

WEST MIDLANDS FUEL POVERTY PROGRAMME PROPOSAL 2020



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Introduction

Over 304,000 households are in fuel poverty in the West Midlands. This level persists despite decades of investment to reduce numbers. Fuel poverty blights lives and communities, pulls the economy down and contributes to continuing cycles of poverty and health inequalities.

Fuel poverty is not a single issue with a single solution. Factors leading to fuel poverty are a complex mix and programmes designed to keep people out of fuel poverty need to recognise this. Synergies with the health, social care, energy system transformation, and construction and skills agenda have been identified and are recognised in the model, influencing outputs and impact.

The proposition

If government devolve £50M of existing funding to alleviate fuel poverty to the West Midlands, our new local delivery mechanism will ensure greater value for money for customers, more effective and efficient policy delivery and above all, more integrated outcomes for people.

Our proposal will not only deliver the same fuel poverty outcomes at lower management cost, it will also deliver benefits to the health and social care system and support delivery of local industrial and climate change strategies.

The opportunity to develop an innovative approach in the West Midlands

Need, capacity and opportunity

The West Midlands is a prime region to develop a radical new approach due to its existing high levels of fuel poverty¹, diverse types and locations of housing and a drive to turn the failed approaches into successes. Despite huge resource constraints, organisations in the West Midlands are demonstrating their capacity to get to the roots of causes of fuel poverty and solutions focussed on need. Through SHAP, organisations at the forefront of activity to support those in fuel poverty and those in the health, housing, energy and construction sectors have come together over a number of years to look at ways to improve outcomes for individuals and households. The focus on fuel poverty by Energy Capital and the West Midlands Combined Authority ensures that the programme proposal responds to and supports a number of themes and priorities for the West Midlands including skills, energy system transformation and inclusive growth. This cross-disciplinary collaboration has been fundamental in the development of the programme presented in this proposal.

The business case

Tackling fuel poverty supports the West Midlands inclusive growth agenda and its objectives in the Local Industrial Strategy, the national Clean Growth Strategy and national fuel poverty strategy. Investment in the West Midlands will create jobs in the local supply chain, increase skills and help people back to work. Conversely, those living in cold homes have blighted lives – experiencing ill health (physical and mental), failing to thrive academically, often losing their jobs, driving further cycles of poverty, limiting contribution to society and the economy. The costs of not addressing fuel poverty are significant and perpetuated as new generations grow up failing to thrive and take their place in the economy and society. In contrast, investment in cold

¹An average of over 12.6% households in fuel poverty and over 50% in some wards.

homes can deliver year on year savings to our health system and can stimulate local economic growth. Our programme will provide robust evidence of the business case building on existing figures including:

Data on fuel poverty in England indicates that there were 2.28 million fuel-poor households in 2012.² The cost of fuel poverty to the NHS in England was estimated to be £1.36 billion (2012 figures), not including associated social care costs.³

The consequences of cold homes for health and social care services are enormous. The Northern Ireland cost-benefit analysis⁴ assessed the health impacts of the regional Fuel Poverty Strategy and concluded that for every £1 invested, 42 pence was returned in quality of life gains (QALY's). The report also evidenced similar estimates that emerged from cost-benefit analyses of other retrofit programs. Where schemes explicitly focus on households with an existing health condition, the returns on savings to health increase greatly with some estimates indicating returns in the order of £2 for every £1 invested. The focus of the study was the Warm Homes scheme in Northern Ireland carried out between 2001 and 2008, which invested £109 million in retrofit energy efficiency work.

The proposal

This proposal is for a programme that addresses fuel poverty at scale. It provides long-term policy and funding stability to support investment in excellence and innovation.

- It is ambitious, innovative and deliverable.
- It can be further replicated and scaled up.
- It will deliver impact and inform national strategy, policy and delivery.

Led by the West Midlands Combined Authority and Energy Capital, fuel poverty is regarded as a key priority for the West Midlands and confirmed by the West Midlands Mayor in 2018.

The West Midlands Fuel Poverty programme will bring about a systemic change to tackling fuel poverty by delivering:

- A person-centred approach to understanding the individual causes of fuel poverty,
- With a broad range of partners from the public, private and third sector,
- With a long-term view bringing a stable and reliable programme,
- Integrating the programme with other connected strategies from the health, housing, energy, economy and sustainability sectors,
- Delivering high-quality and appropriate improvement measures,
- Learning from past successes and failures as well as evaluating its own performance across the partnership.

² Department of Energy and Climate Change. Annual Fuel Poverty Statistics Report, 2014. London: 2014.

³ Age UK. The cost of cold: Why we need to protect the health of older people in winter. London: 2012.

