

UK Fuel Poverty Monitor

2016 - 2017



*A review of progress
across the nations*



Action for Warm Homes

ABOUT THIS REPORT AND ACKNOWLEDGEMENTS

National Energy Action (NEA) and Energy Action Scotland (EAS) are national charities working to end fuel poverty and the illness caused by cold homes across the United Kingdom. NEA and EAS are grateful for the support of the organisations that responded to our call for evidence or more generally assisted us in the production of this year's report. The authors draw on other organisations' reports that are listed in the annexes. We would like to thank all of those that have contributed to the sources that have been cited, however, the views expressed are those of NEA and EAS and do not necessarily represent the views of the organisations that have been referenced in this work.

CONTENTS

Executive summary	3-5
Summary of recommendations	6-7
Update on fuel poverty levels:	
• England	8-11
• Northern Ireland	12-13
• Scotland	14-16
• Wales	17-19
Summary of the evidence on the link between cold homes and health and well-being	20-22
Different approaches to reducing ill health associated with cold homes in the UK nations	23-27
Emerging trends in delivery of health-related fuel poverty schemes and comparing frameworks across the UK	28-30
Case studies: Examples of good practice across the UK	31-32
Recommendations and next steps to end ill health and death caused by the cold homes crisis	33-35
Annexes:	
Glossary of Terms	36
Sources and further information	36-39

EXECUTIVE SUMMARY

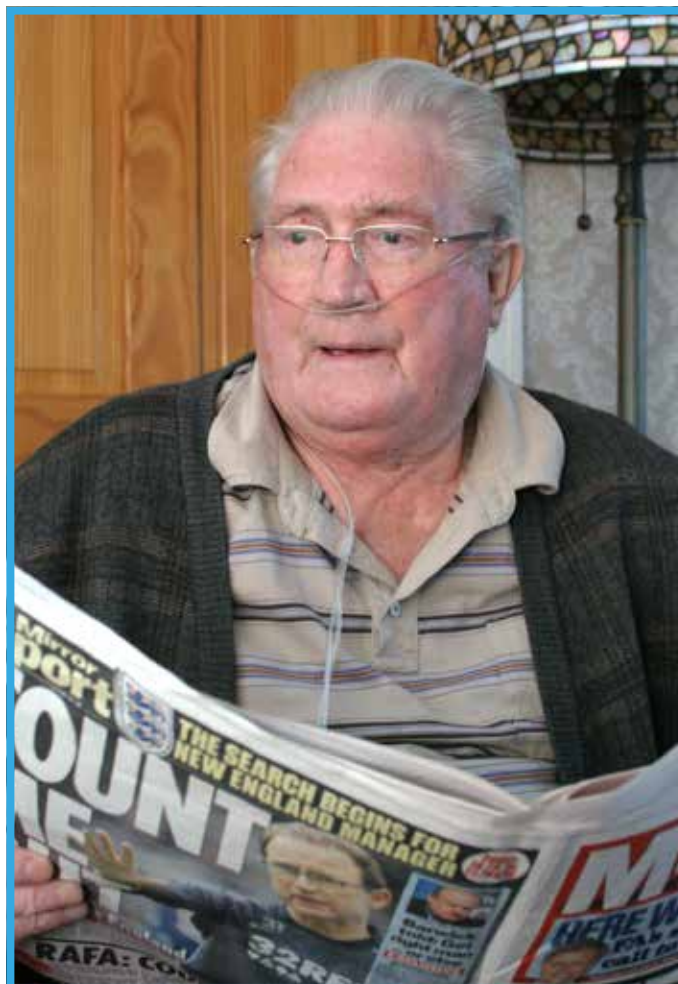
National Energy Action (NEA) and Energy Action Scotland (EAS) have produced the UK Fuel Poverty Monitor every year since 2003-04¹ allowing progress and activity to tackle fuel poverty to be tracked and compared across the four nations over time. Whilst this publication was delayed due to the General Election², as with previous editions, we provide the latest national fuel poverty statistics³ and an update on the key aspects of policy which impact low income and vulnerable energy consumers or the population at large⁴.

This year's report has a special focus on the impact living in cold, damp conditions has on the most vulnerable members of our society. We note the most at-risk groups continue to be typically older people, children and those with existing long-term illnesses. Whilst UK-wide statistics for fuel poverty are no longer produced⁵ by the UK Government, the last year that they were published in 2015 highlighted that there are over 3.5 million vulnerable households who are unable to heat and power their homes adequately across the UK; an increase of 500,000 compared to the previous year⁶. In addition, even under the relative Low Income High Costs (LIHC) indicator in England, there are 1.8 million vulnerable fuel poor households, again an increase of over 40,000 compared to the previous year⁷.

Our evidence continues to show the increased risk of heart attacks and strokes via rising blood pressure for these households, as well as causing or worsening respiratory illnesses such as Chronic Obstructive Pulmonary Disease (COPD) and asthma. There is also strong existing evidence that cold homes can worsen arthritic, rheumatic conditions or increase propensity to falls as well. Sadly these households are also most susceptible to premature death. Using the World Health Organisation (WHO)'s estimate that 30% of winter deaths are caused by cold housing⁸, we estimate over 9,600 frail and vulnerable people across the UK are dying needlessly on average throughout the winter months due to cold homes; 80 people

per day. This is not acceptable in the fifth largest economy in the world. Worry about high fuel bills and fuel debt also continues to significantly damage mental health, which is affecting an increasing number of households⁹.

We hope this analysis further highlights the need for an adequate response to address the impacts of cold homes on health, not only to reduce needless suffering but equally to address the cost of inaction. The report highlights that whilst the total cost of morbidity to health services of damp, cold and energy-inefficient housing across the UK is currently unknown, it is clear that the impacts reduce the operational effectiveness of, and carry significant costs to, the National Health Service (NHS)¹⁰. Conversely, addressing these costs through further action on energy efficiency will help save money. Previous estimates suggest that each £1 invested to enable affordable warmth at home generates 42p in cost savings for the NHS¹¹.



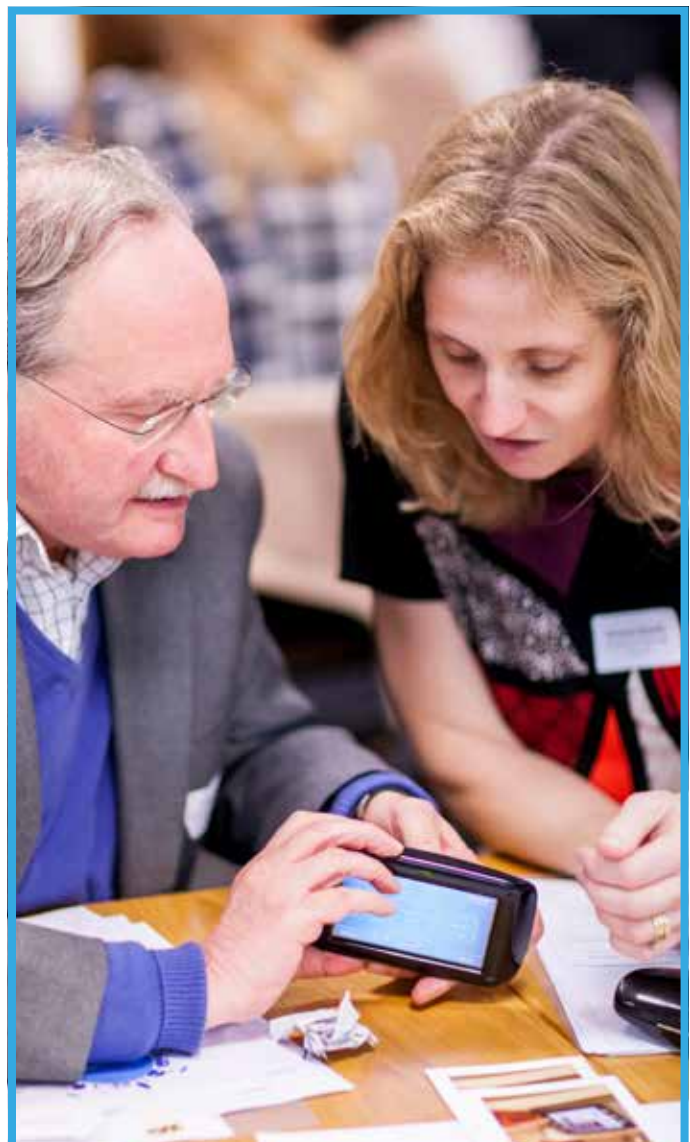
This report also provides evidence that significant annual savings to the health sector could be achieved with less central government investment if there was greater enforcement within the private rented sector¹² or fuel poverty and health initiatives became a more common part of local health and social care commissioning. Using new analysis from a recent call for evidence, we demonstrate how the links between cold homes and health are being acted upon and are already shaping local, national and UK-wide delivery. This underlines that there is a strong recognition of how the cold impacts health and many organisations are already providing leadership and good practice examples of preventative action across all the UK nations. We also highlight how sharing this understanding and replicating these positive outcomes more systematically (either within each nation or across the UK) is possible.

The final section of the report draws out key recommendations which apply to the UK Government, four national governments, their respective departments, local government, and national or local agencies. The actions we propose are ambitious but achievable and start with much greater co-ordination at a local, national and UK level. In the short-term, we believe this could be enhanced by a joint ministerial summit on health and fuel poverty with representatives from across all four nations' governments. The summit should be held by winter 2017/18 and the outcomes should include a joint public commitment formally recognising the importance of cold homes as a key determinant of ill health. The summit should also seek to establish an ongoing UK-wide taskforce (again with representatives from across all four nations' governments and their respective stakeholders) which would review the actions being taken across the nations in detail – assessing national frameworks, relevant policies and local action - and seek agreement on the key priorities that could be implemented consistently across all nations in the coming winter and beyond.

We also highlight that improved transparency and local data is required. Data and local intelligence is vital to identify households; for tracking

progress and addressing gaps in delivery and for sharing best practice approaches. To improve transparency nationally a UK-wide taskforce would assess the overall scale, cost and pressures cold-related morbidity is having on health services and related agencies across the UK nations. The report should include an appraisal of the extent to which any relevant national or local policies reduce these unnecessary costs and the extent to which this is fully captured within the schemes' cost benefit analysis.

Local government and local health bodies must also be held to account for delivering their existing responsibilities and the Public Health England Quality Outcomes Framework indicators for tracking excess winter deaths, fuel poverty and cold-related morbidity that have been developed in England should be available to each nation at a local government and constituency-level and updated each year.



To improve targeting, tailored advice and referrals, the new data-matching opportunities created by the Digital Economy Act must be fully embraced with the new powers allowing local authorities, GP practices, Health and Well-being Boards (HWBs) and Clinical Commissioning Groups (CCGs) or their equivalents across the UK nations to directly access information about the support energy suppliers can provide to eligible households in their area or assist other national fuel poverty schemes. The new data-sharing powers in Great Britain also need to be introduced for all relevant Northern Ireland fuel poverty schemes.

We also call for a more consistent health-warmth delivery framework across the UK and note that an individual's chances of recovery from illness should not be dependent on where and in which country they live. This report shows that the National Institute for Health and Care Excellence (NICE) guidelines are now being interpreted in other UK nations¹³ but more can be done to transpose this blueprint for action consistently at a UK, national and local level. There is also a precious opportunity to help expand on the good practice demonstrated in some local schemes and establish a comprehensive network of registered single-point-of-contact (SPOC) health and housing referral services to help vulnerable people who live in cold homes. This service mapping can help avoid duplication of effort in some localities which could either confuse clients or be less resource-efficient when compared to a system involving central coordination by a relevant body.

Finally, above all, we underline how vitally important it is to ensure the investment in preventative programmes is sufficient to overcome the costs of inaction. Whilst three out the four UK nations continue to invest in national programmes, currently there is no investment in UK-wide energy efficiency programmes – and GB-wide resources that might help meet the costs of morbidity are declining¹⁴. Reversing these recent trends overall is still a key priority and must be addressed. As a result we highlight that the new United Kingdom Shared Prosperity Fund and the National Productivity Investment Fund should support

initiatives to meet fuel poverty commitments across the UK and more generally improve our unhealthy and inefficient housing stock. There are over 12 million homes across the UK that are less efficient than a modern home¹⁵ and over 4.5 million contain households on the lowest incomes¹⁶. The new incoming UK Government must therefore take the opportunity to make sure energy efficiency becomes a vital part of our national infrastructure. This new approach has notable support from a range of organisations¹⁷ and is being implemented in some countries of the UK and no other infrastructure investment can deliver so much.



