

**THE ENERGYCARER INITIATIVE
A DETAILED PROPOSAL
JULY 2016**

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This proposal has been developed by Lochalsh and Skye Housing Association (LSHA) on behalf of the Highlands & Islands Housing Association Affordable Warmth Group. We are very grateful to the project steering group and the many colleagues around the country who provided advice, guidance, ideas and commentary. Among many visits we have met colleagues in Highland, the Orkney and Shetland Islands, Eilean Siar and Argyll and have talked to Home Energy Scotland delivery partners in the North East, South West and the Highlands & Islands. We have also been heavily influenced by our service contacts in Skye and Lochalsh, however all views expressed here are our own.

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THE ENERGYCARER PROPOSAL

PROJECT SUMMARY

Over 3 years, to test and to demonstrate the effectiveness of well-co-ordinated, high quality, home-delivered holistic support methods in bringing **verifiable affordable warmth improvements** to cold-vulnerable, fuel poor households living in any part of remote rural Scotland by:

- **broadly replicating the successful approach developed by Scotland's now well-established Care & Repair service model** which brings top quality housing and quality of life improvements to cold-vulnerable clients in their own homes, wherever they happen to live in Scotland with little client 'drop-out'
- **creating a testbed of Energycarer pilot projects** in a cross section of all of the principal rural and island typology regions of Scotland (north to south, east to west)
- **ensuring that each pilot is locally embedded** i.e. in an appropriate, locally-based and well-respected host organisation, and that the host organisation has the flexibility and freedom to deliver the project to make best use of local circumstances and expertise, whilst delivering common national outcomes (**Appendix Five**)
- ensuring effective **partnership-working linkages** with Home Energy Scotland, Health, Social Care and Housing services.
- facilitating the **employment of 11 dedicated project staff (9 Energycarers, plus a project manager and administrative, financial and learning support)** whose jobs will be to deliver the quality of outreach, advice, mentoring and other practical support services needed to ensure that each cold-vulnerable household gets the affordable warmth improvements they need for their homes and lives
- conducting **holistic multi-faceted surveys** to monitor costs and comfort levels against national standards

- making **systematic analyses** of the effectiveness and value for money of a property's delivery of target warmth
- **assessing the core, underlying vulnerabilities of the household** concerned e.g. the extent of their household's fuel poverty, their financial, health and comfort needs and the kind of care and hand-holding support they may require to achieve the improvements needed
- **doing whatever needs to be done on the client's behalf** in practical terms to secure solutions to the problems identified, which thereafter result in the client being able to live in appropriate warmth and comfort in their own home as affordably as practicable
- **facilitating and increasing local procurement and supply chain involvement in the installation of energy efficiency measures** to improve outreach services, beneficial spin-off for local economies and the engagement of local businesses in audit-compliant tendering and quality assurance processes
- systematically recording and **verifying each and all of the project's before-and-after outcomes** in relation to : client warmth and comfort levels, health and social care benefits, changes to home heating systems and running costs and improvements made to the thermal efficiency and fabric of the houses, local supply chain engagement and inter-agency partnership working
- **learning and sharing its experience as the pilots progress** and trying out new approaches
- **producing detailed outcome reports on an annual basis** for Scottish Government and other interested parties and a comprehensive final report and project conference
- engaging in a process of **independent evaluation** of the Energycarer pilot as and when required by Scottish Government

THE ENERGYCARER PROJECT IN PRACTICE

An Energycarer provides friendly, empathic, professional advice, practical intervention and close mentoring support to ensure that a remote rural

household which is vulnerable to the cold, achieves the warmth, humidity and comfort levels the household needs to help assist delivery of a positive health outcome. An Energycarer will act on the referral of a Health, Social Care or Housing professional, Home Energy Scotland, Citizens Advice, a concerned family member, or directly from a concerned householder.

