in very poor condition. This intelligence will then be redirected to the relevant enforcement authority for investigation.

5. Considering and approving selective licensing schemes

All Houses of Multiple Occupation (HMO) above a certain size are subject to mandatory licensing designed to ensure minimum standards. However, this regime is patchily enforced across London. In addition to mandatory HMO licensing, some boroughs have implemented further 'discretionary' licensing schemes for privately rented homes and smaller HMOs. A number of councils in London have shown that borough-wide licensing of all privately rented properties can be extremely effective in targeting enforcement work at the worst landlords and helping others to reach compliance. Some local authorities outside London have sought to include a minimum energy efficiency standard (using EPC ratings) as a pre-requisite for licensing.

The Government has the final say over whether new licensing schemes can go ahead, but currently property licensing is being applied inconsistently across London - leading to a confusing patchwork of different schemes and conditions. The Mayor, who believes that all councils who can evidence the need for a scheme should be allowed to adopt one, is calling on government to devolve to him responsibility for considering and approving selective licensing schemes. The Mayor would use his new powers to ensure all licensing schemes adopt a common approach, including how to tackle energy inefficient homes.

6. Establishing new funding mechanisms to support fuel poor homes

National funding to implement the energy efficiency measures required to lift Londoners out of fuel poverty is not currently sufficient, with national funding schemes, such as Warm Front, no longer available. New funding is therefore needed for all fuel poverty support – from programme management and delivery, through to the installation of home energy efficiency measures. The Mayor supports the Committee on Fuel Poverty's recommendations on increasing the availability of funding for energy efficiency and fuel poverty measures. The ring-fencing of ECO funding is supported so that it can be aligned with programmes in London. The Mayor believes London has not received its fair share of ECO funding in the past. He supports recent changes targeting action on energy efficiency which could help with tackling fuel poverty (and climate change) but would recommend the devolution of funds for him to disburse including through his Energy for Londoners' energy efficiency programmes.

In addition to grant funding, the Mayor seeks to unlock and use public and private capital to increase investment in energy efficiency in London, particularly to households in fuel poverty.

Many of the boroughs have also established carbon offset funds to meet the Mayor's zero carbon homes policy requirements. A small number of boroughs are already using the funds raised to retrofit the homes of low-income households.

Using GLA planning data, it is estimated that London developers could commit to £30-40 million of zero carbon offset funds annually based on forecasts, a proportion of which could be used to target fuel poverty.

The Mayor will provide clear guidance to boroughs on how they can most effectively use offset funds, collected from planning obligations from new developments, to meet zero carbon targets. This will include guidance on how offset funds can be used to deliver projects that help to alleviate fuel poverty, while delivering appropriate carbon savings (for example, through home energy efficiency retrofit to help reduce fuel bills).

Improving the energy efficiency of homes remains the most sustainable, long-term solution to fuel poverty and is also an essential part of tackling climate change.

While energy efficiency measures typically help reduce household energy bills, they can be expensive to install, and so some financial support is necessary to support the up-front costs, especially for those who are living in fuel poverty. The Mayor will build on current energy efficiency initiatives to design and roll-out a focussed, world-class homes energy efficiency programme as part of Energy for Londoners, to help support fuel poor households and reduce carbon emissions.

The Mayor has earmarked over £10m to 2020/21 for new energy efficiency delivery mechanisms. This money will be split between action to drive carbon reduction, and to support fuel poverty reduction. Taken together this package will deliver:

- better data and targeting – including making available a new open-source pan-London EPC data model in 2018, to help boroughs drive better long-term planning of interventions at a property level
- referrals and advice – up to £500k through the Fuel Poverty Support Fund to support the roll out of local advice and referral networks, including home visiting services, as a way of helping to improve the living conditions of fuel poor households
- new technical assistance from 2018 for local authorities, social housing providers, and private landlords, where possible, to support retrofitting of their housing stock, through a successor to the current RE:NEW programme
- direct funding support, including through the Mayor's Warmer Homes scheme, to drive carbon reduction and tackle fuel poverty– incentives or grants (akin to the £1m Mayor's Better Boilers scheme, which replaces and repairs inefficient and broken boilers for free), which do not rely on government subsidy, to enable more fuel poor Londoners to improve their homes, including tailored support to tenants within the private rented sector. Grant funding will be focussed on delivering high quality installations to maximise outcomes and to develop a flexible and reliable local supply chain. The Mayor will also investigate new finance arrangements such as revolving loans for the owner-occupied and private rented sector
- evaluation – new interventions will be supported by better evaluation to track the benefits that can be realised through delivering energy efficiency and fuel poverty support, demonstrating how it can be made more investible e.g. how fuel poverty interventions can reduce healthcare costs

This new programme will also seek to implement the recommendations of Each Home Counts (the Bonfield Review) in London, using evidence from London's retrofit projects to help implement an installer Code of Conduct for the residential retrofit sector to deliver better quality installations.