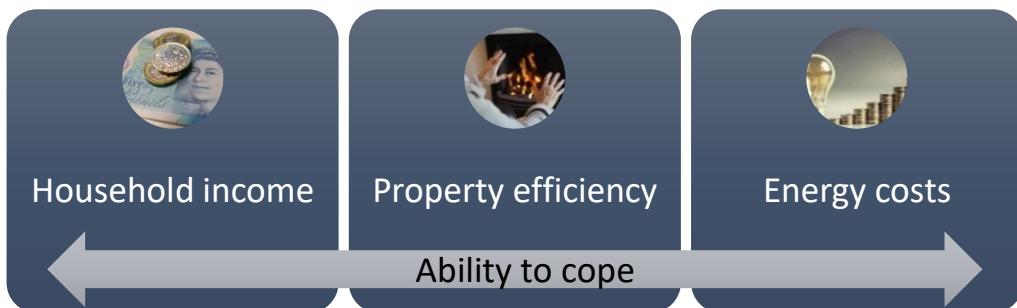
⁴ Liddell, C. University of Ulster (2008). *Estimating the health impacts of Northern Ireland's Warm Homes Scheme 2000-2008*. University of Ulster.

The strategy

Our strategy:

- Puts the lived experience of fuel poverty at the centre of our approach.
- Strengthens, widens and deepens collaborative partnerships across multiple sectors with touch points on fuel poverty.
- Ensures that capital funding is targeted effectively.
- Commits to long-term support to help keep people from sliding back into fuel poverty.

The WMFP strategy considers all contributory factors to fuel poverty, as shown below:



'Ability to cope' is a critical issue as case studies confirm that an inability to cope as a contributory factor to falling into fuel poverty and as a barrier to benefiting from fuel poverty focussed interventions. Ill health, grief and isolation are crippling and may require sustained repeated interventions before a successful outcome is achieved. Our case study in this document describes a two-year journey from the point at which Pam sought help to the end of that part of her story.

Different households demonstrate different levels of resilience to the three main factors which is why the WMFP programme will address householders' ability to cope across each factor through an individual assessment of needs. This individual assessment will shape the customer's journey throughout their experience during the programme.

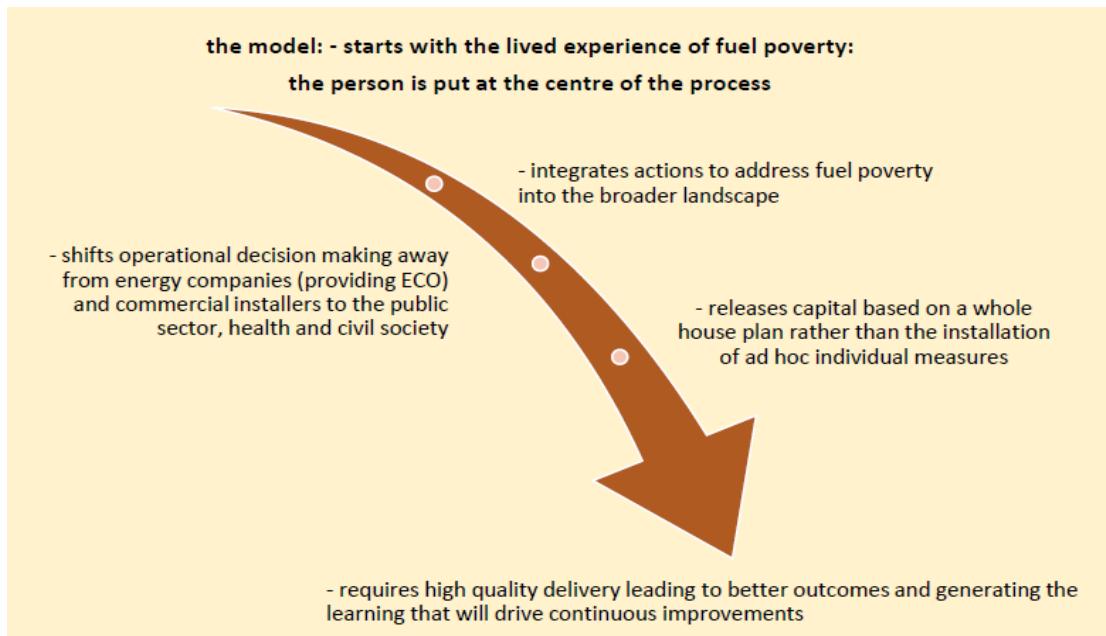
The WMFP programme will:

- Move fuel poverty away from being regarded as solely an energy problem with a single-issue approach.
- Develop a broad partnership of organisations that are either impacted by fuel poverty or can contribute to a West Midlands approach.

The collaborative partnership approach will:

- Align each partner's strategies to embed policy, strategy and actions that relate and contribute to fuel poverty.
- Engage partners according to their specialisms and specific resources.

The model



The model will incorporate innovation, R&D and academic research to evidence outcomes and improving immediate and long-term impact.

Cross-sector and cross-disciplinary collaborative partnerships are fundamental to the success of the new model's design and delivery.