There are four levels of Energycaring

- 1 Mechanisms to ensure more effective referrals from a remote rural, cold-vulnerable household to Home Energy Scotland for telephone advice, and potential referral to Government support schemes, to other support agencies and to the Energycarer Pilot.
- 2 Holistic, in-home surveys to diagnose and identify need and appropriate remedy
- 3 Third party support of cold-vulnerable households to secure effective delivery of Government insulation and heating schemes
- 4 Additional practical measures to ensure the delivery of verifiable warmth

ENERGYCARER LEVEL 1 - EFFECTIVE REFERRALS

This level of Energycare is about assisting in the development of local initiatives which better help the Health and Social Care Sector signpost cold- vulnerable households living in Remote Rural locations to Home Energy Scotland (HES) for telephone advice, referrals to Government support schemes like Warmer Homes Scotland and Area Based Schemes and other local advice services. The Pilot Project Energycarers will also work locally to increase these linkages and promote referrals to HES as part of their operational work.

Level 1 is already embedded in Scottish Government and Home Energy Scotland practices. Current initiatives already encourage health professionals and carers and the Fire and Rescue Service and associated agencies to work closer together to encourage referrals to Home Energy Scotland. Projects supported to date have included Healthy Homes for Highland plus significant frontline training efforts made by Energy Action Scotland and SCARF, and a significant GP led project in Glasgow – the Link Worker GPs at the Deep End approach.

Other significant UK Level 1 Initiatives include the PITCH (Preventing Illness by Tackling Cold Homes) project in Bristol, which involved close collaborative work

between energy advisers, NHS health champions, GPs, Hospital Trusts and Pharmacies to develop a Cold Homes Referral Service. (Centre for Sustainable Energy 2016)

The majority of advice given by Home Energy Scotland is telephone-based, but on occasions householders are also eligible for Government schemes such as Warmer Homes Scotland, or can access an area based scheme and in many cases get a benefits or pension referral. In some areas, but not all, a referral to a community in-home advice service is made such as to the HEAT teams in the North East.

ENERGYCARER LEVEL 2 – HOLISTIC IN-HOME SURVEY

The Energycarer will carry out a full diagnostic, holistic, in-home affordable warmth survey and assessment of need. In consultation with the household and relevant health and care professionals they will confirm the particular health and warmth needs of the individual and recommend next steps appropriate to the situation. The Energycarer examines fabric, ventilation, heating, people and tariff solutions in a holistic manner and identifies the most appropriate solutions to match the householder's need for appropriate warmth, ventilation and humidity.

During the holistic Home Survey process an Energycarer:

- identifies any concerns individuals and/or carers have in terms of securing affordable and appropriate warmth, ventilation and humidity levels for the household
- confirms the existing energy costs of the property through analysis of bills, meter readings and payments, including the identification of energy supplier, tariff type and tariff rates and payment methods with the aim of identifying annual and cold weather costs.
- confirms the existing comfort levels of the property through household interview and, where the season allows, carries out relevant cold weather temperature, humidity and energy monitoring and thermal imaging. (If the season does not allow the Energycarer will arrange to return to monitor in cold weather.)
- carries out an EPC (this is a key benchmarking requirement and allows an affordable warmth assessment to be made against an EPC score and other indicators)

- carries out visual inspection of insulation in accessible lofts to identify gaps and failures in coverage, including compression and extent of eaves cover
- identifies areas of draughts and fabric cold bridging through internal thermal imaging and visual inspection of walls, floors, windows and ceilings (also includes the identification and location of any mould).
- identifies make and model of heating system and identifies all thermostats and controllers and confirms that user documentation is available to the occupants
- identifies the extent of the household's knowledge about the efficient operability of the heating system and provides any immediate guidance that is lacking

Once the needs and status of a cold-vulnerable household are identified and the property assessed a support plan will be implemented and may include the following elements:

ONWARD REFERRAL

- If a private home or a private let, identify likely eligibility for Government insulation and heating schemes (e.g. Warmer Home Scotland). If appropriate, support the client to phone through the Home Energy Check.
- If a social let, provide support to tenant and liaise with landlord as appropriate.
- Work closely with Home Energy Scotland and, if needs be, act as full third party supporter for duration of application and continue to support household after install (See EC3).
- Help ensure benefit entitlement is maximised through Home Energy Scotland Benefits and Tariff Check and/or support from local Citizens Advice Services.