Box 7: Energy for Londoners

Energy for Londoners (EfL) is the Mayor's flagship programme which aims to make London's homes warm, healthy and affordable, and its workplaces more energy efficient, and to supply the capital with more local clean energy.

Energy for Londoners has the potential to deliver on a wide range of energy and fuel poverty programmes and projects, including energy efficiency building retrofit, solar deployment, fuel poverty alleviation, energy demand side reduction, smart metering rollout support, and developing green funding and financing initiatives. The Mayor will also deliver an energy supply company, aiming to offer fairer energy bills to Londoners.

Box 8: Warmer Homes

In January 2018 the Warmer Homes fuel poverty scheme was launched, which will help London homeowners on benefits to stay warm and save on their energy bills. The scheme targets homeowners with disabilities or long-term sickness, and older people claiming eligible benefits, with up to £4,000 worth of energy improvements available per household. The improvements funded include boiler replacement or repair, improved heating controls and heating systems, insulation for walls, roofs and floors, window upgrades, draught-proofing, and better ventilation. Match funding will be sought from the Energy Company Obligation and borough carbon offset funds wherever possible. After a review of the implications of the private rented sector minimum energy efficiency standards coming into force in April 2018, a trial expansion of the scheme into the private rented sector will take place later in 2018.

7. Helping London's fuel poor to access more affordable energy tariffs

The UK energy market is currently dysfunctional and most customers pay too much for their electricity and gas.

The Competition and Markets Authority's (CMA) 2014-16 Energy Market Investigation identified that 70 per cent of domestic customers could save as much as £300 per year by switching supplier, but that 56 per cent of consumers have never switched energy supplier or did not realise that this was possible. A fifth of Londoners are on pre-payment meters, which tends to mean higher tariffs and less access to good deals. There is no incentive for the energy market to help customers move from the most expensive tariffs. London has the lowest levels of switching of all regions in the UK for gas and is below the national average for electricity.

Households who pay on a quarterly basis (standard credit) on receipt of bills or who use prepayment meters to pay for their energy are significantly more likely to be in fuel poverty than those paying by direct debit. While there has been a decline in the number of households using standard credit, the number of fuel poor households paying by prepayment meter increased by 36,000 (58 per cent) between 2011 and 2014. This means that, in 2014, almost 100,000 of the total 346,000 households in fuel poverty in London used prepayment meters to pay for electricity.⁵⁸

In addition to his Warmer Homes energy efficiency and fuel poverty support package (see above), the Mayor will create an energy supply company, aiming to offer fairer energy bills to Londoners as soon as possible. In light of changing market conditions and uncertainty in national policy, the Mayor aims to start a scheme using an existing supplier. This will allow Londoners to have fairer energy bills sooner. The option to move to a fully licensed supply company will be kept under review in light of changes in the market and clarification of national policy, as well as the progression of the License Lite project. The Mayor will work with London boroughs, community energy groups and charities to help engage harder-to-reach groups of customers and those who could soon become fuel poor.

In addition, through Energy for Londoners, greater awareness of the benefits of energy management will be promoted such as identifying the most energy efficient appliances, guidance on selecting the best energy tariffs and supporting 'switch off' campaigns and competitions.

8. Lobbying for a better approach to debt and disconnection

The decision by Ofgem in March 2018 to ban "backbilling" (catch-up bills where energy consumers have not been charged correctly) of customers beyond 12 months is welcome but there should be a requirement on all energy suppliers to spot debt problems early and intervene with appropriate services.

Energy UK, the industry body for energy suppliers, currently operates a "Safety Net" initiative, to which many its members are signed up. Alongside a pledge to never knowingly disconnect vulnerable customers there are several approaches to support vulnerable customers including a range of debt management and repayment options and follow-up procedures. These are currently voluntary and new entrants to the market do not all adopt them, either through lack of awareness or because they may not understand their relevance for their customer base. The Mayor will lobby Ofgem to formalise these procedures and ensure that they apply to all energy suppliers as strict licence conditions.

The Mayor will lobby for better regulatory safeguards to protect against the negative consequences of self-disconnection.

9. Ensuring that the fuel poor benefit from smart energy

The Mayor is committed to supporting the delivery of an effective and inclusive smart meter rollout in London as it will help reduce energy demand, cut Londoners' bills and provide the best possible foundation for London to be zero carbon. He will work with energy suppliers, distribution network operators, government, Ofgem, Smart Energy GB, London boroughs and landlords. Smart meter installation will feature in his energy efficiency programmes. Installation of Smart Meter Equipment Technical Specifications 2 (SMETS2) should be prioritised for fuel poor households alongside a switch to fairer energy tariffs. This should include providing meaningful support to more vulnerable, fuel poor and digitally excluded households who choose to have a smart meter installed, both during installation and afterwards.