SUMMARY OF RECOMMENDATIONS

A UK-wide recognition of the impact of cold homes on health

1. In the short-term, a joint ministerial summit should be arranged with representatives from across all four nations' governments by winter 2017/18. The outcome of this should include a joint public commitment formally recognising the importance of cold homes as a key determinant of ill health. The statement should also hold relevant national departments, local government and competent bodies to account for reducing cold-related premature mortality and the public costs of inaction.
2. The summit should seek to establish an ongoing UK-wide taskforce (again with representatives from across all four nations' governments and their respective stakeholders) which would review the actions being taken across the nations in detail – assessing national frameworks, relevant policies and local action – and seek agreement on the key priorities that could be implemented consistently across all nations in the coming winter and beyond.
3. UK-wide standardisation of these reporting metrics would greatly assist transparency, help target delivery and crucially enable local commissioners to assess the effectiveness of existing schemes. Local government and local health bodies must also be held to account for delivering their existing responsibilities. For example, the Public Health England Quality Outcomes Framework indicators for tracking excess winter deaths, fuel poverty and cold-related morbidity that have been developed in England should be available to each nation at a local government and constituency level and updated each year.
4. To improve targeting, tailor advice and establish effective referral routes the new data-matching opportunities created by the Digital Economy Act must be fully utilised¹⁸. The new powers must allow local authorities, GP practices, Health and Well-being Boards (HWBs) and Clinical Commissioning Groups (CCGs) or their equivalents across the UK nations to directly access information about the support energy suppliers can provide to eligible households in their area or assist other national fuel poverty schemes.

Improved transparency and local data

1. The UK-wide taskforce should develop a detailed assessment of the overall scale, cost and pressures cold-related morbidity is having on health services and related agencies across the UK nations.
2. The report should include an appraisal of the extent to which any relevant national or local policies reduce the unnecessary cost of cold homes and the extent to which this is fully captured within these programmes' cost benefit analysis. This analysis should be disseminated to the policy makers who took part in the original joint ministerial summit and made publicly available.
5. To ensure that the intended benefits from the Digital Economy Act can be delivered for all UK households, the new data-sharing powers in Great Britain should be adopted for all relevant Northern Ireland fuel poverty schemes.



A consistent health-warmth delivery framework across the UK

1. The Scottish Government should create formal links between fuel poverty, energy efficiency delivery and the health sector, including building on the Scottish Public Health Network guidance and this should feature in the new fuel poverty strategy.
2. The new Public Service Boards for every local authority area in Wales should outline how they intend to address cold homes and fuel poverty in their first Local Well-being Plans next year.
3. In Northern Ireland, health must play an upfront and central role in the new Outcome Based Programme for Government (2016-2021) and this will require close alignment with the proposed action for a new Fuel Poverty Strategy.
4. Annual registration for SPOCs could be set up by respective government departments; a related agency such as the UK Public Health Register (UKPHR) or, with suitable funding, a third party. This updated information could then be shared with wider relevant national or local bodies to ensure help is delivered efficiently and gaps in provision are addressed.

Resources must reflect the costs of not taking action

1. England is now the only GB nation without a Government-funded energy efficiency scheme to sit alongside ECO. To cover the heating shortfall during the ECO transition scheme, immediate funds should be made available for crisis heating repairs, replacements and to protect fuel poor, off-gas households whose health is at risk. The Welsh Government should also further protect vulnerable households with a crisis fund for emergency heating repairs and replacements for fuel poor households that fall outside of the NEST scheme when their health is at risk.
2. The UK Government must act on the strong case for domestic energy efficiency to be regarded as a hugely important infrastructure priority as part of the National Infrastructure Commission's National Infrastructure Assessment this year – as is the case already in Scotland. This would help unlock access to public infrastructure funding such as the new National Productivity Investment Fund or alternative structural funds such as the United Kingdom Shared Prosperity Fund. Both of these ring-fenced budgets can help the UK and national Governments meet their fuel poverty targets and more generally improve our unhealthy and inefficient housing stock.



UPDATE ON FUEL POVERTY IN ENGLAND

KEY OBSERVATIONS

- Fuel poverty levels have not improved since the last report but the UK Government has recently renewed its commitment to meet statutory fuel poverty requirements
- England remains the only GB nation without a Government-funded energy efficiency scheme to sit alongside the Energy Company Obligation (ECO)
- The commitment to target ECO at those in or at risk from living in a cold home is still to be honoured and the details of the longer-term scheme have yet to be set out or consulted upon
- There is a worrying gap in provision for repairs and replacements for gas boilers and funds are no longer available for first time gas central heating systems
- The worst private rented properties are causing the greatest hardship and the most acute risks for their residents
- Urgent clarity is needed for landlords on how they will be required to meet upcoming energy efficiency requirements from next year and invest in these potentially life-threatening properties



The number of households in fuel poverty in England under the Low Income High Cost (LIHC) definition has not improved since our last report and has increased by over 100, 000 households in the last year. In 2015¹⁹ - the most recent year that statistics are available for - it was estimated that around 2.50 million households were in fuel poverty, representing approximately 11 % of all English households compared to 2.38 million households (or 10.6% of all households) in England in 2014. This too was a small increase from 2.35 million households in 2013, the level of fuel poverty prior to the fuel poverty strategy being passed in Parliament.

The fuel poverty gap – an estimation of the additional amount that those in fuel poverty need to pay to heat their homes adequately compared to average households – has not shown any real progress either, and remains at around £884 million. The average fuel poverty gap – the additional amount one average fuel poor household would need to spend – has decreased slightly and is now estimated for 2015 at £353 per year for low-income households living in the least efficient homes.

In 2014 the UK Government introduced a statutory target to ensure fuel poor homes in England achieve a minimum energy efficiency rating of Band C by 31 December 2030²⁰; broadly the same energy efficiency level as a modern home²¹. During the General Election the new UK Government also committed to honouring this requirement²². We welcome this renewed commitment but note that overall an investment of £20bn is required to bring all current fuel poor homes in England up to this standard. This breaks down as £1.9bn to meet the 2020 fuel poor EPC E milestone, a further £5.6bn to meet the fuel poor 2025 EPC D milestone and a further £12.3bn to meet the 2030 fuel poor EPC C target in England.

Whilst the aforementioned investment does not fall to central Government solely, it must be defrayed across a number of parties²³. According to the Committee on Fuel Poverty²⁴, the Climate Change

Committee (CCC)²⁵ and think tanks such as Policy Exchange²⁶, current resources are less than half of what is required to meet these commitments let alone accelerate delivery with a more ambitious aim to bring all low-income households up to the standard of a new home by 2025²⁷.

Policy and Delivery

The only energy efficiency policy directed at addressing fuel poverty in England remains the GB-wide Energy Company Obligation (ECO). Indeed, following the demise of the Green Deal²⁸, the Green Deal Home Improvement Fund²⁹ and the Landlord Energy Saving Allowance³⁰, ECO is the only remaining domestic energy efficiency scheme in operation in England. Despite these negative developments, NEA welcomed the UK Government's 2015 Spending Review announcement that ECO will run for five years from April 2017 and the longer-term scheme from 2018-2022 will be focused on helping households out of fuel poverty. This commitment is however still to be honoured and the details of the longer-term future of ECO have yet to be set out or consulted upon. In addition, the recent lengthening of the transition scheme to 18 months (from the original proposals of 12 months) also means a delay to the fully-focused,



better-targeted scheme. This will lead to a large shortfall in activity for the poorest households with the highest energy costs, equivalent to almost £1bn of lifetime energy savings³¹.

The development of the ECO transition scheme has also led to a big gap in provision for low income or vulnerable consumers who cannot afford to repair or replace existing gas boilers. Whilst a better balance of energy saving measures is needed within the ECO programme, this shift has been dramatic and is most acute in England as obligated suppliers are delivering heating measures in Scotland (or to a lesser extent Wales) where the existence of complementary, tax-funded programmes makes it cheaper for them to deliver their targets. As explored further in the report, the energy supplier-led scheme is also still failing to take account of the enhanced needs of vulnerable consumers and has a significantly reduced budget³². It is therefore clear that without additional programmes, low income and vulnerable consumers in England, who cannot afford to repair or replace broken gas boilers, will be left exposed to safety implications such as an increased risk

of carbon monoxide poisoning, gas explosions or severe cold. Whilst this shortfall in funding has been recognised by the UK Government³³, no further investment has yet been made available.

In addition to the need to help vulnerable households to repair or replace existing gas boilers, NEA's report *In from the Cold*³⁴ has also recently highlighted the need to make immediate funds available for first time gas central heating systems to complete economic gas connections to fuel poor homes. NEA recommends setting the fund at £25 million per annum and reserving £37.5 million to help cover the funding gap estimated at £43.5 million for first time gas central heating over the 18-month ECO2T transition period (April 2017 to September 2018). NEA estimates a £37.5 million non-gas fund could support around 9,375 households and deliver up to £142 million in lifetime bill savings.

Finally, there are some positive signs that local authorities will have a greater role in the delivery of energy efficiency schemes following the development earlier this year of the ECO eligibility flexibility mechanism to support households in private tenures, living either in fuel poverty or living on a low income and who are particularly vulnerable to the effects of living in the cold³⁵. This is an important development to help deliver assistance to those not on means-tested benefits and allow local authorities to build their capability. Despite this development however, once again, it is likely that the proportion of the obligation set aside to be delivered through this route will be delivered in other GB countries as deep cuts to council funding in England continues to make it more challenging than ever (and in some cases impossible) to commit time and officer resources to tackle fuel poverty locally. Despite these challenges, a small number of local councils are still delivering or producing new Fuel Poverty Action Plans³⁶ and others are including basic energy efficiency standards as a key part of licensing requirements³⁷.

These proactive steps are designed to reduce the public costs that failure to enforce housing standards locally presents. In contrast to most of the current approaches to enforcement, they also



seek to shift the burden away from tenants to lead complaints about their landlords and aim to raise a common expectation of the living standards which should be expected in one of the biggest economies in the world.

Without this shift, it is likely that in an increasingly competitive rented housing market tenants will be unwilling to ask their landlords to fulfil their rights to repairs due to fears of eviction. This is despite the properties (and landlords) potentially falling foul of minimum safety requirements. In 2016 a survey carried out by Future Climate on behalf of NEA found that acute risks from faulty gas appliances are common in private rented properties and many Houses of Multiple Occupation (HMOs) have such inadequate heating and insulation that it is impossible to keep them warm and free from damp³⁸. As a result, the introduction of minimum energy performance standards in the worst Private Rented Properties in England and Wales from 2018³⁹ is a welcome and necessary regulation. There is however an urgent need to provide clarity to landlords on how they will be required to meet these requirements and invest in these potentially life-threatening properties⁴⁰.



UPDATE ON FUEL POVERTY IN NORTHERN IRELAND

KEY OBSERVATIONS

- Despite a lack of up-to-date statistics NI has the highest proportion of fuel poverty across the four UK nations
- The pressing challenge of low household income is being exacerbated by the unregulated heating oil market
- The Northern Ireland Sustainable Energy Programme (NISEP) has been extended which has sustained some activity however current and future schemes are in hiatus due to wider political uncertainty
- An update on fuel poverty levels is expected later this year alongside the development of a new fuel poverty strategy



Up-to-date fuel poverty official statistics for this year are not available. The Northern Ireland House Condition Survey official statistics are expected at the end of 2017. The most recent statistics – from 2011 – showed that an estimated 294,000 households (42%) were in fuel poverty using the 10% definition. This is the highest proportion across the four UK nations. Research commissioned in 2010 by the Northern Ireland Government with the University of Ulster indicated that more than 33,000 (11%) of all fuel poor households in Northern Ireland were in extreme fuel poverty and needed to spend more than 25% of household income on energy⁴¹. One in five individuals is also currently considered to be living in absolute poverty⁴² and the 2016 Family Resources Survey showed that incomes still remain lower than 2008/9 levels⁴³. While the Northern Ireland targets for reduction in fuel poverty were not statutory (unlike in the other UK nations), the interim 2010 target to eradicate fuel poverty in vulnerable households was missed as was the subsequent 2016 target to eradicate fuel poverty in all other households.

Policy and Delivery

The key delivery mechanism for domestic energy efficiency in Northern Ireland is the statutory Affordable Warmth Scheme, an area-based programme which has been running since 2014. Slow to start, it is now estimated to be improving energy efficiency in circa 5000 fuel poor households per year. This is fewer than its predecessor – the Warm Homes Scheme – which helped around 9,000 fuel poor households per year. This is due in part to focusing on households with an income of less than £20,000 and a focus on a whole-house approach which includes insulation, upgraded heating and installation of double-glazed windows. However, at the current rate of progress it could take until 2025 for the 33,000 households estimated to be spending more than 25% of their income to be able to stay warm in their homes.