FURTHER IN-HOME ADVICE

- Provide guidance to household and carers on the best way to use the heating system.
- Check whether programmers, wall thermostats, thermostatic radiator valves and any other heating controls are set to deliver appropriately timed temperatures and reset as appropriate.
- Advise on any lifestyle issues that will detract from an affordable warmth outcome.

TARIFF SWITCHING

- Review and analyse historic energy use and help householders to interpret bills.
- Advise on appropriate electricity tariffs and metering where electricity is the main heating type
- If switching electricity supply is beneficial, ensure household has access to professional switching support such as Citizens Advice Services and/or Citrus

ENERGYCARER LEVEL 3 - THIRD PARTY SUPPORT

One of the failings of existing schemes is that some eligible cold-vulnerable households drop out and do not persevere with the install of heating or insulation. This role is one where the Energycarer acts as a nominated third party to support a household through the implementation of any energy efficiency improvement to their property. An Energycarer represents the householder and/or family members or carers and liaises with surveyors, contractors and Home Energy Scotland to facilitate delivery of new heating and/or insulation and/or supports the household to change a tariff (**Case study One, Two; Appendix Six**).

ENERGYCARER LEVEL 4 - DELIVERING VERIFIABLE WARMTH

In essence, **to do whatever has to be done to ensure and verify effective delivery of affordable warmth to match householder health needs**. If a whole property solution is not realisable, or affordable, then at least ensure key rooms meet acceptable standards.

FINDING PRACTICAL MEASURES THAT WORK

- Looking beyond eligibility for Government insulation or heating programmes, identify the best in-house solution to deliver appropriate warmth including reallocation and reprioritisation of heat within the property
- Implementing solutions to manage condensation, dampness, heat and ventilation effectively to eradicate mould from the fabric of the home
- Having identified draughts and other sources of unwanted ventilation, advise and implement fixes in conjunction with any local Care and Repair or other support scheme

- Access eligible funding from the pilot project Energycarer fund, Care and Repair and other services to install more localised fixes that are not available through national schemes such as increasing radiator sizing, introducing new easy to use controllers for the physically and visually impaired, install insulating curtains and blinds (EC4)
- Work out how to at the very least create some warm zones in a cool property through methods like installing insulated curtains, temporary room division, secondary glazing, draught sealing
- Have access to and provide additional temporary heat emitters for emergency use
- Consider providing “personal heat” options so that an individual can be supported without the property and other less cold-vulnerable family members becoming overheated

ONGOING SUPPORT

- Install permanently running temperature and/or humidity monitors for duration of support period to check conformity to targets
- Ensure humidity is effectively monitored and managed and if needs be try to secure the installation of humidistatic ventilation
- Provide post installation support to households

An illustrative annual spend has been produced in Appendix Four and a short case study in Appendix Six. The aim is to secure delivery of warmth, ventilation and humidity to ensure adequate comfort levels appropriate to need, and monitor the house to ensure effective delivery

PROGRAMME, TARGETS AND COSTS

The pilot is provisionally costed at £6 million over three and a half years and allows for positive intervention in over 4000 remote rural properties. (**Appendix Three** details the provisional project costings). The draft programme targets are detailed here, and include both Energycarer functions, and tasks aimed at tackling market failure and improving the supply chain.

PILOT PROJECT TARGETS	EC Energycarer Levels MF tackling market failure	= Three year project totals
Process Energycarer referrals from Home Energy Scotland (HES) and local health & social care providers	EC1,2,3,4	
Carry out 150 holistic in-home surveys annually per Energycarer region	EC2	4050
Carry out benchmark cold weather monitoring of 150 households per Energycarer region and determine comfort levels and costs (this recognises that return visits may be required in colder seasons)	EC2	4050
Carry out affordable warmth assessments post engagement for 75 households (c50% of home surveys) per Energycarer region	EC2,3,4	2025
Monitor health outcomes and household satisfaction outcomes for 50% of Energycarer interactions	EC,2,3,4	2025
Provide third party support to 25 households annually to access Government schemes, ensuring less than 10% drop out	EC3	675
Support the delivery of accountable, verifiable warmth to 75 households annually per Energycarer region using project budget effectively and efficiently to secure outcomes (see Appendix Four for illustrative spend)	EC4	2025
Contrast EPC expectations with real world findings for all interactions	EC2	4050
Maximise the take-up and realisation of any Warmer Homes Scotland or other schemes		