10. Protecting vulnerable consumers

Interruptions to gas, electricity and water can pose a considerable threat to vulnerable households and supply companies working with boroughs are best placed to assist. They can only do this where they are aware of their customers' vulnerability and have added them to their Priority Services Register (PSR). The Mayor is therefore committed to working with supply companies to boost awareness and registrations to the PSR through his fuel poverty programmes.

Increasingly data is being shared between energy suppliers and government to identify those eligible for the Warm Home Discount social tariff on energy. Households vulnerable to fuel poverty are also likely to be at risk of "water poverty" yet low income residents still have to apply for water social tariffs and awareness and take up is low. As the number of homes in London with a water meter increases, it is important that those at risk from potential price increases on bills can access social tariffs if needed. The Mayor will work with water suppliers in London to promote social tariffs alongside our fuel poverty programmes and integrate water efficiency measures within these where possible.

11. Engaging the health and social care sector in tackling the health impacts of cold homes

In 2015 the National Institute for Health and Care Excellence (NICE) published guidance on excess winter deaths and illness and the health risks associated with cold homes. The guidance provides a clear blueprint on how to assist households at risk aimed at Health and Wellbeing Boards, Clinical Commissioning Groups and others. Adoption of this guidance is not uniform across London. The Mayor will urge and support health commissioners and Wellbeing Boards to apply the recommendations within the NICE guidance. Projects funded through the Fuel Poverty Support Fund go some way to delivering on several of the recommendations (see Box 8) contained in the guidance, particularly in the provision of a pan-London referral service.

Analysis by one London borough⁵⁹ suggested that there were six emergency hospital admissions for each excess winter death. This represents a potential annual additional burden of around 20,000 emergency hospital admissions related to winter conditions in an

average year. Winter pressures place the NHS under considerable strain and hospitals face financial penalties for re-admissions within 30 days, which could be avoided by improving discharge procedures including addressing patients' housing conditions and heating crises. The Mayor will encourage Clinical Commissioning Groups and engage them in the evidence to improve discharge procedures including by channelling any fines resulting from repeat admissions into this area.

Box 9: NICE recommendations on excess winter deaths and illness⁶⁰

Recommendation 1: Develop a strategy to address the health consequences of cold homes

Recommendation 2: Ensure there is a single-point-of-contact health and housing referral service for people living in cold homes

Recommendation 3: Provide tailored solutions via the single-point-of-contact health and housing referral service for people living in cold homes

Recommendation 4: Identify people at risk of ill health from living in a cold home

Recommendation 5: Make every contact count by assessing the heating needs of people who use primary health and home care services

Recommendation 6: Non-health and social care workers who visit people at home should assess their heating needs

Recommendation 7: Discharge vulnerable people from health or social care settings to a warm home

Recommendation 8: Train health and social care practitioners to help people whose homes may be too cold

Recommendation 9: Train housing professionals and faith and voluntary sector workers to help people whose homes may be too cold for their health and wellbeing

Recommendation 10: Train heating engineers, meter installers and those providing building insulation to help vulnerable people at home

Recommendation 11: Raise awareness among practitioners and the public about how to keep warm at home

Recommendation 12: Ensure buildings meet ventilation and other building and trading standards

12. Ensuring existing GLA schemes maximise the incomes of Londoners

i. New Homes and London Affordable Rent

There is a cost premium in London compared to the rest of England for both housing sales and rentals. This gap has grown in the last five years, with London house prices increasing by around 50 per cent compared to 30 per cent for England. In 2015, the average house price in London was £500,000, close to double the England average at £280,000.

The London cost premium is greater in the private rental sector, with the average monthly rent of £1,600 being more than double the England average at £770. Social sector rents in London are about a third of the cost of private sector rents, at £520 per month in registered landlord accommodation and £440 in local authority housing. Rental costs have also been rising in London.

The Mayor and the Government have a shared aspiration to support both affordable home ownership and much needed submarket rented homes.

The Mayor will work with local councils, housing associations and developers to build the homes Londoners need. He has secured more than £3 billion to help start building 90,000 affordable homes by 2021, which will be both for sale and for rent. The London Affordable Rent will be based on annual benchmarks determined by Homes for Londoners. The Mayor will make renting more affordable through the London Affordable Rent for people on low incomes, and the London Living Rent for people on average incomes to help them save money for a deposit for their first home. There will also be more shared ownership homes to help Londoners who want to buy, but are unable to afford market rates. The Mayor's aim is for half of all new homes in London to be genuinely affordable. He is also working with partners to enable more affordable homes to be built on empty public land.

ii. The London Living Wage

The Mayor will encourage employers to sign up to the London Living Wage and other fair employment practices through the Mayor's Good Work Standard. The voluntary London Living Wage rate for 2017 is £9.75 per hour. The rate is independently calculated each year, based on the amounts that people and their families need to afford the essentials and to save for unexpected events like higher than average fuel bills. The Mayor's Good Work Standard will support employers to adopt best practice and achieve high standards related to fair pay and employment conditions, such as through ruling out the exploitative use of 'zero hours' contracts for people in low-paid roles.