Impact

The WMFP programme will start delivering using the same level of resources currently spent on ECO in the West Midlands, but implement a more targeted set of improvements at households suffering most from fuel poverty. This will enable the programme to deliver improvements to 6,000 households every year. However, at this rate, tackling the existing number of households in the West Midlands will take 50 years. To combat this, a scalable model will be created that will allow the programme to be significantly increased after a short pilot phase.

Other direct benefits of the programme include:

- A saving in health spending of £18M per year on fuel-poor households (42p for every £1 spent on retrofitting).
- An average saving of £304 per household on energy bills.
- Unlocking the current energy expenditure gap of £999M every year.
- Up to 2,000 jobs sustained annually by retrofitting work.
- Reduced carbon emissions and improved air quality.
- Increased apprenticeships and qualifications created within the local supply chain.
- Efficiency savings through a single point of funding decisions.
- Cost savings through a 'right first time' approach.

These benefits have been assessed following macro-economic modelling for a hypothetical UK domestic energy efficiency investment programme scenario was carried out by Verco and Cambridge Econometrics and their report was published in October 2014. The report was commissioned by E3G and the Energy Bill Revolution.

The investment programme scenario was that:

- All low-income homes would be retrofitted to EPC C standard by 2025 through energy efficiency grants capped at £10k.
- All able-to-pay homes would be retrofitted to EPC C standard by 2035 financed through 10 year interest free loans capped at £10k.
- 500,000 low income houses would be retrofitted per year by 2018, with 2 million treated to EPC C standard by 2020.
- One million deep retrofits would be supported per year by 2020 in able-to-pay homes.

The modelling established that the programme would deliver:

- £3.20 returned through increased GDP per £1 invested by government.
- 0.6% relative GDP improvement by 2030, increasing annual GDP in that year by £13.9 billion.
- £1.27 in tax revenues per £1 of government investment, through increased economic activity, such that the scheme has paid for itself by 2024, and generates net revenue for government thereafter.
- 2.27:1 cost benefit ratio (value for money), which would classify this as a 'high' value for money infrastructure programme.
- Increased employment by up to 108,000 net jobs per annum over the period 2020-2030, mostly in the service and construction sectors, spread across every region and constituency of the UK.

- A more resilient economy, less at risk of shock changes in gas prices, as the economy becomes less reliant on fossil fuels. Investment in energy efficiency in the domestic sector will result in a 26% reduction in imports of natural gas in 2030, worth £2.7 billion in that year.⁵

Costs

The programme will require an investment of £50M/year⁶ in three phases to create a delivery programme that will manage devolved powers over fuel poverty in the West Midlands, ensure high-quality long-term outcomes and build reach and scale. Health, environmental and economic outcomes will be evidenced, and the model will be replicable.

The West Midlands fuel poverty programme will be at least 8% more efficient to administer than ECO. On ECO2 energy company administration fees were 13% of total funding⁷. Based on a £50M investment this equates to £6.5M. The West Midlands programme will cost £6M/pa and includes funding of a wide range of additional resource in Local Authorities and frontline energy advice agencies. On a like-for-like basis administration costs will be 7%, compared to BEIS projections of 8.5% for ECO3 (*ibid*).

Of the programme costs of £50M/year, £44M will be spent on installation measures at an average cost of £7,500 per property based on two intervention rates of £5,000 and £10,000 depending upon the needs of the household and condition of the property.

Cost heading	Amount (£M)
Capital work	44.0
Revenue support	
Call centre	0.5
Assessments and customer co-ordination	3.0
Contractor co-ordination	1.0
Local authority and public sector engagement	1.5
Total	50.0

The three phases will be developed as follows:

- Phase 1 – year 1. Review and enhance – develop and create efficiencies in existing systems, build capacity and increase collaboration.
- Phase 2 – years 2-4. Sandbox development – establish and test governance and delivery models, evidence outcomes.
- Phase 3 – rolling programme. Deliver activities to address fuel poverty at scale, evidence impact, scale up and replicate.

⁵ Verco/Cambridge Econometrics (2014). *Building the Future: The economic and fiscal impacts of making homes energy efficient*.

⁶ The approximate regional share of current ECO spend based on ECO3 levels and the West Midlands population.

⁷https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/749638/ECO_3_Final_Stage_I_A_Final.pdf

Why is fuel poverty a vital challenge to tackle?

People cannot afford to warm their homes – a household defined as being in fuel poverty has a low income, high energy costs problem. The West Midlands has some of the highest rates of fuel poverty in England, second only to the North West region, with 12.6% of households suffering from fuel poverty due to higher than average fuel costs, combined with lower than average incomes. A total of 304,000 fuel poor households exist in the West Midlands.