The other main fuel poverty intervention is the Northern Ireland Sustainable Energy Programme

(NISEP). Funded by a customer-based levy, the NISEP is targeted at low-income households not eligible for the statutory affordable warmth scheme. Initially set to end in 2014, NEA NI has successfully campaigned for its continuation until such time as it can be evidenced that it will be replaced by another socially progressive energy efficiency scheme. Government published a broad consultation in May 2016 on replacing NISEP with a new programme, EnergyWise, however, the more detailed consultation promised in Autumn 2016 has not been published and we believe EnergyWise as outlined in its current form is unlikely to be established in the short to medium term.

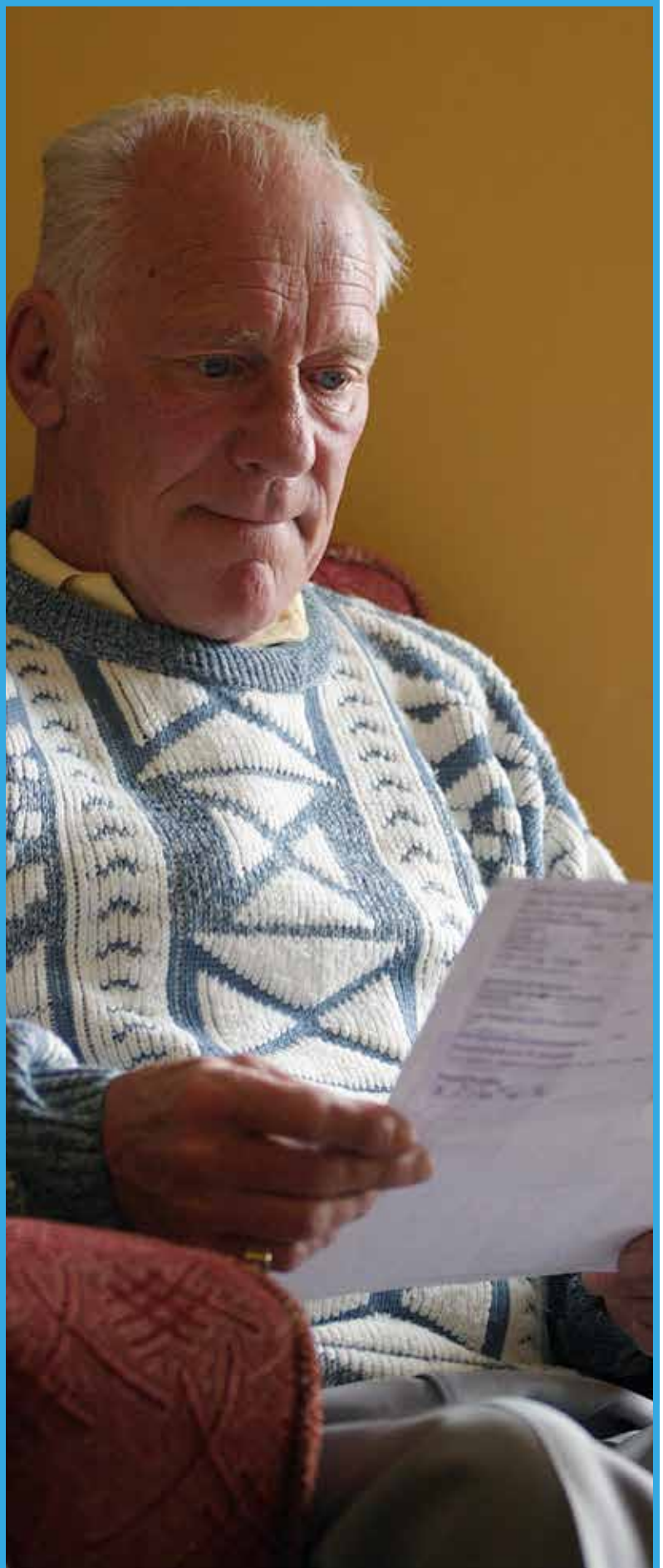
NEA NI also chairs the Northern Ireland Fuel Poverty Coalition⁴⁴ which recently outlined how to reduce the alarming level of cold homes in NI⁴⁵. As well as calling on the UK Government to make energy efficiency an infrastructure priority, they also called for adequate oversight and regulation of the heating oil industry to protect vulnerable consumers, ensuring they have similar safeguards to natural gas and electricity consumers. This is particularly important in Northern Ireland as heating oil is the main fuel source with 68% of households reliant on this unregulated fuel. In January 2016 the price of oil was at an all-time low, but since then the price has increased by almost 50%⁴⁶. In terms of national schemes, NEA NI has highlighted current and future schemes should be effectively targeted at those who need the most support to reduce their heating costs and any emerging scheme must ensure that the energy justice principles established in the NISEP are embedded as a key principle.



UPDATE ON FUEL POVERTY IN SCOTLAND

KEY OBSERVATIONS

- Fuel poverty in Scotland has reduced since the last UK Fuel Poverty Monitor report but this is overshadowed by the failure to achieve the statutory duty to eradicate fuel poverty by 2016 as set out in the Housing (Scotland) Act
- The formation of a statutory new duty for fuel poverty eradication, a new strategy, a new fuel poverty definition and new regulations in the private rented sector are still under development and will be finalised 2018
- New powers will allow Scotland to adapt and target UK or GB-wide policies on fuel poor households
- Energy efficiency has been designated as a National Infrastructure Priority by the Scottish Government but the detail of budgets and delivery mechanisms has still to be explained in detail



In 2015 there were an estimated 748,000 households living in fuel poverty in Scotland, which uses the 10% indicator, compared with 845,000 in 2014⁴⁷. This shows an improvement of around four percentage points (dropping from 34.9% to 30.7% of households). The Scottish Government attributes just over half of this improvement to a fall in energy prices⁴⁸ and a third to improvements in the energy efficiency of the housing stock. It has long been recognised that fuel poverty in remote and rural areas is much higher than in urban areas, for example, in the Orkney Islands 65% of households are in fuel poverty⁴⁹. Recent findings in the 2015 Scottish House Condition Survey show that rural fuel poverty has reduced largely due to the drop in domestic heating oil prices over that period. In addition, the numbers of households living in severe fuel poverty – needing to spend 20% or more of their income – has also improved by around one percentage point – from 229,000 (9.5%) in 2014 to 203,000 (8.3%) in 2015.

The Scottish Government had a statutory target to eradicate fuel poverty in Scotland 'as far as is reasonably practicable' by November 2016⁵⁰, which was not met. The Scottish Government emphasised the amount of money spent on improving the energy efficiency of homes and attributed the failure to factors beyond the Government's control, such as high energy prices. In autumn 2015, the Scottish Government set up two advisory groups and tasked them with looking into various aspects of fuel poverty strategy and rural fuel poverty. A year later in October 2016 both the Scottish Fuel Poverty Strategic Working Group⁵¹ and the Scottish Rural Fuel Poverty Task Force⁵² published their reports containing over 100 recommendations. The Scottish Government published its response to these reports in March 2017⁵³. The Scottish Government has committed⁵⁴ to review the fuel poverty definition with a panel of independent experts by summer 2017. This will be followed by the drafting of a new fuel poverty eradication strategy, including a new overarching statutory target to replace the missed 2016 target. Government will consult on these changes, which will inform the Warm Homes Bill which is planned

for 2018. Various further consultations are expected in 2017 including on energy efficiency regulation in the private rented sector⁵⁵.

Policy and Delivery

As part of the Scotland Act 2016, new powers will come to Scotland in the future, including control over key GB-wide policies. Winter Fuel Payments (WFPs), Cold Weather Payments (CWPs), the Warm Home Discount and the Energy Company Obligation are being devolved, with the timetable and detail still to be set out. However, a recent consultation, which included WFPs and CWPs, proposed amendments including improving access for families with disabled children and those who live off the gas grid; and better recognising harsh weather conditions in certain parts of Scotland. In its response to this consultation, the Scottish Government noted that both government advisory groups on fuel poverty had included recommendations about the use of these devolved benefits in tackling fuel poverty. The Scottish Government will consider these as it develops the new long-term fuel poverty strategy, which will be consulted on later in 2017.



Turning to energy efficiency delivery policy, in June 2015 energy efficiency was designated as a National Infrastructure Priority. The cornerstone of this will be Scotland's Energy Efficiency Programme (SEEP), a 15 to 20-year programme which will offer support to improve the energy efficiency ratings of all domestic and non-domestic buildings in Scotland. SEEP will be launched in 2018 and will be supported by over £500 million of public funding over four years. 'Pathfinder Fund' pilot projects have already begun in areas at risk of having higher levels of fuel poverty and low income, which will shape the delivery of future SEEP.

The Scottish Government has just concluded a consultation into SEEP and more detail is expected later in 2017.

At present the Scottish Government funds the Home Energy Efficiency Programmes for Scotland (HEEPS), which is a cluster of programmes including Area Based Schemes (ABS), a reactive scheme for individuals in need called Warmer Homes Scotland and two loan schemes.

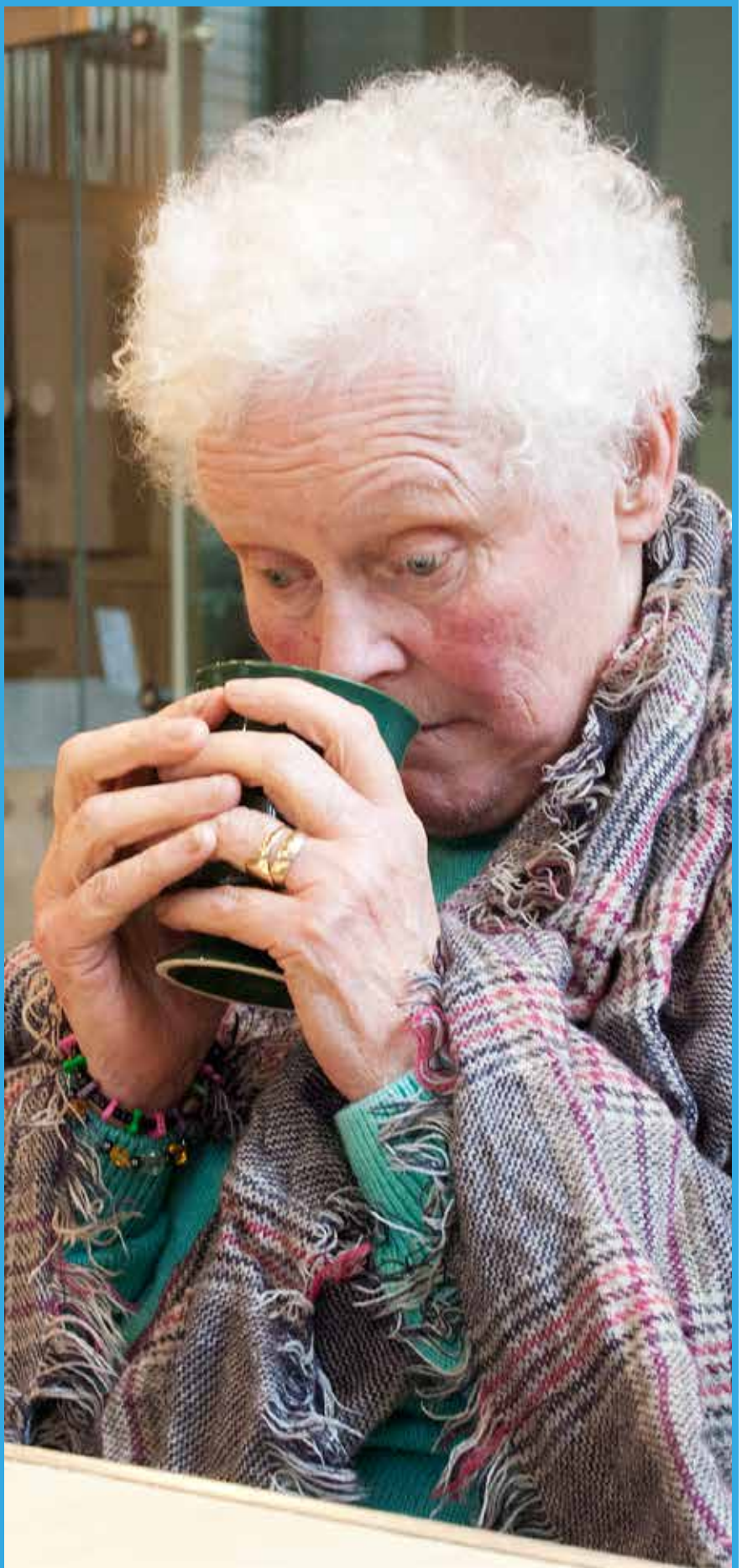
Alongside this, the existing Energy Efficiency Standard for Social Housing (ESSH) aims to further improve the energy efficiency of social housing in Scotland by 2020. In its 2015/16 national report, the Scottish Housing Regulator reported that 68.6% (407,174) of houses in the scope of ESSH already meet this standard⁵⁶. Local authorities in Scotland also contribute to the eradication of fuel poverty through their Local Housing Strategies.