Further details will be set out in the Mayor's Economic Development Strategy.

iii. Making Public Transport More Affordable

The Mayor is also aware that transport is a significant cost for Londoners and can prove unaffordable for many. The Mayor has delivered his pledge to freeze TfL fares: passengers using TfL services will pay the same in 2020 as they did in 2016. The fares freeze will save an average household £200 over the next four years. The Mayor also protected all concessions, which include discounts for young people, older people and jobseekers.

The Mayor also introduced the Bus Hopper ticket in September 2016. The Hopper allows passengers to take two bus or tram journeys for the price of one, provided the second journey begins within an hour of the first. Nine months after its launch, the Hopper ticket continues to be a huge success, with around 300,000 Hopper journeys made every weekday. From 2018, Londoners will get unlimited bus and tram journeys within an hour.

iv. Coordinating longer-term action

In the long term the underlying challenges that prevent fuel poverty support from reaching those in need must be tackled. To help with this, the Mayor will therefore build up capacity, coordinate action and test new ways to finance the tackling of fuel poverty.

13. New partnership – spearheaded by the Deputy Mayors

The causes of fuel poverty are complex and the solutions require collaboration across sectors and organisations. Currently, programmes exist in parts of London to help households in fuel poverty. However, the effectiveness and reach of this activity could be enhanced by greater leadership, more senior representation and improved co-ordination and collaboration across the various organisations involved across London, through implementation of the actions below.

The Mayor will establish a high-profile cross-sectoral Fuel Poverty Partnership and appoint the Deputy Mayors for Environment and Energy, and Social Integration, Social Mobility and Community Engagement as Co-Chairs. The Partnership will bring together key stakeholders from sectors including local government, social housing, landlords, tenants, health, social care, academia, charities, energy suppliers and energy efficiency. The Partnership will have a clear remit not only to support the Mayor in the delivery of fuel poverty support, but also to enable a smooth and effective collaborative approach to finding and helping Londoners who are struggling with their energy bills. They will encourage all sectors and organisations to play their part in alleviating fuel poverty, and act as advocates for improvements in policy and delivery.

14. Making the case for investment

The partnership will work to build an evidence base that can be shared with all involved in tackling fuel poverty and be used to make the case for further investment. While the impacts of fuel poverty on health and healthcare costs are understood at a general level, it has been difficult previously to make the connection between cold homes and health

impacts for individual households. In addition to data on homes and incomes, health data is particularly important in being able to understand the impacts of fuel poverty. For example, early evidence demonstrating the value and cost effectiveness of direct home health interventions, including reduced NHS usage and improved health in the most vulnerable households can potentially support the investment case for action on fuel poverty,⁶¹ although there are restrictions on how this data can be used.

A strong evidence base showing what healthcare cost savings can be achieved would strengthen the case for investment and may enable the development of new financing mechanisms for fuel poverty interventions, for example through social impact bonds. The Mayor will therefore work in partnership with health services to understand how different data sets can be combined to better understand how fuel poverty interventions can reduce healthcare costs.

Indicators and reporting

Actions within the plan and resulting schemes will be measured against a series of outcomes and indicators. These can be divided into primary indicators, measuring the overall impact of fuel poverty interventions across London (delivered by partners across London, including the Mayor), and secondary indicators to provide feedback on how effectively the GLA supported interventions are delivered.

Reporting on these indicators will be included as part of an annual progress review of this Fuel Poverty Action Plan. These are currently in draft and, as part of the consultation, we would welcome suggestions on targets and how best to monitor them. Targets for these indicators will be set following consultation.

Primary indicators (measuring the overall impact of fuel poverty interventions delivered by partners across London, including the Mayor of London)

Table 3: Primary indicators	
Outcomes	Indicator(s)
Reduce the number of fuel poor homes in London	Number of fuel poor homes moved out of fuel poverty. This can be broken down into: <ul style="list-style-type: none"> • overall reduction in fuel poor homes • reduction in fuel poor homes through action supported directly by the Mayor
Aggregate reduction in fuel poverty gap in London	Percentage reduction in aggregate fuel poverty gap. This can be broken down into: <ul style="list-style-type: none"> • overall reduction in fuel poor homes • reduction in fuel poor homes through action supported directly by the Mayor
Reduce the number of cold homes in London	Number of fuel poor homes moved from: <ul style="list-style-type: none"> • EPC bands F&G to E and above (2020) • EPC band E to D and above (2025) • EPC band D to C and above (2030)

Table 3: Primary indicators	
Outcomes	Indicator(s)
	Note: a home moved from EPC band G to EPC band C in 2019, for example, would contribute towards the 2030 target and interim milestones

Secondary indicators

For homes that have been assisted through GLA-supported interventions, the following will be monitored and assessed to help better understand which elements of fuel poverty schemes are working well and to help develop a strong evidence base to demonstrate the need to wider action.