This has a physical and mental health impact on people – A body of evidence is clear that cold weather experienced by fuel poor households can affect or exacerbate a range of health problems, including respiratory and circulatory conditions, cardiovascular disease and accidental injury. There is also a significant mental health impact from the loss of dignity and isolation experienced by those who cannot heat their homes, control damp and mould, welcome guests or even wash. *“Cold homes can affect or exacerbate a range of health problems including respiratory problems, circulatory problems and increased risk of poor mental health. Estimates suggest that some 10% of excess winter deaths are directly attributable to fuel poverty and a fifth of excess winter deaths are attributable to the coldest quarter of homes.⁸⁹ Cold homes can also affect wider determinants of health, such as educational performance among children and young people, as well as work absences.”¹⁰* was evidenced by PHE and UCL Institute of Public Health (led by Sir Michael Marmot).

The Marmot Review Team (2011) collated studies concerning the health impacts of cold homes, and concluded that the evidence “shows the dramatic impact that cold housing has on the population in terms of cardiovascular and respiratory morbidity and on the elderly in terms of winter mortality. It also highlights the stark effect that fuel poverty has on mental health across many different groups, while also having an impact on children and young people’s well-being and opportunities...once the trade-off issues for at-risk households are addressed, energy efficiency interventions always bring multiple health and environmental gains”.

There have been high levels of failure in programme attempting to tackle fuel poverty¹¹ – much of the causes of fuel poverty in the West Midlands relates to the condition of houses – often poorly insulated with inefficient heating appliances. With most existing fuel poverty programmes targeted at ‘low hanging fruit’, such as cavity wall and loft insulation, there needs to be a systemic change to improve the housing stock with a radically different, person-focussed approach to eliminating fuel poverty.

⁸ Hills J. Getting the measure of fuel poverty: Final Report of the Fuel Poverty Review. London: 2012. 3. UCL Institute of Health Equity.

⁹ The health impacts of cold homes and fuel poverty 2011. Available from: www.instituteofhealthequity.org/projects/the-health-impacts-of-cold-homes-and-fuel-poverty

¹⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/355790/Briefing_7_Fuel_poverty_health_inequalities.pdf

¹¹ Each Home Counts

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/578749/Each_Home_Counts__December_2016_.pdf

Fuel poverty fact sheet - West Midlands

This factsheet summarises the headline figures to illustrate the nature and extent of fuel poverty in the West Midlands in 2017. This forms part of an evidence base to inform the need to deliberate on an all-inclusive regional fuel poverty alleviation programme

Understanding the local picture

A household is classed as being in fuel poverty if:

- Their fuel costs are above average.
 - Their disposable income (after housing and fuel costs) is below the poverty line.



Homes account for 22% of carbon emissions in the UK. Improving home energy efficiency in the West Midlands will positively contribute towards climate emergency targets.

303,702 fuel poor households in the West Midlands.

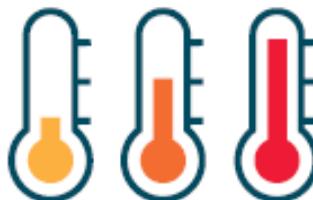
There are **1,215,906** homes in the West Midlands with Energy Performance Certificates (EPCs) below the Government's statutory C rating target for 2030.

12.6% proportion of fuel poor households
in the West Midlands.

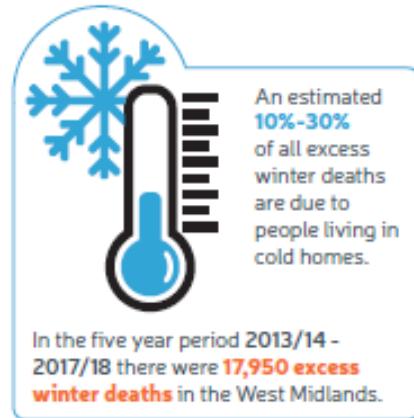
10.9% proportion of fuel poor households
in England.



There is a strong consensus across Government departments, Public Health England, the National Institute for Health and Care, the Committee on Fuel Poverty, and other bodies, that cold homes present a health risk, especially for the fuel poor.



Temperatures do not have to be extreme for cold homes to impact health. Negative impacts start at around 5-8 °C
The average temperature for winter 2018/19 in Central England was 5.9°C.



The West Midlands has both higher than average likelihood of fuel poverty and one of the largest fuel poverty gaps. This is likely to be due to higher than average fuel costs, combined with lower than average incomes.

We need to improve the standard and quality of housing to positively contribute to health and wellbeing and independence of people, aiding local economic benefits and householder's affordability.

Fuel poverty target: All fuel poor homes to be Energy Performance Certificate (EPC) Band C by 2030 and as many homes as possible to be EPC Band C by 2035.

Annual costs for householders to have a warm, well-lit home every day and enough hot water are three times higher for the least efficient properties:

 EPC Band A-C	£940
 EPC Band D	£1190
 EPC Band E	£1510
 EPC Band F	£2000
 EPC Band G	£2860

The Building Research Establishment calculated that if all 1.3m Category 1 excess cold hazards in homes in England were dealt with, the cost saving to the NHS would be £848m.