UPDATE ON FUEL POVERTY IN WALES

KEY OBSERVATIONS

- Whilst there has been a small decrease in fuel poverty in 2016 compared to 2015, the 2018 target to eradicate fuel poverty won't be met
- There has been a welcome continuation of resources to fund energy efficiency schemes but investment in national programmes needs to be expanded alongside leveraging in further funding from outside Wales
- Recognition of the impact of cold homes on health with a new Nest scheme offering assistance for low income groups with certain health conditions
- A new long-term strategy for addressing fuel poverty and a new ambitious fuel poverty target are required



In 2016 there were an estimated 291,000 households in fuel poverty. This is a small decrease compared with estimates of 305,000 in 2015, an improvement of one percentage point from 24% to 23%⁵⁷. In longer term trends, the Welsh Government estimates that fuel poverty levels have fallen by 6 percentage points from 29% in 2012 to 23% in 2016 as a result of rising incomes, energy efficiency improvements and reductions in energy prices.

Using the Low Income High Costs definition - to allow comparison with England - 141,000 households (11%) were predicted to be in fuel poverty in 2012, decreasing over four years to 132,000 (10%) in 2016⁵⁸. Statutory targets were in place to eradicate fuel poverty amongst vulnerable households (by 2010) and in social housing (by 2012). The Welsh Housing Quality Standard (WHQS) requires all social landlords to improve their housing stock to an acceptable level by 2020. As at the end of March 2016, 93% of social housing dwellings were compliant with the WHQS requirement for properties to have a minimum SAP rating of 65 and 98.1% were compliant with the central heating requirement. However, 27% of social housing tenants in Wales were estimated to be in fuel poverty in 2016. The 2018 target to eradicate fuel poverty in Wales "as far as is reasonably practicable" remains, but given current estimated levels of fuel poverty at 23% in 2016 it is unlikely to be met.

Policy and Delivery

Following campaigning by the Fuel Poverty Coalition Cymru in the run-up to the Welsh Assembly elections in May 2016, all major parties pledged to continue a Government-funded energy efficiency programme for fuel poor households. A key driver is the Welsh Government's Warm Homes Programme, which currently has around £26m funding per year committed until 2021⁵⁹. Up to 25,000⁶⁰ homes are expected to receive efficiency measures over the next four years. In addition, the programme is expected to lever in funding from Europe and from the GB-wide Energy Company Obligation through both the Nest and Arbed schemes.



The Nest programme delivers energy efficiency improvements for eligible low income, privately owned and privately rented households, who are in receipt of qualifying benefits and have a poor energy efficiency rating. An estimated 79%⁵¹ of contacts were from households living in fuel poverty. Amendments to the programme from April 2018 are expected to extend eligibility to low income groups with respiratory or circulatory conditions, and begin offering in-home advice. Evidence to support inclusion of mental health conditions is also being explored.

The complementary area-based scheme, Arbed, continues to fund the installation of energy efficiency measures in deprived communities and the Wales Infrastructure Investment Plan⁶² also reiterates their investment in the Warm Homes Programme to drive up energy efficiency improvements to tackle fuel poverty. There is however a pressing need to mirror energy

efficiency as an infrastructure priority consistently across the whole of the UK and unlock further access to national, UK or GB-wide funding.

To date additional fuel poverty activity outside of the Warm Homes Programme has also included pilots for a 'Warm Homes on Prescription' initiative and a trial of a new local energy scheme. There has also been £20m for trials of innovative models of housing which can reduce energy bills; and £1.8m over the next three years for data collection, including a survey of housing conditions and

modelling and analysis of fuel poverty. Despite this activity, NEA Cymru remains concerned that the Welsh Government's policy direction appears to have shifted from a focus on eradicating fuel poverty to the reduction of fuel poverty. A new long-term strategy for addressing fuel poverty needs to be developed as a matter of urgency. In its Manifesto 'Ending Wales' Cold Homes Crisis' the Fuel Poverty Coalition Cymru also called for a new and ambitious fuel poverty target based on improving the number of low income homes to a minimum standard of EPC band C each year.



SUMMARY OF THE EVIDENCE ON THE LINK BETWEEN COLD HOMES & HEALTH AND WELL-BEING

There have been a substantial number of studies carried out to examine the relationship between fuel poverty, cold homes and health. Whilst it is difficult to conclusively identify the direct, causal pathways of this relationship⁶³, the strong association between cold homes and health has been repeatedly evidenced by many academics^{64 65 66}. Amongst the key findings from the existing wide body of research reviewed about the effects of cold on health and well-being, we highlight the following points:

The impact of winter on respiratory and cardiac conditions

- According to a 2011 report from the World Health Organisation, deaths from cardiovascular diseases are directly linked to exposure to excessively low indoor temperatures for long periods⁶⁷
- 50-70% of excess winter deaths are attributed to cardiovascular conditions, and some 15-33% to respiratory disease. As a result, the WHO estimates that 30% of winter deaths are caused by cold housing⁶⁸
- It is now also widely accepted that cardiovascular and respiratory diseases are caused or exacerbated by living in cold conditions; for every 1°C drop in temperature below 5°C, GP consultations for respiratory illness in older people increase by 19% and a 1°C drop in living-room temperature results in a rise in blood pressure amongst those aged 65-74⁶⁹
- People with Chronic Obstructive Pulmonary Disease (COPD) are four times more likely to be admitted to hospital with respiratory problems over the winter⁷⁰
- Vulnerability to dying from ischaemic heart disease and cerebrovascular disease increases significantly when the temperature drops⁷¹
- Increased levels of clotting molecules in the blood during the winter months accounts for a 9-15% rise in coronary heart disease⁷²
- Indoor dampness and mould are associated with increased risk of asthma, dyspnea, wheezing, coughing, respiratory infections, bronchitis, allergic rhinitis and upper respiratory tract symptoms⁷³
- Contact with mould spores may cause allergic reactions including hay fever-type symptoms, such as sneezing, runny nose, red eyes, and skin rash like dermatitis and eczema⁷⁴



Mental health and well-being

The health impacts of living in a cold home are not just physical, but can also greatly impact upon mental health and well-being.^{75 76 77 78}

- Currently, more than one in four adolescents living in cold housing are at risk of multiple mental health problems⁷⁹
- Being unable to keep warm at home and being in fuel debt have been identified as independent predictors of Common Mental Disorder (CMD)⁸⁰
- Being cold at home has also been independently and significantly associated with the likelihood of a young person suffering 4 or more negative mental health outcomes⁸¹
- Cold homes impact upon other avenues of life necessary for good health. For example, paying for energy might mean that a household spends less on food,^{82 83 84} running the risk of reduced calorific intake, malnutrition, and limited weight gain in infants^{85 86 87 88}



The importance of energy efficiency

- Initial evaluation findings from the Nest scheme in Wales show those people receiving heating and insulation measures benefited from a drop in GP interventions for respiratory illness (c.4%) and asthma (c.6.5%)⁸⁹
- In areas with poor central heating coverage, mortality rates increase more rapidly when the outdoor temperature falls⁹⁰
- People living in the coldest quarter of homes are 20% more likely to die during the winter than those in the warmest quarter^{91 92}
- In one detailed study in the South West of England home energy improvements were associated with an 80% decrease in the rate of sickness absence from school for children with asthma and recurrent respiratory infections⁹³
- Evaluation of the Warm Front scheme found that 70% of households who increased indoor temperatures to WHO levels did not have an increased 'mortality risk' when outdoor temperatures dropped. But the mortality risk for those without improved comfort worsened by 2.2% with every 1°C fall in outdoor temperatures⁹⁴
- 9% of hypertension in Scotland could be prevented by maintaining indoor temperatures above 18°C⁹⁵

We know from this evidence and wider sources that living in cold, damp conditions can increase the risk of heart attacks and strokes via rising blood pressure, as well as causing or worsening respiratory illnesses such as COPD and asthma. They can worsen arthritic and rheumatic conditions, as well as potentially leading to increased propensity to falls. They also cause and significantly contribute to poor mental health. The most at-risk groups are typically older people, children and those with existing long-term illnesses. Whilst UK-wide statistics for fuel poverty are no longer produced, the last year

that they were available highlighted that across the UK over 3.5 million vulnerable households were unable to heat their homes adequately across the UK, an increase of 500,000 compared to the previous year.⁹⁶

in addition, even under the relative LIHC indicator in England, there are 1.8 million vulnerable fuel poor households, again an increase of over 40,000 compared to the previous year⁹⁷. As illustrated in the table below, using the WHO estimate that 30% of winter deaths are caused by cold housing, over 9600 people across the UK are dying needlessly on average throughout the winter months due to cold homes; 80 people per day. This is not acceptable in the fifth largest economy in the world.



Five year average of EWDs and attributable to cold homes across UK nations:

	2011/12	2012/13	2013/14	2014/15	2015/16	5 yr average	Attributable to cold homes [ii]
England	22,960	29,480	16,470	41,300	22,500	26,542	7,963
Wales	1,260	1,850	1,010	2,580	1,800	1,700	510
Scotland	1,420	2,000	1,600	4,060	2,850	2,386	716
N Ireland [i]	500	560	590	870	630	630	189
United Kingdom	26,140	33,890	19,670	48,810	27,780	31,258	9,377

[i] Data for 2015/16 is not available for NI. Therefore the NI 5 year average and attributable to cold homes figures are based on 4 years' data. An estimate for EWD in NI for 2015/16 has been provided based on the 4 year average for the purposes of calculating a UK figure.
[ii] Based on WHO (2011) 30% estimate
Source data: Office for National Statistics; National Records of Scotland; Northern Ireland Statistics and Research Agency



DIFFERENT APPROACHES TO REDUCING ILL HEALTH ASSOCIATED WITH COLD HOMES IN THE UK NATIONS

Like fuel poverty, health is a devolved issue but each of the four UK nations has recognised the links between fuel poverty and health to some degree in recent years. The situation is however rapidly evolving and there are marked differences in the strategic frameworks each nation has applied. The following section highlights the most recent developments within each country and then compares the approaches across the UK as a whole.

Health and cold homes in England

The most important recent development for galvanising action on the links between cold homes and health was in March 2015 when the National Institute for Health and Care Excellence (NICE) published its guidelines on tackling 'Excess winter deaths, morbidity and the health risks associated with cold homes'⁹⁹. NICE has statutory duties set out in the Health and Social Care Act 2012 to develop guidance and quality standards in health and social care and the guidance followed an extensive process of evidence reviews, economic modelling and submission of expert papers¹⁰⁰. As noted further on in the report, decisions on how NICE guidelines apply in Wales, Scotland and Northern Ireland are made by the devolved administrations. As noted in figure 2 (p25) the new guidance set out 12 recommendations for health bodies and other local actors.

In another important step, the NICE guidelines are also supported by recent developments by Public Health England (PHE). PHE stated in their Cold Weather Plan for 2015¹⁰¹ and 2016 that reducing fuel poverty and excess winter illness and deaths should be considered 'core business' by health and well-being boards and these boards should include this in their 'health

and well-being strategies' and 'joint strategic needs assessments' (JSNA). PHE has also set out indicators for increasing quality of life¹⁰², including indicators on excess winter deaths and fuel poverty. The Cold Weather Plan also states that addressing these health inequalities should inform 'year-round commissioning'. There is also an increasing focus on prevention in the NHS in England. This is reflected in the NHS Five Year Forward View¹⁰³ and the new Sustainability and Transformation Plans which oblige the NHS to scale up joint working with other local services to achieve health and well-being outcomes at a population level (rather than focusing solely on the clinical needs of individuals).