Work closely with local authority Area Based Schemes to ensure cold-vulnerable, remote households have equitable access to schemes	MF	
Support local social landlords in their Vulnerable Tenants strategies	EC1	
Write up twenty five case studies annually per Energycarer region	MF	675
Set up local Energycarer contractor forums to help stimulate market	MF	9
Liaise with EST to encourage local contractors to acquire necessary accreditations	MF	
Be a key partner in any Health, Housing & Social Care Forum and ensure improved cross referral to HES and the Energycarer pilot	EC1	9
Work closely with voluntary sector , Citizens Advice, social enterprises & carers to support delivery of affordable warmth	EC1	
Support 50 households to switch tariffs where appropriate	EC2/EC4	1350
Ensure 20% of interactions have independent, third party evaluation	EC2/EC3/EC4	810
Be innovative and pilot methods to secure delivery of warmth	EC4, MF	
Test out effective, localised, draught protection, humidity management and hard-to-treat solutions in challenging properties	EC4, MF	
Produce interim, annual and final project reports, maintain a live learning website and organise an end of project conference	ALL	

PROJECT TIMELINE

PRE-PROJECT START TIMELINE

- 22 July 2016 Submission of draft proposal to Highlands & Islands Housing Association Affordable Warmth Group
- 1 Aug 2016 Last date for feedback from Highlands & Islands Housing Association Affordable Warmth Group
- 10 August 2016 Submission of proposal to Scottish Rural Fuel Poverty Task Force
- 31 August 2016 Rural Fuel Poverty Task Force Meeting to confirm that an Energycarer pilot remains a priority recommendation
- Sep 16 - Nov 16 Set up interim steering group to coordinate the further development of the proposal (necessary preparation for any implementation)
- Nov 16 Target Date for conclusions of strategic working group and rural Fuel Poverty Task Force and a decision on Yes/No to Energycarer pilot implementation

IF YES

- Dec 16 Formalise steering group
- Dec 16 - Mar 17 Employ short term project development officer to coordinate and facilitate implementation
- Early Jan 17 First meeting of steering group (procedures for recruitment and identifying host organisations)
- Jan - March 17 Procure host bodies after seeking expressions of interest
- Apr 17 Recruit energy care project coordinator and live learning coordinator
- April-June 17 ECM and ECLLC set up project web and communications structure, and initial equipment purchases and arrange initial training
- Jun 17 Host organisations recruit and/or second Energycarers to project ahead of July start
- Jun 17 Second meeting of steering group (confirming project start methodologies/procedures)
- 03 July 17 PROJECT STARTS

(ECM Energycarer Manager; ECLLC Energycarer Live Learning Coordinator)

ENERGYCARER PROJECT – STRATEGIC CONTEXT

INTRODUCTION

Remote rural Scotland is acknowledged to have the worst fuel poverty level in Scotland, with 60% plus of the community living in fuel poverty, fuel costs up to a £1000 a year higher than the Scottish average and few accessible solutions currently in place (See Appendix Ten).

The dilemma is that this area, which has the **greatest need** for the provision of energy advice and remedies, has the **poorest provision** – in effect there is systematic market failure, particularly in the Highlands and Islands.

The great success of the Care & Repair Service in remote and rural Highland and Island locations is clear evidence of the important role that can be played by sensitive, responsible, and accountable services, delivered locally by trusted contractors.

In this proposal we will argue for the Scottish Government to fund an Energycarer pilot, modelled on the Care & Repair service, which will be focused on securing effective delivery of **affordable warmth** to the most remote, cold-vulnerable, fuel poor households. Through the provision of local **“Energycarers”**, and the benefits of an **“Energycarer Network”**, bespoke solutions will be found to ensure that the most cost-effective means of delivering affordable warmth in a property will be found; the needs of the individual householder will be met using a tailor-made package of advice, support and installation of measures, as opposed to the ‘one size fits all’ approach of current government contracts.