This doesn't include savings for treatment costs beyond the first year, or social care cost savings.



Replacing the most inefficient type of gas boiler can save an estimated £160 to £315 per year on energy costs.

Improving **home insulation** can substantially reduce energy costs. Depending on the house type, estimated savings are:



Loft insulation
£120-£225p.a.



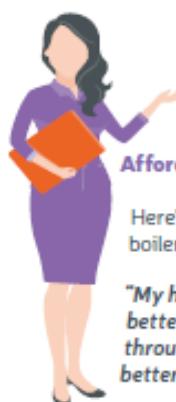
Solid wall insulation
£160-£435p.a.



Cavity wall insulation
£95-£255p.a.



Studies that modelled the economic benefits of large-scale energy efficiency policies have demonstrated potential annual GDP growth of **0.25%-1.1%**.



Affordable warmth projects can transform people's lives.

Here's just one quote from a Worcestershire householder who had a new boiler after being without central heating for seven years.

"My health and wellbeing has really improved, my lungs are much better, my arthritis is more manageable... My happiness is also reflected throughout the family - we're all so pleased with the outcome. I feel better about myself now... I'd say what you've done has kept me alive!"

To create greater resilience within the West Midlands towards fuel poverty will require a regional all-inclusive programme that puts the householder at the centre of the support they receive to be warmer and safer at home.

What is wrong with the current approach to fuel poverty?

"The UK's 2001 Fuel Poverty Strategy was founded on the belief that living in cold homes constituted a health risk... On the ground, the Fuel Poverty Strategy resembles a home improvement programme rather than a health programme. It is not surprising that its principal objective is often overlooked."¹²

There are different approaches to tackling fuel poverty in the four UK nations. The West Midlands Fuel Poverty programme proposal has looked at how initiatives in Scotland and Wales are addressing issues still systemic in England.

Some of the difficulties with the current approach include:

- The entire focus of expenditure is on capital funding of one-off interventions meeting targets rather than identifying the needs of the most vulnerable households.
- Very little attention is paid to maintenance, leading to early failures in improvements.
- The effectiveness of most current interventions (in England) results in an insignificant change in the numbers of fuel-poor homes, despite a spend of around £1 billion annually on fuel poverty interventions.
- The stop-start, short-term approach to programmes leads to a weak and disengaged supply chain.
- Fuel poverty is treated as an 'energy' problem with limited strategic connections to other complementary programmes, such as health, air quality, infrastructure investment and economic growth.
- The lack of a whole house design misses opportunities for low cost improvements and householder behaviour change.
- Householders, as customers, are lost in the journey of improving their homes, identifying vulnerabilities and saving money.

¹² Defining Fuel Poverty in Northern Ireland - Ulster University : C Liddell 2011
<https://pure.ulster.ac.uk/ws/portalfiles/portal/11272278/FuelPovertyReport%28WEB%29-5Sept2011.pdf>

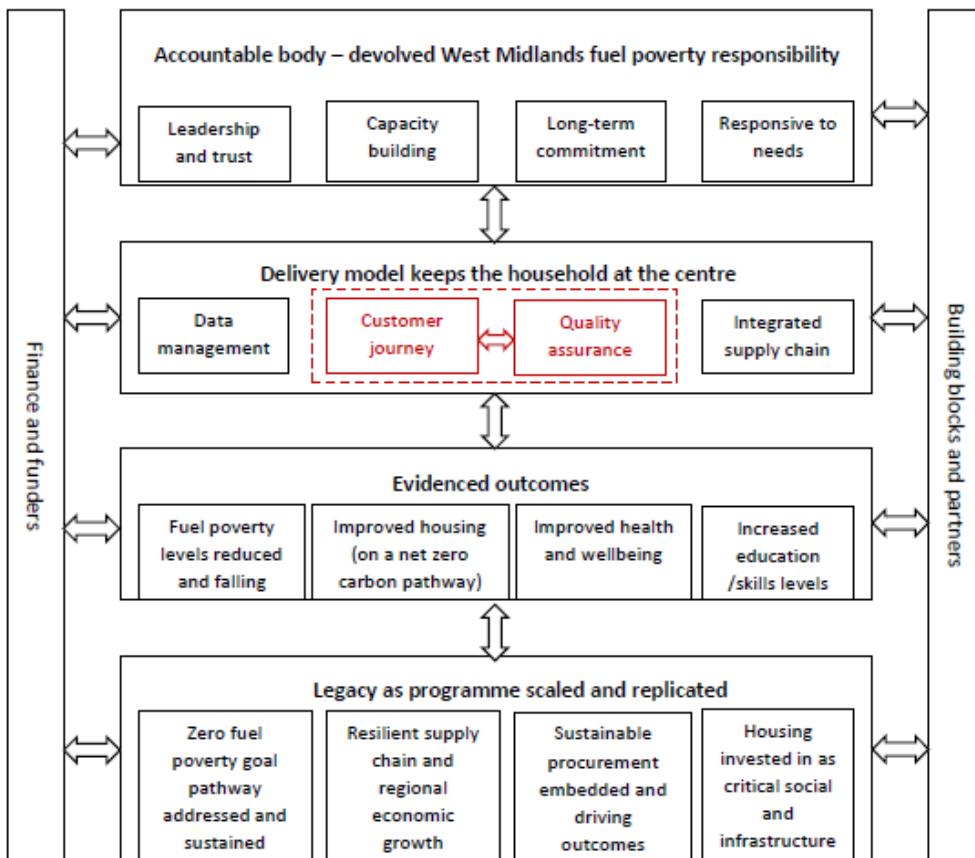
West Midlands fuel poverty programme governance and operational model