Following the emergence of these positive frameworks, in September 2016 NEA published a detailed report 'Get Warm Soon'¹⁰⁴. NEA assessed how HWBs in England are including relevant public health indicators in their joint needs assessments and strategies. NEA also reviewed the local application of NICE and how this linked to concrete plans to commission health and housing services. The analysis revealed:

- **Improving public health leadership to tackle cold homes:** Bringing together key decision makers, HWBs are the natural meeting point from which to plan, commission and deliver integrated health and housing services to address fuel poverty and EWDs. At the moment their lack of commissioning power means local actors do not always view them as the preferred or most effective body through which to focus health and social care attention on the problem of cold homes. High performing areas are also still overly reliant on individual champions to issue the clarion call for cold homes
- **Incorporating the NICE guidelines into joint health and well-being strategies** - While a majority of council areas in England still have fuel poverty on their agendas and are making encouraging links between health and housing, only a small minority of HWBs appear to mention fuel poverty in their strategies, overall 40% of all HWBs
- **Implementing the NICE recommendations:** With the exception of some good practice examples there is little evidence from this research that most HWBs are taking on a leadership role to implement key NICE recommendations to reduce ill health from cold homes. However HWBs cannot be expected to address this issue alone, nor can we assume their successful leadership within a fragmented and underfunded public health landscape. More resources are also needed to insulate and heat cold homes



Figure 2: 2015 NICE recommendations for tackling cold-related ill health¹⁰⁵

Recommendation	Who Should Take Action
1. Develop a strategy to address the health consequences of cold homes	Health and wellbeing boards
2. Ensure there is a single point of contact health and housing referral service for people living in cold homes	Health and wellbeing boards
3. Provide tailored solutions via the single point of contact health and housing referral service for people living in cold homes	Health and well-being boards; local authorities; housing providers; energy utility and distribution companies; faith and voluntary sector organisations
4. Identify people at risk of ill health from living in a cold home	Primary health and home care practitioners
5. Make every contact count by assessing the heating needs of people who use primary health and home care services	Primary health and home care practitioners
6. Non-health and social care workers who visit people at home should assess their heating needs	People who do not work in health and social care services but who visit people at home (e.g. meter installers, faith and voluntary sector workers, housing professionals etc.)
7. Discharge vulnerable people from health or social care settings to a warm home	Secondary healthcare practitioners; social care practitioners
8. Train health and social care practitioners to help people whose homes may be too cold	NHS England, universities and other training providers
9. Train housing professionals and faith and voluntary sector workers to help people whose homes may be too cold	Training providers (e.g. Chartered Institute of Environmental Health, Chartered Institute of Housing etc.)
10. Train heating engineers, meter installers and those providing building insulation to help vulnerable people at home	Employers who install and maintain heating systems, electricity and gas meters and building insulation; training providers
11. Raise awareness among practitioners and the public about how to keep warm at home	Health and well-being boards; Public Health England; Department for Business, Energy and Industrial Strategy
12. Ensure buildings meet ventilation and other building and trading standards	Building control officers; housing officers; environmental health officers; trading standards officers

Health and cold homes in Northern Ireland

The links between health and fuel poverty are also fully recognised in Northern Ireland and since its inception in 2009 the Public Health Agency (PHA) has undertaken some key activities in this area.

Most notably they have funded Northern Exposure which is delivered by NEA and is designed to tackle the high levels of fuel poverty found across Belfast. The project objectives support the implementation of the NICE guideline NG6 and it does this by raising awareness of fuel poverty and its effects on health amongst frontline Health and Social Care professionals, community groups and advisers. The overall aim is to improve effective referrals to energy efficiency initiatives for low-income households.

Outside Belfast the PHA supported 'Warmer Ways to Better Health' which is strategically delivered at local Government level by four district councils. The project has built up local infrastructure which includes a number of workers who support households in fuel poverty through energy efficiency advice and targeting schemes. It was in this context that the public health strategy for Northern Ireland specifically captured an objective 'to offer everyone the opportunity to live and work in a healthy environment and to live in a decent affordable home'. Disappointingly the updated strategy does not include this commitment but the PHA Poverty Priorities 2016-2020 have some links to tackling cold homes but is still underdeveloped within existing plans. This is however expected to change following some recent developments last year.

In February 2016 the Northern Ireland Deputy Chief Medical Officer also stated that the Department has recently reviewed the NICE guidelines on excess winter deaths, morbidity and the health risks associated with cold homes and has formally considered it for applicability in Northern Ireland. The Chief Medical Officer noted that the guidance should be taken into account when designing and delivering services for people at risk from living in a cold home. NEA believes the guidelines should also be viewed within the context of the Public Health Agency's 'Making Life Better' strategy¹⁰⁶. This ten-year strategy addresses health inequalities and will feed directly into the outcome-based Programme for Government Framework (2016-2021)¹⁰⁷ which in turn aims to directly align with the Community Planning strategies across the eleven councils in Northern Ireland.

Health and Cold Homes in Scotland

Scotland has not adopted the NICE guidelines on the health risks associated with cold homes and currently has no plans to adopt them¹⁰⁸. However, links between health and fuel poverty are becoming more distinct. The 2016 guidance for Directors of Public Health¹⁰⁹ from the Scottish Public Health Network sets out possible public health actions to tackle fuel poverty – including that local public health teams start making links with the existing Community Planning Partnerships and Integrated Joint Boards, energy companies and third sector partners. Further guidance published in 2017 focuses on how to improve health through the provision of good housing¹¹⁰, and urges public health and housing officials to prioritise populations or communities who may be vulnerable to the health effects of poor housing.

In addition, health professionals from the Scottish Public Health Network and NHS Scotland sit on the Scottish Fuel Poverty Forum, ensuring that health is represented in fuel poverty discussions. In response to recommendations from the Scottish Fuel Poverty Strategic Working Group to ring-fence funds and co-ordinate local



action, the Scottish Government agreed that a locally led collaborative approach was valued in tackling fuel poverty and that they were keen to build on that approach.

Finally, there are wider policy developments which could potentially have an impact on cold homes and health. The Scottish Government published a Health and Social Care delivery plan in 2016 to increase the pace of improvement and change within the Scottish health and care system¹¹¹. This was supported by additional funding of £128 million in 2017/18. As part of their Fairer Scotland Action Plan (2016), which aims to eradicate child poverty and make Scotland a fairer place to live and work, the Scottish Government will recruit at least 250 Community Links Workers to work with GP surgeries to increase access to local services and support.

Health and Cold Homes in Wales

Wales has not adopted the NICE guidelines on the health risks associated with cold homes but strategic links between health and warm homes are being made. Promising initial findings from the Nest scheme showed those people receiving heating and insulation measures benefited from a drop in GP interventions for respiratory illness (c.4%) and asthma (c.6.5%)¹¹². The Welsh Government also published findings in July 2016 about the characteristics of low-income households most at risk from living in cold homes¹¹³. Following this, in a welcome move, Nest scheme eligibility will be extended from April 2018 to low-income households with a member suffering from a respiratory or circulatory condition; and a proportion of scheme funding will be ring-fenced as a pilot. Inclusion of other physical and mental health conditions is also being reviewed.

The Well-being of Future Generations (Wales) Act 2015 also came into force on 1 April 2016 and has seven well-being goals, including 'a healthier Wales', which Local Health Boards (LHBs) and others must work towards. The Act also established Public Service Boards (PSBs)

for every local authority area in Wales, which must prepare and publish an assessment of local well-being by May 2017 and their first Local Well-being Plan by May 2018.

Information from LHBs requested by NEA Cymru has highlighted some limited activity to address fuel poverty by some LHBs, including exploring local links between health and housing in specific deprived areas; links between a local public health team and local authority affordable warmth partnerships and the development of detailed fuel poverty and health inequality maps. Public Health Wales is also working with Community Housing Cymru and others to take forward the health and housing agenda and the Welsh Government has invested £250,000 to Care & Repair Cymru to pilot a Warm Homes on Prescription initiative working with health professionals. This will focus on individuals with health conditions exacerbated by cold housing.



EMERGING TRENDS IN DELIVERY OF HEALTH-RELATED FUEL POVERTY SCHEMES AND COMPARING FRAMEWORKS ACROSS THE UK

It is clear from the analysis in the previous section that each of the nations is taking positive and proactive steps to address the health risks from cold homes. Each nation also recognises improving energy efficiency is centrally important to achieving these outcomes although provision across different countries and local authorities is very mixed¹¹⁴. To build on this understanding in 2016, NEA and separately EAS with Shelter Scotland¹¹⁵ conducted further analysis. In each nation, we issued a questionnaire to organisations with an interest in health and fuel poverty. These asked questions about how health-related fuel poverty schemes were established and delivered; how links had been made with the health sector and what the key learnings were. This was followed up in England and Scotland with more in-depth interviews with those involved in delivering local health-related fuel poverty schemes. This section briefly explores this additional research and highlights a number of key findings which can be drawn together across the four UK nations and, encouragingly, some examples of good practice.

Key features of health-related fuel poverty schemes across the nations

Whilst some local schemes may not have been identified¹¹⁶, across all four nations, our research found that schemes receiving any funding from health bodies were in the minority – with only 15% receiving any funding as shown in figure 3. Also, assistance was often not in the form of direct funding for delivery of energy efficiency measures but other forms of assistance, often onward referrals linking in with existing sources of national funding. For example, many local authorities were supporting energy suppliers

to fulfil their ECO obligations in GB nations by referring vulnerable households with health conditions into this programme¹¹⁷. Encouragingly however, a high number of schemes received referrals directly from health professionals across the UK which was surprising, given that only England has formally adopted the NICE guidelines, and these direct linkages with health professionals were just as strong in Scotland as in England, at 72% and 66% respectively. One particular trend to highlight is that – unlike in the other nations – the number of schemes working in rural areas is low in England, with only 6% of schemes working in rural areas. It is well established that rural areas have received low levels of support under ECO in the past whilst having much higher levels of fuel poverty and the least efficient homes across the country. This could indicate that the same issues that impact on fuel poverty delivery in rural areas are trickling through to health-focused schemes as well.



Table 3: Highlighting a summary of findings

		SCOTLAND	ENGLAND	WALES	NI	UK
Number of schemes identified¹¹⁸		25	105¹¹⁹	6¹²⁰	18	154
Percentage of schemes	Received funding from health bodies	16%	18%	0%	27%	15%
	Received referrals generated by health professionals including GPs and nurses	72%	66%	83%	54%	68%
	Targeted specific health conditions	20%	50%	50%	33%	38%
	Offered medium to high cost energy efficiency measures via referrals into national or GB schemes	56%	N/A ¹²¹	83%	33%	43%
	Worked in rural areas, or a combination of rural and urban areas	76%	6%	83%	72%	59%

As part of our research, we also asked respondents to tell us about the challenges they had faced, and the successes they had achieved. In our analysis of respondents' data, we also looked for common themes. This has produced valuable insights into the areas of delivery that most need attention.

Common themes: Engaging or working with the health sector

Having good links with health professionals is obviously considered important to the success of fuel poverty health schemes but despite the reported number of referrals generated by health professionals this doesn't always happen successfully. As opposed to being considered a core function, at the moment many projects are still too reliant on individual champions within housing, environmental health and public health to influence health and social care decision makers. Also, the health and social care system is complex and it can be difficult for service providers to identify a transparent and systematic pathway to achieving healthcare commitment and funding for cold homes actions. Many of

our respondents also recognised that health professionals could be too busy or have their own work challenges to really engage.

Common theme: Data sharing

A high number of schemes had tried sharing data; for example in Scotland 16 of 25 schemes had shared data. However, there is currently a huge variation between which personal data public sector health organisations are prepared to share which is often down to various individually set policies and practices. This has led to a postcode lottery where some citizens' data can be shared to better identify and assist vulnerable households who are most at risk of the direct impacts of cold homes while others can't be, even if it's for a similar or identical purpose.

Common theme: Once eligible, health workers expect households to be assisted

A high number of respondents noted that it is often difficult to support eligible households with health conditions under the main energy efficiency programme in GB: ECO. The reasons provided

were the full cost of works are not covered or the lack of a guarantee an eligible client, no matter how vulnerable, will receive support. As a result, the funding landscape overall is considered to be inconsistent, ever-changing, and short-term. This can badly impact the willingness of health professionals to engage in fuel poverty health schemes.

Common theme: Many of the schemes were short-term or had short lead-in times

In itself, the short-term nature of funding streams could lead to a number of difficulties – for example in recruiting and retaining staff to support the scheme or securing referrals from local agencies who are only rarely involved in this area. Indeed, one scheme respondent identified that a key element of their success was the relatively long length of the scheme which gave the project time to establish, embed and grow. Short timescales also reduce the number of participants in pre and post evaluation, making it more challenging to showcase the impacts of health-related fuel poverty schemes and therefore secure ongoing funding.