Table 4: Secondary indicators	
Outcomes	Indicator(s)
Reduction in utility bills	<ul style="list-style-type: none"> reduction in energy bills, broken down by intervention (£/year) reduction in water bills, broken down by intervention (£/year)
Increased thermal comfort	<ul style="list-style-type: none"> reduction in heating demand (kWh/m2/year)
Increased income for fuel poor homes	<ul style="list-style-type: none"> number of successful referrals to benefits maximisation services amount of additional income secured per home reduction in fuel debt (£/home)
Improved health and wellbeing	<ul style="list-style-type: none"> savings in healthcare provision per person (this will require close cooperation with health services and ongoing monitoring⁶²) homes reporting health improvements following installation of energy efficiency measures (survey based)
Funding leveraged	<ul style="list-style-type: none"> ECO funding secured (£) additional capital funding secured (e.g. through new finance mechanisms) (£)
Effectiveness of targeting	<ul style="list-style-type: none"> number of successful referrals, broken down by referral route cost per successful referral, broken down by referral route

Lobbying government

Central government has dramatically reduced its support for fuel poverty alleviation since 2012. It continues to provide the framework for support through the ECO, which is now focused largely on energy efficiency measures for low-income households, and the Warm Home Discount, but this is far from adequate to lift Londoners out of fuel poverty.

Government has taken some initial steps to reduce the impact of fuel costs on the most vulnerable customers by introducing a cap on prepayment tariffs. This has resulted in approximately £80 savings to four million customers per annum.⁶³ However, this does not compare favourably with government estimates, which state that 14 million households could save £200 by switching suppliers per annum.⁶⁴ This suggests that a price cap is a temporary fix to an energy market that will need further changes. At the time of publication, Government has asked Ofgem for a proposal on how this tariff cap can be widened to help other vulnerable customers and Ofgem, in turn, is consulting with consumer groups. The Mayor will continue to focus on encouraging switching and making lower tariffs more accessible. In addition, the Mayor will lobby Government to introduce a cap on energy prices to stop energy companies making excess profits at the expense of households.

Despite the above, higher housing costs and benefit cuts are making it increasingly difficult for low-income households in London.⁶⁵ The Mayor will advocate for improvements to national policy and regulations to better support households in fuel poverty. These improvements will include, but not be limited to:

- calling on government to urgently review the minimum energy efficiency standards to introduce an appropriate cap on landlord investment, of at least £5,000 per home to reflect higher costs in London.
- the devolution of ECO funds for the Mayor to disburse including through his Energy for Londoners energy efficiency programmes.
- calling on government to devolve to him responsibility for considering and approving selective licensing schemes.
- developing fiscal incentives to increase uptake of solid wall insulation, for example reductions in VAT (which could be undertaken following the UK's exit from the EU), voucher schemes and low- or zero-interest rate loans
- improve funding support for fuel poverty programmes; expand minimum energy performance standards for homes and increase national infrastructure investment in home energy efficiency retrofit.

Appendix 1 – Data tables on fuel poor households

For each characteristic, there are two sets of tables. The first shows the numbers of fuel poor households in each group, the proportion of each group that are in fuel poverty and the average fuel poverty gap for these households in 2014. The second set of tables shows the change in the number of fuel poor households since 2011, this number is a proportion of 2011 levels, and the change in the average fuel poverty gap over that period. This data has been calculated using the most recent publicly available fuel poverty data from EHS (2016) and BEIS (2016, 2017).

*Please note that numbers of households are to the nearest hundred.

Table 5: Numbers of fuel poor households and average fuel poverty gaps by employment status of head of the household					
Employment status	Number of non-fuel poor households	Number of fuel poor households	Proportion in fuel poverty (%)	Proportion of all fuel poor households (%)	Average fuel poverty gap (£)
Full time work	1,619,900	120,900	6.9	34.9	297
Part-time work	292,400	53,500	15.5	15.4	353
Retired	581,700	66,900	10.3	19.3	354
Unemployed	116,200	39,100	25.2	11.3	200
Full time education	63,300	7,000	9.9	2.0	589
Other inactive	260,200	58,900	18.5	17.0	226
All households	2,933,700	346,300	10.6	100	296

Table 6: Change in number of fuel poor households and average fuel poverty gaps by employment status of head of the household between 2011 and 2014

Employment status	Change fuel poor households (2011 – 2014)	Proportion change since 2011 (%)	Change in fuel poverty gap (2011-2014)
Full time work	3,800	3.2	-17
Part-time work	12,900	31.8	124
Retired	16,300	32.3	11
Unemployed	-700	-1.7	-61
Full time education	-800	-10.8	125
Other inactive	8,800	17.5	-82

N.B. Data here is not shown for trends in fuel poverty within these groups since 2011, since the number of data points was insufficient for statistical confidence.