Operational model

The operational approach:

- Starts with the person experiencing fuel poverty, who is at the centre of the process.
- Requires high-quality delivery leading to better outcomes and generating the learning that will drive continuous improvements.
- Integrates actions to address fuel poverty into the broader landscape.
- Shifts operational decision making away from energy companies (providing ECO) and commercial installers to the public sector, health and third sector.
- Releases capital based on a whole house plan rather than the installation of ad hoc individual measures'

The WMFP group has investigated different approaches used to tackle fuel poverty in the UK, including the role of the supply chain, academic collaboration, area-based initiatives, business models and performance management. The partnership has developed a new programme model that considers the three vital success factors of governance, delivery model and outcomes that will be successful and leave a legacy aiming to eliminate fuel poverty. The programme will include action for those in fuel poverty in all tenures but will focus on those most in need initially and likely to be principally in the private rented sector and owner occupiers. Tenant groups, stockholders including private landlords, Registered Providers and local authorities/ALMOs will be invited to join the operational team working groups.



The drivers of each building block:

Accountable body – a strategic partnership will be developed between Energy Capital, the West Midlands Combined Authority, local authorities and related statutory bodies to oversee and govern the programme. As a not-for-profit organisation, it will ensure the quality measures are applied throughout the programme, based on long-term and value for money outcomes.

Delivery model – a model for delivering the programme has been developed based on best practice from successful fuel poverty programmes but with a determination to create better, systemic changes to the approaches used. The delivery model will ensure that a person-focussed approach is used and that the programme is responsive to a local context.

Outcomes – outcomes will be constantly monitored to ensure decisions affecting the future progress are based on actual evidence discovered while delivering improvements. Outcomes will be used to gauge the success of the programme in terms of reducing fuel poverty, increasing health of householders and developing economic benefits for the West Midlands.

Legacy – the WMFP programme aims to establish its activities with a long-term perspective of radically reducing fuel poverty in the West Midlands. It will build a resilient supply chain to tackle fuel poverty and energy efficiency in buildings, where skills and quality are fundamental drivers of business success.

Integrating with the health sector

Excess winter deaths resulting from cold homes is a key issue for the health sector. The NICE pathway¹³ identifies activities where the role of partners is crucial (blocks 9,10,11) and where collaboration will be essential (blocks 2, 3, 5, 6, 12 and 13).

Excess winter deaths and illnesses associated with cold homes overview

NICE Pathways



¹³ <http://pathways.nice.org.uk/pathways/excess-winter-deaths-and-illnesses-associated-with-cold-homes> NICE Pathway last updated: 12 November 2019