We see the benefits of this holistic approach as being threefold:

1. A consistent effort will be made to improve the **actual** comfort levels in houses that have had insufficient support or attention to benefit from previous schemes.
2. By potentially reducing hospital admissions in the areas where the cost of in-patient stays are highest (remote and island hospitals can cost up to twice as much as overall averages for general hospitals), the health service can reallocate that money to support more people to live at home and free up beds for those who really need to be in hospital.
3. The on-going medical needs of those benefiting from the scheme will be reduced by ensuring that they are living in a warm, healthy environment.

(See **Appendix One** for further exposition of the health benefits of investment in achieving affordable warmth.)

The draft budget for the project is c£6m, (**Appendix Three**) representing around 2% of the total Scottish Government energy efficiency spend, which is around £103m per annum. The presumption is that this investment delivers warm, energy efficient homes, but, peculiarly, the outcome is *assumed - not audited or verified*. It is the experience of Lochalsh & Skye Energy Advice Service that the installation of a measure, while it may improve a property, does not necessarily secure an affordable warmth outcome for the resident, therefore the assumption of a positive outcome is misplaced.

The Energycarerer project is focused very specifically on verified outcomes. These outcomes are only met by ensuring a package of support, which may include effective insulation and draught protection, access to an efficient and easy to use heating system, good household energy decision making or the purchase of fuels from the cheapest provider – or it may include all of these measures – the aim is to ascertain what that specific householder and property need, what will make the difference, and verify the outcome.

For too long, those living in remote rural areas have suffered from inferior or inconsistent provision through government schemes, whether they were delivered by local, Scottish or UK government (**Appendix Eight**). This Energycarerer proposal will put these households at the front and centre of provision, both to ensure they get a fair deal and to ensure that their home is a warm and healthy place in which to live.

The Strategic Case

It is proposed that the Government funds an extensive, cross-Scotland pilot for at least three years, embedding Energycarers in at least nine, principally rural locations in the *most appropriate* local delivery organisation. This could be a housing association, a local authority, an Energy Advice Agency, a National Health Service facility or some other locally based outreach service. The most important factor in deciding which should be the host organisation is the underlying ethos of providing in-home, empathic support and an infrastructure that ensures that the most remote rural households will receive that support. While support can, on occasions, be provided by telephone or some other form of remote communication, this will not be an acceptable means of providing primary support.

The pilot areas need to be chosen to represent the diversity of rural and remote Scotland and to be supported fully by local, strategic Health, Social Care and Housing partnership networks. Close links will need to be established between Handyman, Care & Repair, Technology Enhanced Care and Occupational Therapy services to ensure effective, coordinated delivery, and the programme will require strategic coordination in terms of implementation, delivery and post project assessment and evaluation.

Early indications are that the Scottish Fuel Poverty Strategic Working Group, set up by the Scottish Government, will recommend that new approaches to tackling fuel poverty and delivering affordable warmth are cross-departmental, person-centred and engage community-based partnerships. The Rural Fuel Poverty Task Force, also set up by the Scottish Government, is currently stating that geography should not be a barrier to achieving the desired outcomes and that priority should be given to supporting the most vulnerable. This Energycarer proposal is focused on helping to achieve these strategic objectives.

Targeting energy efficiency measures to the most vulnerable households and those most in need will produce the maximum benefit-cost ratios and will also contribute to improving social equality and increasing individual feelings of control and self-worth.

(International Energy Agency, 2014)

http://www.iea.org/publications/freepublications/publication/Captur_the_MultiplBenef_ofEnergyEfficiency.pdf

Our review of the Health and Energy Efficiency literature (**Appendix One**) provides significant justification for piloting a pioneering health vulnerability-led approach to improving affordable warmth outcomes for cold-vulnerable households in remote communities. The Energycarer project outlined in this paper is designed to tackle the significant remote rural disadvantage and the project will deliver comprehensively one of the key principles of recently published National Institute for Health & Clinical Excellence (NICE) guidelines:

NICE Statement 3 – People who are vulnerable to the health problems associated with a cold home receive tailored support with help from a local, single point of contact, health and housing referral service.

<https://www.nice.org.uk/guidance/ng6>

NICE indicates that “the health problems associated with cold homes are experienced during ‘normal’ winter temperatures, not just during extremely cold weather.” Year-round action is needed, therefore, by many sectors working together to combat these problems.