Table 7: Numbers of fuel poor households and average fuel poverty gaps by different BME groups

BME group	Number of non-fuel poor households	Number of fuel poor households	Proportion in fuel poverty (%)	Proportion of all fuel poor households (%)	Average fuel poverty gap (£)
White	2,121,700	199,100	8.6	57.5	319
Black	293,900	53,200	15.3	15.4	226
Asian	286,600	64,400	18.3	18.6	356
Other	231,400	29,700	11.4	8.6	212
All households	2,933,700	346,300	10.6	100	296

Table 8: Numbers of fuel poor households and average fuel poverty gaps by household composition					
Household composition	Number of non-fuel poor households	Number of fuel poor households	Proportion in fuel poverty (%)	Proportion of all fuel poor households (%)	Average fuel poverty gap (£)
Couple, no dependent children under 60	636,400	48,800	7.1	14.1	207
Couple, no dependent children aged 60 or over	282,600	43,600	13.4	12.6	192
Couple with dependent children	636,000	62,300	8.9	18.0	308
Lone parent with dependent children	266,700	56,700	17.5	16.4	208
Other multi-person households	373,900	79,200	17.5	22.9	461
One person under 60	400,100	40,000	9.1	11.5	284
One person aged 60 or over	338,000	15,800	4.5	4.6	221
All households	2,933,700	346,300	10.6	100	296

Table 9: Change in number of fuel poor and average fuel poverty gaps by household composition between 2011 and 2014

Household composition	Change fuel poor households (2011 – 2014)	Proportion change since 2011 (%)	Change in fuel poverty gap (2011-2014)
Couple, no dependent children under 60	4,000	9.0	-20
Couple, no dependent children aged 60 or over	23,300	115.0	-101
Couple with dependent children	-24,300	-28.1	-59
Lone parent with dependent children	16,300	40.2	-29
Other multi-person households	33,024	71.5	32
One person under 60	-7,841	-16.5	78
One person aged 60 or over	-4,140	-20.6	-77

Table 10: Numbers of fuel poor households and average fuel poverty gaps by long term illness or disability

Long term illness or disability	Number of non-fuel poor households	Number of fuel poor households	Proportion in fuel poverty (%)	Proportion of all fuel poor households (%)	Average fuel poverty gap (%)
No long-term illness or disabilities	2,206,400	187,900	7.8	54.2	296
Long term illness or disability	727,300	158,500	17.9	45.8	297
All households	2,933,700	346,300	10.6	100	296

Table 11: Change in number of fuel poor households and average fuel poverty gaps by long term illness or disability between 2011 and 2014

Long term illness or disability	Change fuel poor households (2011 – 2014)	Proportion change since 2011 (%)	change in fuel poverty gap (2011-2014)
No long-term illness or disability	-15,900	-7.8	-37
Long term illness or disability condition	56,200	55.0	47

Table 12: Numbers of fuel poor households and average fuel poverty gaps by method used to pay for electricity

Payment method	Number of non-fuel poor households	Number of fuel poor households	Proportion in fuel poverty (%)	Proportion of all fuel poor household (%)	Average fuel poverty gap (£)
Direct Debit	1,887,700	141,100	7.0	40.7	344
Standard credit	549,100	106,100	16.2	30.6	389
Pre-payment	496,800	99,200	16.6	28.6	199
All households	2,933,700	346,300	10.6	100	296

Table 13: Change in number of fuel poor households and average fuel poverty gaps by method used to pay for electricity between 2011 and 2014

	Change fuel poor households (2011 – 2014)	Proportion change since 2011 (%)	change in fuel poverty gap (2011-2014)
Direct Debit	18,400	15.0	-32
Standard credit	-14,700	-12.2	127
Pre-payment	36,600	58.4	-78

Table 14: Numbers of fuel poor households and average fuel poverty gaps by tenure

	Number of non-fuel poor households	Number of fuel poor households	Proportion in fuel poverty (%)	Proportion of all fuel poor household (%)	Average fuel poverty gap (£)
Owner occupied	1,443,200	126,700	8.1	36.6	352
Private rented	817,800	126,100	13.4	36.4	385
Local authority	346,000	57,300	14.2	16.6	202
Housing association	326,700	36,100	10.0	10.4	226
All households	2,933,700	346,300	10.6	100	296

Table 15: Change in number of fuel poor households and average fuel poverty gaps by tenure between 2011 and 2014

Owner occupied	1,700	1.4	-53
Private rented	6,200	5.2	57
Local authority	19,000	49.7	18
Housing association	13,300	58.4	32

Table 16: Numbers of fuel poor households and average fuel poverty gaps by energy efficiency rating of dwelling

EPC band	Number of non-fuel poor households	Number of fuel poor households	Proportion in fuel poverty (%)	Proportion of all fuel poor household (%)	Average fuel poverty gap (£)
B	111,100	0	0.0	0.0	0
C	768,900	1,700	0.2	0.5	278
D	1,507,500	174,700	10.4	50.4	194
E	463,700	140,000	23.2	40.4	311
F	74,100	20,700	21.9	6.0	708
G	8,400	9,300	52.3	2.7	1,300
All households	2,933,700	346,300	10.6	100	296