Common theme: Raising awareness and gaining trust

Some scheme providers found that building a good local reputation and word of mouth was the most effective way of raising awareness. One scheme highlighted that they were so successful that giving advice and support to all those who need it has been a challenge. On the contrary, it was difficult to build trust and relationships in areas which had been let down by short-term schemes or poor delivery which eroded trust and engagement with the health sector. Some schemes also found that 'endorsements' from health professionals were only likely if they fully understood the benefits of the scheme.

This was however very challenging given the number of additional duties related to non-medical appointments GPs in particular needed to carry out. Other barriers included the complexity of sequencing joined-up outpatient care to reduce recurrent GP visits and unplanned hospital admissions via preventative energy efficiency interventions.



CASE STUDIES: EXAMPLES OF GOOD PRACTICE ACROSS THE UK

England - Seasonal Health Interventions Network (SHINE)¹²²

Islington has long been regarded as an area which showcases best practice to address ill health from cold. The council's Seasonal Health and Affordable Warmth (SHAW) Team delivers schemes such as the Well Winter Campaign; Warmth on Prescription; and CRISP (Climate Resilience Islington South Project). It was responsible for setting up the Seasonal Health Interventions Network (SHINE), which was the first single point of contact referral service of its kind to unite seasonal health concerns with housing, energy efficiency and affordable warmth, income and social isolation.

Between 2010 and 2016, the scheme received over 12,000 referrals, and clients are able to benefit from up to 30 services on offer. These interventions range from energy efficiency measures to health checks and falls assessments. Members of the SHAW Team were also directly involved in drafting the NICE guidelines and its recommendations.

However, while the Council's energy and housing departments have led on implementing NICE recommendations locally, engagement from the health and well-being board to date has been limited. The team has had most success in engaging parts of the NHS where they directly see the impacts of cold, damp homes or that have greater focus on the social determinants of health, such as respiratory and mental health teams.

Northern Ireland - Northern Exposure's Warmth at Home

Delivered initially as a pilot under the NEA Northern Exposure project, Warmth at Home encapsulates the principles of the NICE NG6 guidelines specifically on illnesses associated with cold homes and hospital discharge to a

cold home. The project promotes the benefits of a warm, healthy home for people who have respiratory conditions and who live in the Belfast area. Warmth at Home involves a respiratory referral system which enables the respiratory team within Belfast hospitals and outpatients to send referrals directly to NEA. Each patient is fully assessed for energy needs and the holistic service incorporates energy efficiency, heating needs, home safety and income maximisation. Respiratory staff also receive training on fuel poverty awareness on an ongoing basis. The project has dealt with over 100 new referrals since it commenced and is undertaking an independent evaluation to assess the effectiveness of the project in improving client health and well-being by providing assistance in accessing grants and benefits to improve the condition of their cold homes.



Scotland - The Energy Agency and NHS Ayrshire and Arran

Area-based schemes (HEEPS: ABS) are one of the major delivery mechanisms for energy efficiency measures to homes in Scotland. This scheme was initiated from discussions between the Energy Agency and NHS Ayrshire and Arran on the potential health benefits from energy efficiency improvements to existing housing. The project evaluates ongoing work under HEEPS: ABS in one region to deliver wall insulation specifically, and examines the potential health benefits of these energy efficiency improvements. The Energy Agency, working in partnership with NHS Ayrshire and Arran, wanted to move from a focus on recording the number of measures and the number of houses treated to concentrating on the impact of these measures on the household, including on a household's health. Support from the health sector came in the form of a full-time Research Officer who visited householders and completed a general household survey including questions about comfort, warmth and health.

This project has had good response rates, increased by the backing of the NHS for the project. In their interim report for the retrospective study¹²³, individual health data was collected for 81 participants. There were ten incidences of improvements to existing conditions, including problems with bones, joints or muscles; COPD; asthma and arthritis. In addition, ten participants reported a decrease in colds and flus and ten reported improved mental well-being. Further research into the health impacts is ongoing in this study.

Wales - Healthy Homes Healthy People

NEA's Warm & Healthy Homes Fund aims to support local health and housing partnerships to better address the needs of households at risk of cold-related illness and build upon good practice outlined in the NICE guidelines. Overall the programme has installed over 2,000 energy saving measures, plus further additional measures through match funding with partners

across the UK. One of the projects, Healthy Homes Healthy People, brings together Flintshire and Cardiff Affordable Warmth Partnerships, which are both multi-agency partnerships consisting of organisations such as local authorities, Public Health Wales, environmental health, Care & Repair agencies, energy advice organisations and social landlords. The project uses a simple assessment form to refer into services such as Housing Health & Safety Rating System (HHSRS) visits; benefit and debt advice; energy efficiency and other home improvements; health-related advice and referrals; tenancy support; fire safety visits; and police home safety advice. It has used mapping tools, overlaying data about health with data about energy efficiency to target areas where health outcomes are most likely to be improved. It is expected that using these interventions will help address the underlying causes that contribute to health inequalities, low life expectancy and also improve the mental well-being of those involved.



RECOMMENDATIONS AND NEXT STEPS TO END ILL HEALTH AND DEATH CAUSED BY THE COLD HOMES CRISIS

As well as unnecessary costs and acute suffering, the report has demonstrated cold housing is costing over 9,600 people their lives across the UK each year. This is not acceptable in the fifth largest economy in the world. NEA and EAS make the following recommendations to national and local governments, local and national health bodies and others. Our goal is ambitious but simple: an end to ill health and death caused by the cold homes crisis.

A UK-wide recognition of the impact of cold homes on health

In order to underline the severity of the current situation, all four nations' governments must come together and put aside any political differences and establish how they can enhance greater co-ordination at a local, national and UK level. Whilst fuel poverty and health will continue to be devolved issues, there is an opportunity to develop a more coherent response to avoid unnecessary illhealth or premature death. Two clear actions can help deliver this outcome:

1. In the short-term, a joint ministerial summit should be arranged with representatives from across all four nations' governments by Winter 2017/18. The outcome of this should include a joint public commitment formally recognising the importance of cold homes as a key determinant of ill health. The statement should also hold relevant national departments, local government and competent bodies to account for reducing cold-related premature mortality and the public costs of inaction.
2. The summit should seek to establish an ongoing UK-wide taskforce (again with representatives from across all four

nations' governments and their respective stakeholders) which would review the actions being taken across the nations in detail – assessing national frameworks, relevant policies and local action - and seek agreement on the key priorities that could be implemented consistently across all nations in the coming winter and beyond.

Improved transparency and local data

Data and local intelligence is vital to identify households; for tracking progress and addressing gaps in delivery and for sharing best practice approaches.

1. The UK-wide taskforce should develop a detailed assessment of the overall scale, cost and pressures cold-related morbidity is having on health services and related agencies across the UK nations.
2. The report should include an appraisal of the extent to which any relevant national or local policies reduce the unnecessary cost of cold homes and the extent to which this is fully captured within these programmes' cost benefit analysis. This analysis should be disseminated to the policy makers who took part in the original joint ministerial summit and made publicly available.
3. UK-wide standardisation of these reporting metrics would greatly assist transparency, help target delivery and crucially enable local commissioners to assess the effectiveness of existing schemes. Local government and local health bodies must also be held to account for delivering their existing responsibilities. For example, the Public Health England Quality Outcomes Framework indicators for tracking

excess winter deaths, fuel poverty and cold-related morbidity that have been developed in England should be available to each nation at a local government and constituency level and updated each year.

4. To improve targeting, tailor advice and establish effective referral routes the new data-matching opportunities created by the Digital Economy Act must be fully utilised¹²⁴. The new powers must allow local authorities, GP practices, Health and Well-being Boards (HWBs) and Clinical Commissioning Groups (CCGs) or their equivalents across the UK nations to directly access information about the support energy suppliers can provide to eligible households in their area or assist other national fuel poverty schemes.
5. To ensure that the intended benefits from the Digital Economy Act can be delivered for all UK households, the new data-sharing powers in Great Britain should be adopted for all relevant Northern Ireland fuel poverty schemes.

A consistent health-warmth delivery framework across the UK

An individual's chances of recovery from illness should not depend on where and which country they live in. This report shows that the NICE guidelines for England are now being replicated in other UK nations. However, progress to establish these replicable frameworks must be achieved consistently at a UK and national level as well as locally. Whilst recognising how NICE guidelines might apply across other UK nations is a matter for the devolved administrations (and health powers more generally are delegated), the NICE framework should be transposed systematically. Where key actions or equivalents are not adopted, there should be an explanation given by the relevant national bodies responsible for public health. There is also an opportunity to help expand on the good practice demonstrated in some local schemes and establish a comprehensive network of registered single

point-of-contact (SPOC) health and housing referral services to help vulnerable people who live in cold homes. The following supportive actions are required:

1. The Scottish Government should create formal links between fuel poverty, energy efficiency delivery and the health sector, including building on the Scottish Public Health Network guidance and this should feature in the new fuel poverty strategy.
2. The new Public Service Boards for every local authority area in Wales should outline how they intend to address cold homes and fuel poverty in their first Local Well-being Plans next year.
3. In Northern Ireland, health must play an upfront and central role in the new Outcome Based Programme for Government (2016-2021) and this will require close alignment with the proposed action for a new Fuel Poverty Strategy.
4. Annual registration for SPOCs could be set up by respective government departments; a related agency such as the UK Public Health Register (UKPHR) or, with suitable funding, a third party. This updated information could then be shared with wider relevant national or local bodies to ensure help is delivered efficiently and gaps in provision are addressed.



Resources must reflect the costs of not taking action

The report has underlined the current scale of cold homes is needlessly costing health services and tax payers billions of pounds. Instead of treating the symptoms of cold homes we should address the causes. There are over 12 million homes across the UK that are less efficient than a modern home built today¹²⁵; over 4.5 million contain those households on the lowest incomes. The incoming UK Government must therefore take the opportunity to make sure energy efficiency is a vital part of our national infrastructure. This new approach has notable support from a range of organisations¹²⁶, is being implemented in some countries of the UK and no other infrastructure investment can deliver so much. However, currently there is no investment in UK-wide energy efficiency programmes – and GB-wide resources that might help meet the costs of inaction are even declining. Reversing these recent trends overall is still a key priority.

1. We welcome the emergence of health-based eligibility criteria in some aspects of energy efficiency delivery policy. But devolved and UK policy-making must ensure that vulnerable households in fuel poverty with a relevant health condition are adequately prioritised for activity in all relevant energy efficiency schemes. It is also important that the customer journey reflects their enhanced needs.

2. England is now the only GB nation without a Government-funded energy efficiency scheme to sit alongside ECO. To cover the heating shortfall during the ECO transition scheme, immediate funds should be made available for crisis heating repairs, replacements and to protect fuel poor, off-gas households whose health is at risk. The Welsh Government should also further protect vulnerable households with a crisis fund for emergency heating repairs and replacements for fuel poor households that fall outside of the NEST scheme when their health is at risk.
3. The UK Government must act on the strong case for domestic energy efficiency to be regarded as a hugely important infrastructure priority as part of the National Infrastructure Commission's National Infrastructure Assessment this year – as is the case already in Scotland. This would help unlock access to public infrastructure funding such as the new National Productivity Investment Fund or alternative structural funds such as the United Kingdom Shared Prosperity Fund. Both of these ring-fenced budgets can help the UK and national Governments meet their fuel poverty targets and more generally improve our unhealthy and inefficient housing stock.