Maintaining quality

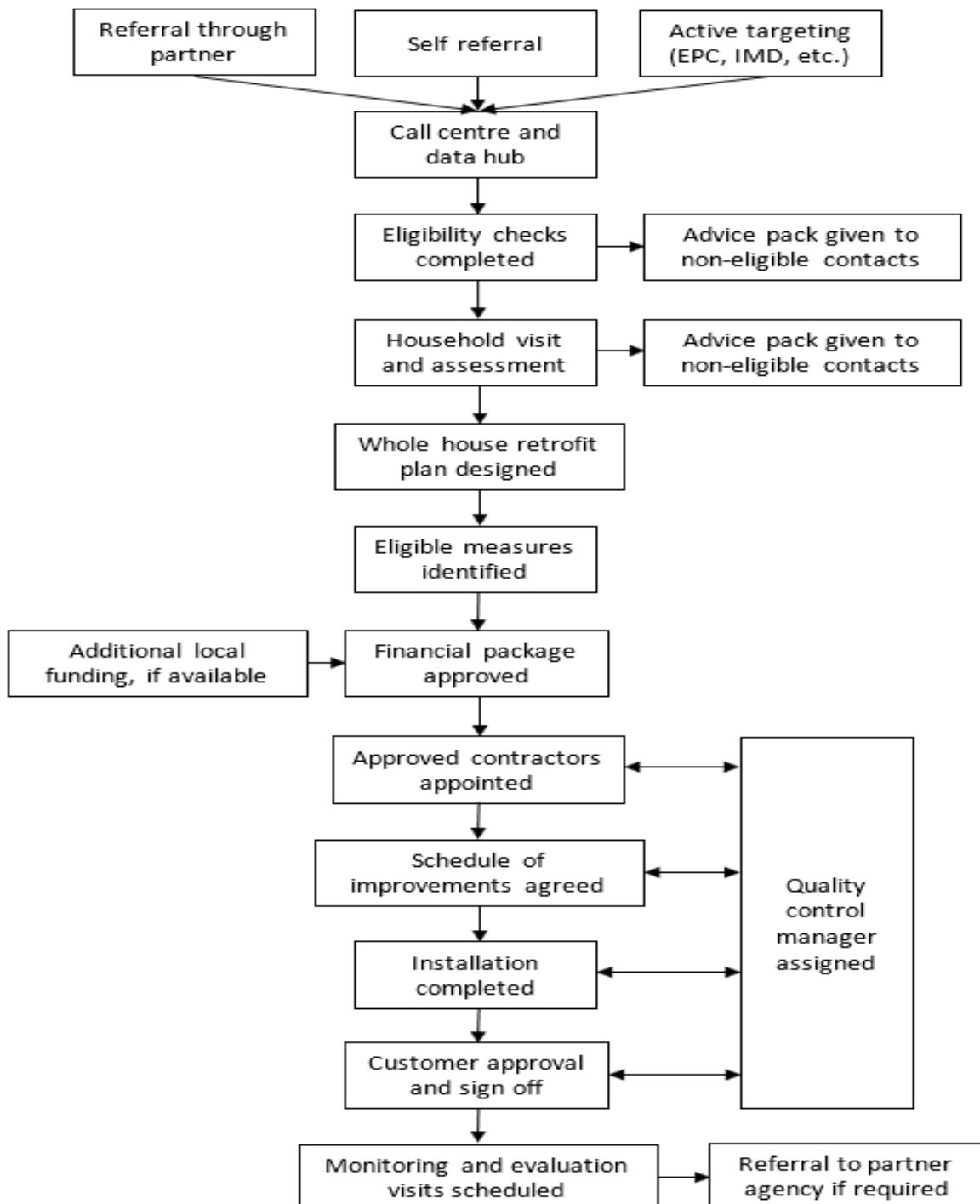
The WMFP programme will be driven by the need to deliver high quality improvements, to safeguard the investment, ensure households are removed from fuel poverty and to create a legacy.

Quality drivers and checks include:

- Maintaining quality will be the responsibility of the WMCA for all aspects of the programme and all delivery organisations will report on quality aspects.
- Frontline customer engagement into the programme will be undertaken by local energy NGOs with a track record of customer satisfaction.
- Assessments and installation measures will need to be delivered to PAS 2035 or better standards.
- All contractors and assessors engaged in the programme will need to abide to the quality standards, including CPD and mandatory training on quality.
- A quality control manager will be appointed to every installation as a clerk of works to check all improvement works.

The 'customer journey'

A key success factor for the WMFP is to ensure the customer has an easy, professional and rewarding journey through the installation process, from initial contact through to monitoring and potential referral to other agencies if required. Monitoring and evaluation will also include performance data to evidence quantitative as well as qualitative assessment. The process is shown below, demonstrating links to other organisations.



Fuel poverty case studies

REFLECTIONS FROM A RANGE OF CASE STUDIES

Multiple small funding streams required for a simple intervention – hugely costly in revenue resource

Constant shifting of funding packages creates chaos in identifying finance and finally securing it.

A whole system failure unblocked by a £220 investment

Those living in fuel poverty may experience multiple crises before first seeking help and ultimately receiving that help which takes time and may see disengagement and the need to rebuild trust over many months/years.