Table 17: Change in number of fuel poor households and average fuel poverty gaps by energy efficiency rating of dwelling between 2011 and 2014

EPC band	Change fuel poor households (2011 – 2014)	Proportion change since 2011 (%)	Change in fuel poverty gap (2011-2014)
B	0	<i>n/a</i>	0
C	-1,600	-49.6	-81
D	62,300	55.5	1
E	-17,896	-11.4	-22
F	-2,149	-9.2	217
G	-319	-3.7	750


Table 18: Numbers of fuel poor households and average fuel poverty gaps by wall type and insulation

Wall type	Number of non-fuel poor households	Number of fuel poor households	Proportion in fuel poverty	Proportion of all fuel poor household (%)	Average fuel poverty gap (£)
Cavity wall with insulation	643,200	21,100	3.2	6.1	161
Cavity wall uninsulated	626,500	64,000	9.3	18.5	227
Solid wall/Other	1,663,900	261,300	13.6	75.4	332
All households	2,933,700	346,300	10.6	100	296

Table 19: Change in number of fuel poor households and average fuel poverty gaps by wall type and insulation between 2011 and 2014

Wall type	Change fuel poor households (2011 – 2014)	Proportion change since 2011 (%)	change in fuel poverty gap (2011-2014)
Cavity wall with insulation	6,000	39.03	-117
Cavity wall uninsulated	10,400	19.39	-2
Solid wall/Other	24,000	10.11	7

Table 20: The EPC band of a home provides an indication of a home's energy performance; in other words how much it costs to adequately heat, light and ventilate it. The Standard Assessment Procedure (SAP) is used to calculate a score between 0 and 100⁶⁶, with a higher score indicating better energy performance. This score is used to divide homes into the following EPC bands.

Rd SAP score	EPC band	
92+	A	Best energy performance
81-91	B	
69-80	C	
55-68	D	
39-54	E	
21-38	F	
0-20	G	Worst energy performance

Endnotes

¹Department for Business, Energy and Industrial Strategy (BEIS) sub-regional fuel poverty England statistics (2014) <https://www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics>

²BEIS sub-regional fuel poverty England statistics (2015), published 28 June 2017.
<https://www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics>

³The Energy Company Obligation (ECO) is a Great Britain-wide government scheme that obligates larger energy suppliers to improve the energy efficiency of homes of low income households

⁴https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/408644/cutting_the_cost_of_keeping_warm.pdf

⁵https://www.foe.co.uk/sites/default/files/downloads/cold_homes_health.pdf

⁶Smart Prepayment and Fuel Poverty, 2016 <https://www.cse.org.uk/downloads/reports-and-publications/fuel-poverty/policy/smart-prepayment-and-fuel-poverty-oct2016.pdf>

⁷Fuel poverty in London: Research and policy report; CAG Consultants working with CSE, ACE and SE2, 2017

⁸Further detail on how these thresholds are derived can be found here:
www.gov.uk/government/collections/fuel-poverty-statistics

⁹<http://www.legislation.gov.uk/ukdsi/2014/9780111118900/contents>

¹⁰https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/408644/cutting_the_cost_of_keeping_warm.pdf

¹¹https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/553931/CFP_report-final.pdf

¹²<http://www.legislation.gov.uk/ukdsi/2015/9780111128350/contents>

¹³http://www.legislation.gov.uk/uksi/2005/3208/pdfs/uksi_20053208_en.pdf

¹⁴https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/553931/CFP_report-final.pdf

¹⁵BEIS sub-regional fuel poverty England statistics (2015), published 28 June 2017.
<https://www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics>

¹⁶Updated fuel poverty data for 2015 was published by BEIS in June 2017, further statistics on fuel poverty gap for that year will not be released until end of 2017. For this action plan, data from 2014 is therefore also used.

¹⁷This is using the most recent publicly available fuel poverty data from EHS (2016). Please note that throughout this document the number of households has been calculated to the nearest one hundred.

¹⁸Fuel poverty in London: Research and policy report; CAG Consultants working with CSE, ACE and SE2, 2017

¹⁹UCL Institute of Health Inequality, 2014, Local action on health inequalities: Fuel poverty and cold home-related deaths

²⁰Barnes M, Butt S, Tomaszewski W. The Dynamics of Bad Housing: The Impact of Bad Housing on the Living Standards of Children. London: National Centre for Social Research, NatCen, 2008.

²¹Friends of the Earth and the Marmot Review Team, 2011, The Health Impacts of Cold Homes and Fuel Poverty.

²²NEA, 2013, The Many Faces of Fuel Poverty.

²³Office of National Statistics, 2017, Statistical bulletin: Excess winter mortality in England and Wales: 2016/17 (provisional) and 2015/16 (final).

²⁴Friends of the Earth and the Marmot Review Team, 2011, The Health Impacts of Cold Homes and Fuel Poverty.