ANNEX 1 - GLOSSARY OF TERMS

CHD	Coronary Heart Disease	HIA	Home Improvement Agency
CIEH	Chartered Institute of Environmental Health	HTT	Hard to Treat
CMD	Common Mental Disorder	IMD	Index of Multiple Deprivation
COPD	Chronic Obstructive Pulmonary Disease	NICE	National Institute for Health and Care Excellence
DBEIS	Department for Business, Energy and Industrial Strategy	Ofgem	Office of Gas and Electricity Markets
ECO	Energy Company Obligation	PHE	Public Health England
EPC	Energy Performance Certificate	PHOF	Public Health Outcomes Framework
FPNES	Fuel Poor Network Extension Scheme	SAP	Standard Assessment Procedure
GDN	Gas Distribution Network	SCD	Sickle Cell Disease
HEEPS	Home Energy Efficiency Programmes for Scotland	SEEP	Scotland's Energy Efficiency Programme
HHSRS	Housing Health and Safety Rating System	WHO	World Health Organisation

ANNEX 2 - SOURCES AND FURTHER INFORMATION

- To view the previous editions please visit: http://www.eas.org.uk/en/uk-fuel-poverty-monitor_50608/
- The General Election campaign period highlighted strong support for ambitious action on fuel poverty and the respective manifestos highlighted a strong cross-party consensus on the need for greater investment to improve energy efficiency. The Conservative Party announced that as well as protecting more customers from unfair bills, they will meet the existing commitment to upgrade all fuel poor homes to a reasonable standard of energy efficiency by 2030. They also announced they will means test Winter Fuel Payments for wealthier pensioners to improve social care. The Labour Party committed to insulate 4 million homes to help 'those who suffer in cold homes each winter'. They also pledged homeowners will be offered interest free loans to improve the efficiency of their properties and to re-establish the Landlord Energy Saving Allowance so taking up energy efficiency improvements in the private rented sector is adequately encouraged alongside tougher national minimum energy efficiency standards. Liberal Democrats, Plaid Cymru, the Scottish Nationalist Party (SNP), the Green Party and UK Independence Party all committed to other actions which can help end fuel poverty.
- Prior to 2013 there were only limited differences in the overall approach to how fuel poverty was defined and modelled within the nations. In Scotland for example, there was a more stringent interpretation of a satisfactory heating regime for vulnerable households which meant these groups were assumed to require a higher temperature to reach an adequate standard of warmth in their homes. The methodology applied to Wales and Northern Ireland differed to a lesser extent and was based on a very similar methodology to England. However, following the findings of the Independent Review of Fuel Poverty in England led by Professor John Hills in July 2013, the UK Coalition Government modified the timetable to address fuel poverty in England and simultaneously confirmed that they would modify the common definition of fuel poverty with a new measurement, specific to England, with immediate effect. The 'new' measurement of fuel poverty under the Low Income High Cost (LHIC) measure is explained fully further into this report and the definition based on the 10% measurement is still used in Wales, Scotland and Northern Ireland.
- Whilst much of the UK's energy policy is assumed to be a devolved matter, in reality, certainly across Great Britain, the policy mechanisms to address fuel poverty represent a complicated mix of devolved and reserved powers and responsibilities. The purpose of the UKFPM is therefore to scrutinise relevant policy areas where the national governments and assemblies across the UK have adopted various approaches in addressing fuel poverty and the impact felt by UK Government policy across the UK.
- Until 2016, the UK Government continued to provide a UK wide estimate of the number of fuel poor households under the 10% indicator of fuel poverty and provided a breakdown of whether these households were classed as vulnerable. This followed a commitment to continue to report under the previous indicator to track progress within the UK Government's response

to the Hills' Review.

6. Annual Fuel Poverty Statistics Report 2015, DECC, page 76. Please note the time lag in publication of official fuel poverty statistics, generally around two years between collection and publication, means that these estimates are not for 2015 but 2012.
7. Annual Fuel Poverty Statistics Report, DECC, 2016, page 47.
8. Environmental burden of disease associated with inadequate housing: A method guide to the quantification of health effects of selected housing risks in the WHO European Region, Edited by Braubach Jacobs Ormandy and primary research by Janet Rudge, World Health Organization 2011, page 81.
9. The average amount of debt owed by domestic customers who have a debt repayment arrangement set up between Q3 2012 and Q1 2016 has increased by circa £75 in this period.
10. Peters, J. and Stevenson, M. (2000) Modelling the health cost of cold housing. In Rudge, J., Nicol, F. (Eds.), Cutting the Cost of Cold: Affordable warmth for healthier homes. Taylor & Francis, London.
11. Friends of the Earth and Marmot Review Team, 2011, The Health Impacts of Cold Homes and Fuel Poverty. Available at: http://www.foe.co.uk/sites/default/files/downloads/cold_homes_health.pdf [Accessed 06/03/2017]
12. Mason, V., Roys, M., 2011. The Health Costs of cold dwellings. Building Research Establishment, Watford
13. NICE's guidelines are officially England-only and decisions on how their guidance applies across other UK nations is made by the devolved administrations.
14. The delivery of home energy efficiency improvements which has reduced by an average of 75% compared to 2008-2012. See: CCC, Meeting Carbon Budgets – 2016 Progress Report to Parliament, June 2016 which highlighted annual rates of cavity wall and loft insulation in 2013-2015 were 60% down and 90% down respectively on annual rates in 2008-2012.
15. A modern home usually has an Energy Performance Rating Certificate of EPC band C or above. The numbers of existing homes below this threshold provided are from E3G.
16. 'Low income' is defined as less than 60% of median equivalised income after housing costs and fuel costs.
17. See: Effective Policy Efficient Homes, Confederation of British Industry (CBI) 2015, p2; Better Homes: Incentivising Home Energy Improvements, Hall and Caldecott 2016, p27; Too Hot to Handle? How to decarbonise domestic heating, Howard and Bengherbi 2016, p.14; A report on initial positions, Committee on Fuel Poverty 2016, p4 and After the Green Deal: Empowering people and places to improve their homes, recommendation 5, Rosenow and Sagar 2015.
18. This would enable local public sector organisations, without the involvement of an energy supplier, match existing information these public sector bodies already hold on health conditions with what support the household is entitled to this would mean local authorities and GPs etc will have greater certainty that those referred will go onto receive support. This data-matching process would also support local affordable warmth programmes to secure funding from HWBs, CCGs and others (either on an individual or aggregated basis).
19. Annual Fuel Poverty Statistics Report 2017, BEIS, page 3.
20. The Fuel Poverty (England) Regulations 2014: <http://www.legislation.gov.uk/ukxi/2014/3220/made>
21. EPCs help tenants, landlords or home owners find out how they can save energy and money by installing improvement measures. The EPC certificate shows how much the average household would spend in this property for heating, lighting and hot water. It's graded from A to G, with A meaning an energy efficient, well-insulated, probably modern home, and G meaning a draughty old building where the wind rattles the walls. Typically, an older property with no retrofitted energy-saving technology will be around a D grade.
22. Forward Together, The Conservative and Unionist Party Manifesto 2017, page 60.
23. Central government, private and social landlords; LAs, utility companies, escos, gas and electricity network operators as well as other key actors such health agencies, charities and community groups etc.
24. A report on initial positions, Committee on Fuel Poverty 2016, p4
25. Addressing fuel poverty and meeting carbon budgets go hand in hand (CCC), 7 October 2014.
26. Warmer Homes - Improving fuel poverty and energy efficiency policy in the UK, 2015, Policy Exchange
27. As well as meeting the required investment to honour current fuel poverty commitments and NEA supports a more ambitious aim to bring all low income households across the UK up to the standard of a new home by 2025.
28. On the 23 July 2015, the UK Government announced there will be no further funding to the Green Deal Finance Company due to low take-up and concerns about industry standards.
29. Through the Green Deal Home Improvement Fund (GDHIF) up to £5,600 was available to households in England and Wales to help with the cost of installing certain energy saving measures such as solid wall insulation, double glazing, boilers, cavity wall and floor insulation.
30. The Landlord's Energy Saving Allowance (LESA) was ended in April 2015 it provided a tax allowance of up to £1,500 per dwelling if the landlord installed certain energy-saving items.
31. The UK Government revised the ECO transition target on a pro-rata basis to £2.8bn lifetime savings, this creates a gap of around £1bn lifetime savings of lost activity (compared with what could have been achieved during that same period of future ECO delivery which should be fully focused on those in or at risk of fuel poverty). To provide some scale this loss of activity is equivalent to insulating cavity walls in around 45,000 off-gas homes.
32. CCC, Meeting Carbon Budgets – 2016 Progress Report to Parliament, June 2016, page 96.
33. During the inaugural annual debate on progress to tackle fuel poverty in England which took place on the 21 March 2016 in the House of Commons, Ministers recognised that further targeted resources are required to meet current fuel poverty commitments.
34. In from the cold: The funding gap for non-gas fuel poor homes under ECO, and a proposal to fill it, February 2017, NEA.
35. For further info on ECO Flex please visit Ofgem's website.
36. For example the Mayor of London has committed to producing a Fuel Poverty Action Plan and put London on a path to zero carbon by 2050. To offer immediate assistance, Londoners struggling to afford to heat their homes also benefit from a new fund to replace or repair inefficient or broken boilers. Better Boilers - is the first ever pan-London scheme and will help fuel-poor home-owners in London to keep warm by replacing or repairing inefficient or broken boilers with A-rated ultra-low emission appliances, and will reduce annual energy bills by an average of around £150 per household. It also aims to reduce cold-related ill health and winter deaths, lower NOx emissions to help improve air quality, avoid acute risks such as carbon monoxide poisoning and save up to 310 tonnes of carbon emissions a year. NEA hopes a the UK Government will introduce this form of support to other localities and will encourage civic leaders and local authorities to produce Fuel Poverty Action Plans to meet fuel poverty commitments and put large towns and cities on a path to zero carbon by 2050.
37. Fuel Poverty and Houses in Multiple Occupation, produced by Future Climate and National Energy Action, 2016.
38. Ibid
39. From April 2018, landlords will not be able to rent out properties with energy efficiency ratings below EPC Band E (exemptions apply). The regulations apply to the domestic private rented sector in England and Wales. This is defined in section 42 of the Energy Act 2011 as properties let under an assured tenancy for the purposes of the Housing Act 1988, or a tenancy which is a regulated tenancy for the purposes of the Rent Act 1977. A high percentage of fuel poor households also live in the worst properties in the deepest fuel poverty are renting from private landlords, they must be prioritised for assistance.
40. NEA and others have also been pushing for urgent changes in the private rented sector as the current energy efficiency requirements for the PRS for 2018 are not fit for purpose and need to be adapted urgently due to the short-timeframe until landlords need to comply. The previous Secretary of State, Amber Rudd and her officials in the Department for Energy and Climate Change (DECC), previously recognised that the regulations needed

to be amended to enable them to work more effectively. She therefore proposed that the regulations be amended to require landlords to make the improvements subject to a proposed cost cap. We warmly welcomed the proposal and yet, with the creation of BEIS, there has been a long delay and no consultation has yet been released.