This includes:

- **prioritising** which homes are tackled first
- **shaping and influencing** the decisions about how homes are improved
- **developing the research agenda**

Further to recommendations from the International Energy Agency (IEA) and strategic health guidance from NICE, the Irish Government has just announced a €20m Health and Energy Efficiency three year pilot programme called “**Warmth and Wellbeing**”. This followed a significant consultation, which concluded:

“The bulk (up to 80%) of the identified benefits in addressing energy poverty **accrue in improved health outcomes and greater comfort levels**”

(A Strategy to Combat Energy Poverty 2016-2019, p.12)

<http://www.coldathome.today/health-drives-irish-fuel-poverty-strategy/>

The Irish scheme, which aims to deliver enhanced energy efficiency measures in households that have a “**pressing medical need**”, involves assessment and monitoring of outcomes to learn lessons for further prioritised programmes. Although the NICE guidelines have been written to address the needs of vulnerable households in England & Wales, Scotland can learn from their approach and extend significantly the range and ambition of current, established Scottish programmes.

The Energycarer concept is similar to the Irish model but includes an enhanced, ongoing monitoring and live learning element; it builds on the existing Scottish experience and practice and, significantly, is targeted at those communities **furthest from the existing market**.

The Scottish Government has confirmed energy efficiency is a National Infrastructure Priority and has a clear commitment to developing a new ‘Scotland’s Energy Efficiency Programme’ (SEEP). By facilitating significant cross-engagement of health, housing and social care sectors the additional cross-sectoral benefits are anticipated to be more powerful.

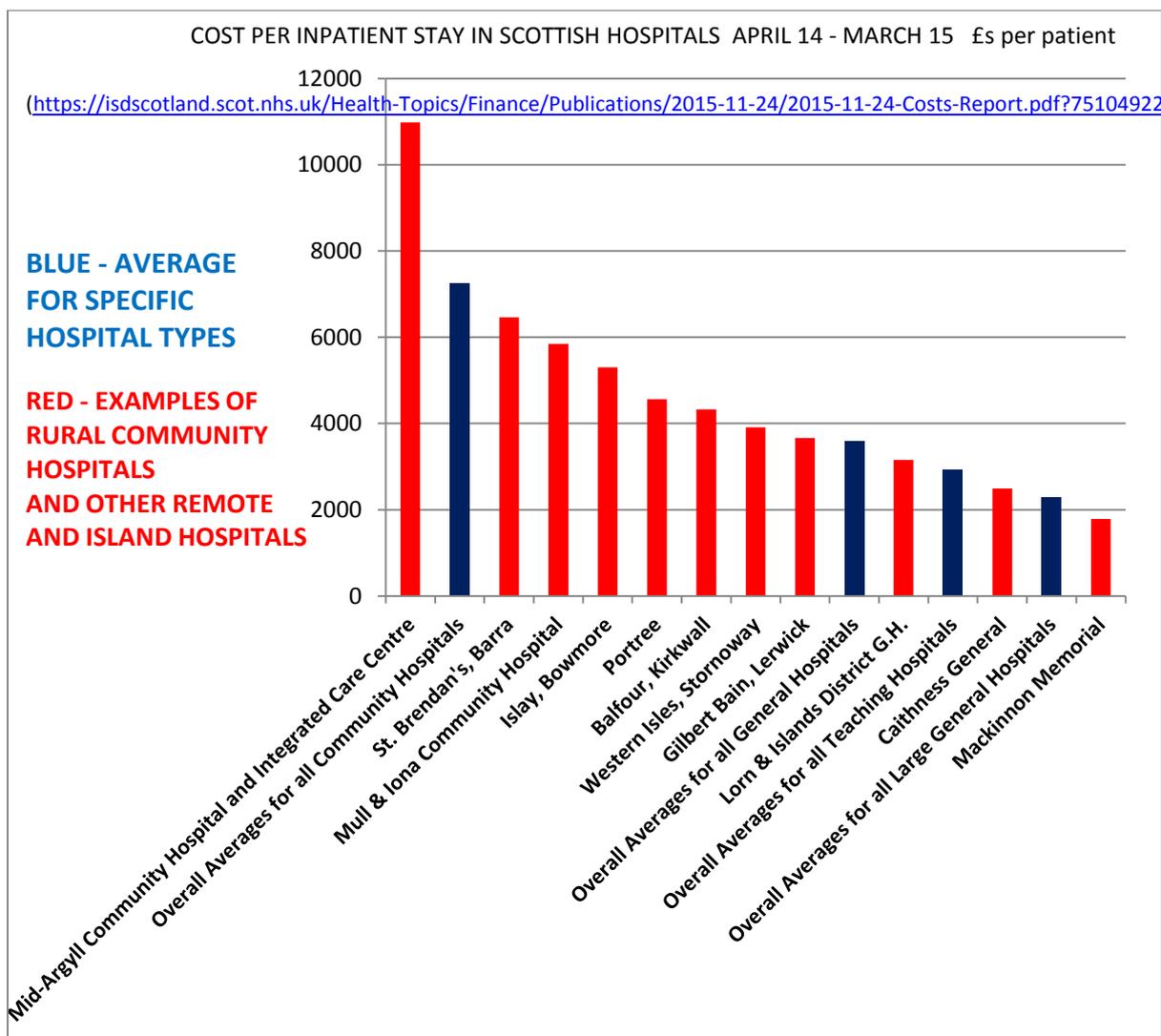
“The detail of the programme [SEEP] is being developed and over the next two years the Government will be working with stakeholders, piloting new approaches with local authorities and other delivery bodies, and undertaking further analysis to understand what is required and what is possible, before launching the new programme in 2018, after new powers over energy efficiency have been devolved to the Scottish Parliament” (Spice Briefing 2016 Domestic Energy Efficiency Schemes in Scotland)