²⁵Hills J. Getting the measure of fuel poverty: Final Report of the Fuel Poverty Review. London: 2012.

²⁶Rudge J, 2011, Indoor cold and mortality. In Environmental Burden of Disease Associated with Inadequate Housing, (Bonn: World Health Organisation (Regional office for Europe)

²⁷E3G and NEA, 2018, Cold homes and excess winter deaths: A preventable public health epidemic that can no longer be tolerated.

²⁸Building Research Establishment, 2011, The Health Costs of Cold Dwellings.

²⁹Health and wellbeing boards were established under the Health and Social Care Act 2012 to act as a forum in which key leaders from the local health and care system could work together to improve the health and wellbeing of their local population.

³⁰National Energy Action (NEA), 2016, Connecting Policy to People.

³¹DECC, 2014 Catalogue of health-related fuel poverty schemes

³²NEA, 2016, Response to the Mayor of London's "A City for All Londoners" consultation.

³³See table 16 in Appendix 1

³⁴CSE, 2011, Analysis of Hard to Treat Housing in England

³⁵Fuel poverty in London: Research and policy report; CAG Consultants working with CSE, ACE and SE2, 2017

³⁶Fuel poverty in London: Research and policy report; CAG Consultants working with CSE, ACE and SE2, 2017

³⁷Eaga Charitable Trust, Research Summary – Fuel Poverty and disabled people: the impact of policy change, August 2013.

³⁸Ofgem, 2017, Vulnerable consumers in the retail energy market

³⁹Citizens Advice, 2014, Topping-up or dropping-out: self-disconnection among prepayment meter users

⁴⁰Calculation of numbers of prepayment meters users disconnecting taken from BEIS estimates of PPM numbers in London and Citizens Advice figures on self-disconnection rates

⁴¹BEIS, 2018, Sub-national estimates of households not connected to the gas network

⁴²BEIS, 2017, Fuel poverty detailed tables

⁴³London Poverty Profile, www.londonspovertyprofile.org.uk/

⁴⁴London Poverty Profile, www.londonspovertyprofile.org.uk/indicators/topics/receiving-non-work-benefits/

⁴⁵<https://www.gov.uk/guidance/welfare-reform-and-work-act-2016-social-rent-reduction>

⁴⁶<https://www.gov.uk/government/publications/each-home-counts-review-of-consumer-advice-protection-standards-and-enforcement-for-energy-efficiency-and-renewable-energy>

⁴⁷<https://www.london.gov.uk/what-we-do/housing-and-land/improving-quality/better-boilers/faqs>

⁴⁸Survey by Association of Local Energy Officers London (ALEO London), 2016

⁴⁹<http://www.london-fire.gov.uk/HomeFireSafetyVisit.asp>

⁵⁰Energy Saving Trust, <http://www.energysavingtrust.org.uk/home-insulation/solid-wall>

⁵¹ECO: Help to Heat April 2017 to September 2018: Final Stage Impact Assessment

⁵²NEA, 2017, In from the Cold: The funding gap for non-gas fuel poor homes under ECO and a proposal to fill it

⁵³The Non-Gas Map www.nongasmap.org.uk

⁵⁴Defined as measures that are capable of being installed within the Green Deal's Golden Rule

⁵⁵<http://www.ukgbc.org/sites/default/files/Minimum%2520EPC%2520standards%2520report%2520WWF%2520%26%2520UK-GBC.pdf>

⁵⁶BEIS, 2017, Amending the private rented sector energy efficiency regulations: Consultation stage impact assessment

⁵⁷Ministry of Housing, Communities, and Local Government (MHCLG), 2018, Local authority housing statistics data returns for 2016 to 2017

⁵⁸Smart Prepayment and Fuel Poverty, 2016 <https://www.cse.org.uk/downloads/reports-and-publications/fuel-poverty/policy/smart-prepayment-and-fuel-poverty-oct2016.pdf>

⁵⁹London Borough of Islington, 2012, Focus on excess winter deaths

⁶⁰National Institute for Health and Care Excellence (NICE), 2015, Excess winter deaths and illness and the health risks associated with cold homes

⁶¹ <http://www.familymosaic.co.uk/download/292360/>

⁶² <http://www.familymosaic.co.uk/download/292360/>

⁶³Ofgem, <https://www.ofgem.gov.uk/publications-and-updates/ofgem-sets-prepayment-price-cap-protect-over-four-million-households-least-able-benefit-competition>

⁶⁴DECC website, 12 February, 2016: <https://www.gov.uk/government/publications/household-energy-savings-through-switching-supporting-evidence/many-households-could-save-around-200-per-year-through-switching-energy-supplier-basis-for-claim>

⁶⁵London Poverty Profile, www.londonpovertyprofile.org.uk/indicators/topics/receiving-non-work-benefits/

⁶⁶It is possible to achieve a score in excess of 100, though this is relatively rare and would be likely to involve the installation of a renewable energy system capable of exporting energy

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