41. See: http://uir.ulster.ac.uk/style/images/fileicons/application_pdf.png
42. In 2014/15, the average (median) income in the UK was £473 before housing costs and £404 after housing costs. Therefore in 2014/15, the relative poverty threshold, 60% of the UK median, was £284 per week before housing costs and £243 after housing costs. The absolute poverty threshold in 2014/15 was £277 before housing costs and £237 after housing costs, based on the 2010/11 inflation adjusted UK median. <https://www.communities-ni.gov.uk/sites/default/files/publications/communities/ni-poverty-bulletin-201415.pdf>
43. In 2014/15 average (median) household income in Northern Ireland increased by 3% to £420 per week Before Housing Costs (BHC) (£380 after housing costs). However, despite a general upward trend since 2011/12, average income in NI remains below the pre-recession peak of £439 per week in 2008/09. <https://www.communities-ni.gov.uk/sites/default/files/publications/communities/hbai-2014-15.pdf>
44. The Coalition has a membership base of over 100 organisations from across Northern Ireland; representing businesses, environmental groups, trade unions, the health sector, local councils, consumer groups, housing associations, rural support networks, the voluntary sector, student unions, young persons groups, older persons groups and faith groups.
45. Northern Ireland Fuel Poverty Coalition, A Manifesto for Warmth, 2016.
46. Consumer Council of Northern Ireland data collected on home heating oil historical prices, figures represent average price heating oil 500L refill in Northern Ireland 2009-2016.
47. We note again the impact that changing the methodology can have on statistics. The fuel poverty statistics in Scotland have been subject to methodological changes in this period – including incorporating income from the Warm Home Discount (WHD) and the Government Electricity Rebate (GER). These methodological changes make the tracking of progress over time more difficult.
48. These statistics are from 2015, therefore the fall in energy prices mentioned here is not recent. Note that most of the major energy suppliers have in 2016 – 2017 announced further price increases.
49. SHCS Local Authority Tables 2013-2015, Scottish Government, 2017.
50. This target was detailed in the Housing (Scotland) Act 2001. Local authorities were also expected to contribute towards meeting the target.
51. A Scotland without fuel poverty is a fairer Scotland: Four steps to achieving sustainable, affordable and attainable warmth and energy use for all, Scottish Fuel Poverty Strategic Working Group, October 2016.
52. An Action Plan to Deliver Affordable Warmth in Rural Scotland proposed by the Scottish Rural Fuel Poverty Task Force, Scottish Rural Fuel Poverty Task Force, October 2016.
53. Fuel Poverty: Scottish Government response to working group reports, Scottish Government, 2017 .
54. See <https://news.gov.scot/news/tackling-fuel-poverty-3> Scottish Government press release, October 2016
55. Improving Scotland's private rented sector properties, Scottish Government press release <https://beta.gov.scot/news/improving-scotlands-private-rented-sector-properties/> April 2017
56. National Report on the Scottish Social Housing Charter: Headline Findings 2015/16, Scottish Housing Regulator, 2016
57. The Production of Estimated Levels of Fuel Poverty in Wales: 2012-2016, Welsh Government, July 2016
58. The Production of Estimated Levels of Fuel Poverty in Wales: 2012-2016, Welsh Government, July 2016
59. Please see <http://gov.wales/newsroom/environmentandcountryside/2017/170214-104million-to-heat-wales-most-vulnerable-households/?lang=en>
60. Please see <http://gov.wales/newsroom/environmentandcountryside/2017/170214-104million-to-heat-wales-most-vulnerable-households/?lang=en>
61. Nest Annual Report 2015-16, Welsh Government, October 2016.
62. CCC, Meeting Carbon Budgets – 2016 Progress Report to Parliament, June 2016. More recently that investment in energy efficiency targeted at fuel poverty must double.
63. Shortt, N. and Rugkåsa, J. 2007. "The walls were so damp and cold" Fuel Poverty and Ill Health in Northern Ireland: Results from a housing intervention. *Health and Place*. 13 (1) pp. 99-110. (page 100)
64. Liddell, C. and Morris, C. 2010. Fuel poverty and human health: a review of the recent evidence. *Energy Policy*. 38, pp. 2987-97 (page 2995)
65. Thomson, H. Thomas, S. Sellstrom, E. and Petticrew M. 2013. Housing improvements for health and associated socioeconomic outcomes (Review). The Cochrane Collaboration. Published by John Wiley & Sons, Ltd
66. Boardman, B. Introduction. In: Rudge, J., Nicol, F. (Eds.), *Cutting the Cost of Cold: Affordable warmth for healthier homes*. Taylor & Francis, London (page 4)
67. Reference from 2015 report, ref 61
68. Reference from 2015 report, ref 62
69. Hajat S, Kovats RS and Lachowycz K (2007) Heat-related and cold-related deaths in England and Wales: who is at risk? *Occupational and Environmental Medicine*, 64(2), pp.93-100.
70. Public Health England, 2014b. Cold weather Plan for England. Making the case: why long-term strategic planning for cold weather is essential to health and wellbeing. Crown Copyright.
71. Donaldson GC, Robinson D, Allaway SL. 1997. An analysis of arterial disease mortality and BUPA health screening in men, in relation to outdoor temperature. *Clinical Science*; 92: 261-68.
72. Woodhouse PR et al. 1994. Seasonal variations of plasma fibrinogen and factor VII in the elderly: winter infections and death from cardiovascular disease. *The Lancet*; 343: 435-39.
73. Respiratory and Allergic Health Effects of Dampness, Mold, and Dampness-Related Agents: A Review of the Epidemiologic Evidence, Mark J. Mendell, Anna G. Mirer, Kerry Cheung, My Tong and Jeroen Douwes, January 2011.
74. A Brief Guide to Mold, Moisture, and Your Home, U.S. Environmental Protection Agency (EPA), September 2010.
75. Evidence Review & Economic Analysis of Excess Winter Deaths for the National Institute for Health and Care Excellence (NICE). Review 1: Factors determining vulnerability to winter- and cold-related mortality/morbidity. London School of Hygiene & Tropical Medicine, Public Health England, University College London
76. Press, V. (2003) Fuel poverty + health: A guide for primary care organisations, and public health and primary care professionals. National heart Forum: London
77. Friends of the Earth and Marmot Review Team, 2011, The Health Impacts of Cold Homes and Fuel Poverty. Available at: http://www.foe.co.uk/sites/default/files/downloads/cold_homes_health.pdf [Accessed 06/03/2017]
78. Public Health England, Sept 2014, Local action on health inequalities: fuel poverty and cold home-related health problems. *Health Equity Evidence Review 7*
79. Marmot Review Team (2011), The Health Impacts of Cold Homes and Fuel Poverty. Friends of the Earth and the Marmot Review Team.
80. Harris, J. Hall, J. Meltzer, H. Jenkins, R. Oreszczy, T. and McManus, S. 2010. Health, mental health and housing conditions in England. National Centre for Social Research: London.
81. Liddell, C. (2008) 'Policy Briefing – The Impact of Fuel Poverty on Children'. Belfast: Ulster University & Save the Children. Available at: <http://tinyurl.com/STC-Policy-Briefing-FP> [Accessed 06/03/2017]; and Barnes, M. et al., (2008). The Dynamics of Bad Housing : The Impacts of Bad Housing on the Living Standards of Children. London : National Centre for Social Research.
82. Anderson, W. White, V. and Finney, A. 2010. "You just have to get by" Coping with low incomes and cold homes. Centre for Sustainable Energy. Available at: https://www.cse.org.uk/downloads/reports-and-publications/fuel-poverty/you_just_have_to_get_by.pdf [Accessed 06/03/2017]
83. Beatty, T. Blow, I. and Crossley, T. 2011. Is there a heat or eat trade off in the UK? London: Institute of Fiscal Studies.
84. Anderson, W. White, V. and Finney, A. 2010. "You just have to get by" Coping with low incomes and cold homes. Centre for Sustainable Energy. Available at: https://www.cse.org.uk/downloads/reports-and-publications/fuel-poverty/you_just_have_to_get_by.pdf [Accessed 06/03/2017]

85. Cooper, N., Purcell, S., and Jackson, R. 2014, Below the breadline: The relentless rise of food poverty in Britain, Church Action on Poverty, Oxfam, The Trussell Trust
86. Public Health England. 2014. Cold weather Plan for England. Making the case: why long-term strategic planning for cold weather is essential to health and wellbeing. Crown Copyright.
87. Bhattacharya J, DeLeire T, Haider S and Currie J (2003) Heat or Eat? Cold Weather Shock and Nutrition in Poor American Families. *American Journal of Public Health*, 93(7), pp.1149–1154.
88. Friends of the Earth and Marmot Review Team, 2011, The Health Impacts of Cold Homes and Fuel Poverty, http://www.foe.co.uk/sites/default/files/downloads/cold_homes_health.pdf
89. Findings Report No.1: initial findings on the impact on Health of the Warm Homes Nest Scheme, Welsh Government, April 2017.
90. Khaw K-T. 1995. Temperature and cardiovascular mortality. *The Lancet*; 345: 337-38.
91. Public Health England, 2014b. Cold weather Plan for England. Making the case: why long-term strategic planning for cold weather is essential to health and wellbeing. Crown Copyright.
92. Wilkinson P, Landon M, Armstrong, B, Stevenson S, Pattenden S, McKee M and Fletcher T (2001) Cold Comfort: The Social and Environmental Determinants of Excess Winter Deaths in England, 1986–96. Bristol: The Policy Press
93. Somerville Metal. 2000. Housing and health: does installing heating in their homes improve the health of children with asthma? *Public Health*; 114, 434–39.
94. Green G and Gilbertson J (2008) Warm front: better health: Health impact evaluation of the warm front scheme. Sheffield: Sheffield Hallam University, Centre for Regional Social and Economic Research.
95. Shiue, I. & Shiue, M., 2014. Indoor temperature below 18°C accounts for 9% population attributable risk for high blood pressure in Scotland In: *Int J Cardiol*. 2014 Jan 15;171(1):e1–2.
96. Annual Fuel Poverty Statistics Report 2015, DECC, page 76. Please note the time lag in publication of official fuel poverty statistics, generally around two years between collection and publication, means that these estimates are not for 2015 but 2012.
97. Annual Fuel Poverty Statistics Report, DECC, 2016, page 47
98. NB: 2015/16 figures for excess winter deaths in Northern Ireland have not yet been released.
99. Reference from 2015 report, ref 67
100. Ibid p.68
101. PHE. 2015. Cold weather plan for England. Making the case: Why long-term strategic planning for cold weather is essential to health and wellbeing. London: Public Health England.
102. PHE. 2013. Public health outcomes framework [Online]. Available: <http://www.phoutcomes.info/> [Accessed 20 March 2017].
103. NHS, 2014, Five Year Forward View. DoH, 2014.
104. Get Warm Soon? NEA, 2016.
105. NICE. 2015. Excess winter deaths and illness and the health risks associated with cold homes 15 February 2016.
106. 'Making Life Better - a whole system framework for public health (2013-23)' was approved by the Executive and published in June 2014. It is the Executive's strategic framework for public health 2013-2023.
107. The Programme for Government is the highest level strategic document of the Executive. The draft Programme for Government contains 14 strategic outcomes which, taken together, set a clear direction of travel and enable continuous improvement on the essential components of societal wellbeing.
108. In reply to a recent written question asked by Alison Johnstone MSP, Shona Robison, Cabinet Secretary for Health and Sport, replied that Healthcare Improve Scotland had no current plans Written Answer 14 March S5W-07580, Scottish Government, 2017
109. Addressing Fuel Poverty, Guidance for Directors of Public Health on taking action in support of: A Scotland without fuel poverty is a fairer Scotland: Four steps to achieving sustainable, affordable and attainable warmth and energy use for all, Scottish Public Health Network, October 2016
110. Foundations for well-being: reconnecting public health and housing, Scottish Public Health Network, March 2017
111. Health and Social Care Delivery Plan, Scottish Government, December 2016
112. Initial findings on the impact on Health of the Warm Homes Nest Scheme, Welsh Government, April 2017
113. Welsh Government July 2016, 'Understanding the Characteristics of Low Income Households Most at Risk from Living in Cold Homes'
114. NEA (2016) Get Warm Soon? Progress to reduce ill health associated with cold homes in England
115. Health-related fuel poverty schemes in Scotland, EAS and Shelter Scotland, January 2017
116. NB the size and coverage of schemes varied and our analysis has not included weighted averages. We should also note that we have not attempted to independently verify the information provided to us by respondents in our research.
117. As noted previously in the report, ECO currently does not guarantee any assistance for eligible households, even the most vulnerable consumers may not receive any measures following a referral from a local agent.
118. NB that the total number of schemes does not always translate into the given percentages in the other fields in the table due to the number of respondents that may have not answered the question for that given scheme.
119. NB this finding is based on NEA's 2015 Catalogue of health-related fuel poverty schemes, prepared for the Department of Energy and Climate Change (DECC). A number for the schemes may no longer be serviced as many were funded from the Warm Homes Healthy People Fund that was abolished by the Department of Health in 2014.
120. Although we received 24 responses back in response to our call for evidence, we felt that only 6 met our key requirements of being projects currently operating in Wales with a specific health focus (rather than being generic fuel poverty schemes).
121. Not captured as a field in original research
122. For more information please visit: https://www.islington.gov.uk/environment/energy-services/affordable_warmth
123. Area Based Schemes Wall Insulation Evaluation 2015 – 2017 Interim Report, The Energy Agency, 2017
124. This would enable local public sector organisations, without the involvement of an energy supplier, match existing information these public sector bodies already hold on health conditions with what support the household is entitled to this would mean local authorities and GPs etc will have greater certainty that those referred will go onto receive support. This data-matching process would also support local affordable warmth programmes to secure funding from HWBs, CCGs and others (either on an individual or aggregated basis).
125. The numbers provided are from E3G. 'Low income' is defined as less than 60% of median equivalised income after housing costs and fuel costs.
126. NEA was a member of the Energy Bill Revolution; an alliance of children's and older people's charities, health and disability groups, environment groups, consumer groups, trade unions, businesses, politicians and public figures. See: <http://www.energybillrevolution.org/whos-behind-it/>. In addition, other organisations have noted this key opportunity; Better Homes: Incentivising Home Energy Improvements, Hall and Caldecott 2016, p27; Too Hot to Handle? How to decarbonise domestic heating, Howard and Bengherbi 2016, p.14; A report on initial positions, Committee on Fuel Poverty 2016, p4; After the Green Deal: Empowering people and places to improve their homes, recommendation 5, Rosenow and Sagar 2015; Effective Policy Efficient Homes, Confederation of British Industry (CBI) 2015, p2 and CCC, Meeting Carbon Budgets – 2016 Progress Report to Parliament, June 2016. More recently that investment in energy efficiency targeted at fuel poverty must double.



Action for Warm Homes

© NEA 2017

NEA is the national fuel poverty charity.
Registration No. 290511. www.nea.org.uk