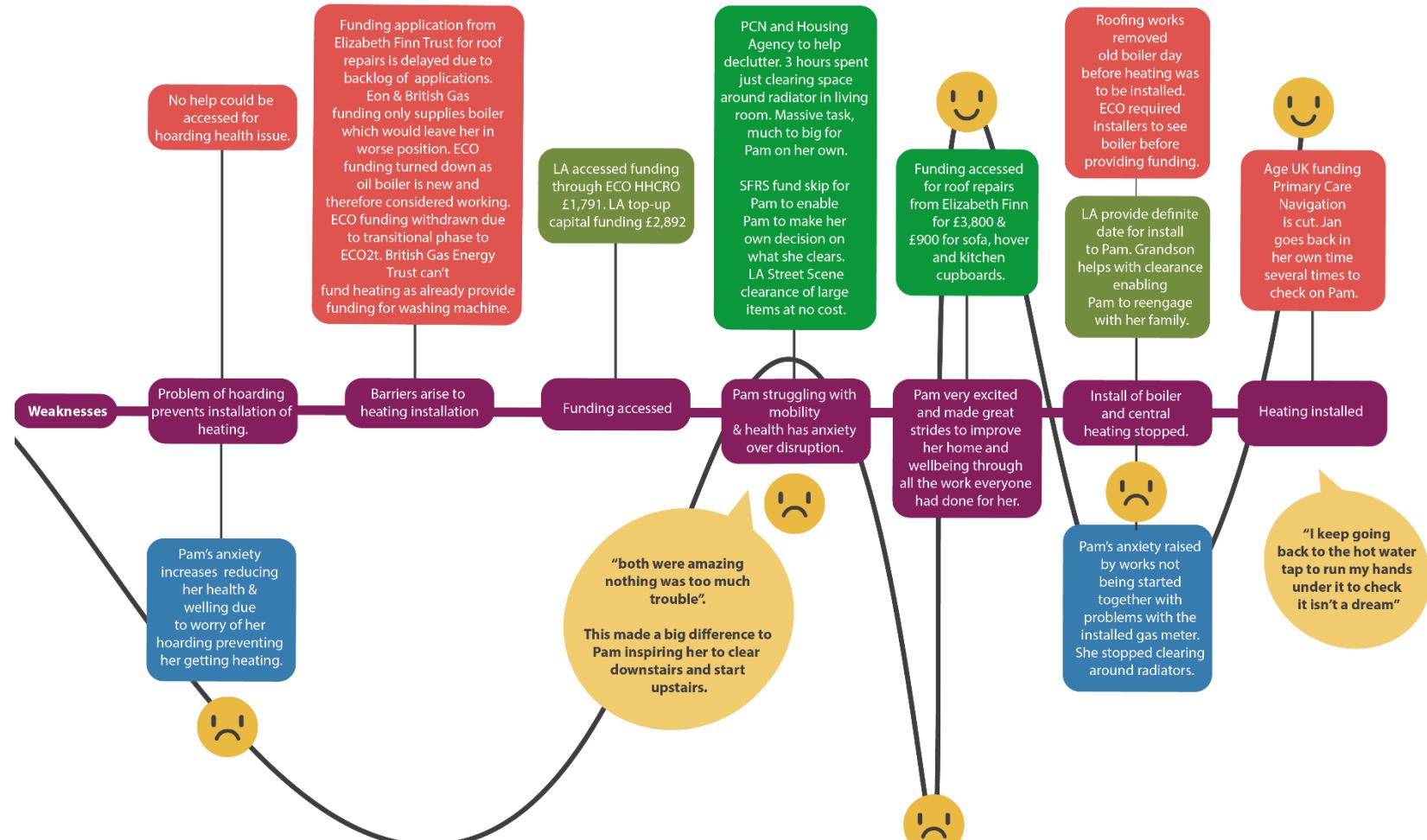
Some families remain seeking help for years.

Ill health, isolation and grief often underlying issues impacting on ability to cope



Fuel Poverty Case Study





The Working Group attendees – 2018-2020

One or more representatives from each organisation attended one or more meetings and/or contributed by email/phone. Others have also supported the working groups and development of the proposal. This list will be updated in the full report.

Accord	Lovell
Acivico	Marches Energy Agency
Act on Energy	MEBC
Adecoe	Midland Heart
Agility Eco	Midlands Energy Hub
Anthony Collins	Midlands Energy Professionals
Baxi	Minus 7
BEIS	National Grid
Birmingham City Council	Parity Projects
Birmingham City University	PHE
Black Country Consortium	Q Bot
BNK	Red Coop
Building Alliance	RetrofitWorks
Calor Gas	Sandwell MBC
Cannock Chase District Council	SHAP
Cenex	SIG inside
Citizen	Solihull Community Housing
Climate KIC	Solihull MBC
Connexus	Soltherm
Coventry City Council	South Staffordshire Council
Coventry University	Steven Harris Ltd
Daikin	Sunamp
DECCC	Surefire SMS
Dimplex	Sycous
Dudley MBC	Symeco
E H Smith	Trowers and Hamlins
EBC	University of Wolverhampton
Energie	Walsall MBC
Energiesprong UK	Warmworks Scotland
Energy and Utilities Alliance	Warwick District Council
Energy Capital	Warwickshire County Council
Energy Systems Catapult	Wates Living Space
Engie	whg
Envirovent	WM Housing
EON	WMCA
Excite Ventures	WMCU
Federation of Master Builders	Wolverhampton City Council
Greater London Authority	Wolverhampton Homes
Green Energy Networks	Worcestershire County Council

Next steps

Following the launch of the proposal, the following next steps will be taken:

- Publication of the full West Midlands Fuel Poverty Programme proposal with the complete appendices including working group outputs, case studies, conference recommendations and list of references.
- Objectives and action plan for 2020 will be created.
- Confirmation of the process to gain broad political support.
- Timetable of working group meetings in 2020 will be developed.