The existing direction of travel from the Rural Fuel Poverty Task Force and the strategic working group is for the development of a more people-centred, outcome-based approach to energy efficiency and fuel poverty schemes, and this energy carer proposal has been developed with this mind set.

The wider benefits of achieving affordable warmth

As indicated in our introductory paper submitted to the Scottish Rural Fuel Poverty Task Force (*Highlands & Islands Energycarer Network – Pilot Proposal, March 2016*), remote rural Scotland, particularly the Western and Northern Isles, has the highest rates of fuel poverty in Scotland (almost double the Scottish average) despite all the efforts of existing Scottish energy efficiency programmes, including area based and national schemes.

We envisage that the pilot will be accessible to all remote rural communities in Scotland through nine host bodies (**Appendix Five**). The Energycarer model aims to support households to achieve verifiable warmth at home, to help offset any additional healthcare costs of living in failing homes. **As rural healthcare costs are the highest in Scotland the logic of supporting the affordable warmth needs of remote rural households to a more intensive level is plain and clear.**



The Association for the Conservation of Energy suggests that tackling cold housing effectively would be a net gain to the health service. This pilot will allow health service economics and local assessment, procurement and delivery of affordable warmth services to be evaluated properly and help to inform the methodology for fuel poverty eradication in remote rural communities.

“Cold housing is one of a number of important issues for public health and safety. Focusing more resources on tackling this crisis does not mean taking resources away from tackling other health problems, such as those mentioned...in fact it may free up resources to address them.”

(Association for the Conservation of Energy, Research Briefing, March 2015)

<http://www.ukace.org/wp-content/uploads/2015/03/ACE-and-EBR-fact-file-2015-03-Chilled-to-death.pdf>

In addition, the pilot scheme supports the direction of travel already outlined in the Scottish Government's plans for reshaping care for older people. The project's health needs-led approach will be innovative and match the cross-domain efficiency savings expected from health, housing and social care integration. Prioritising the delivery of support to households where there is leverage of additional health benefits is both socially and economically responsible in a time of restricted budgets.

“There is a strong and clear preference among older householders to live independently in the community for as long as possible. This was clearly recognised in the Scottish Government’s Reshaping Care for Older People programme, which noted that institutional options such as residential care and nursing homes were very expensive as well as being seen as very much a last resort by older people themselves. It also noted that emergency admissions to hospital of older people cost £1.4 billion each year.”
(Scottish Government, 2011, Reshaping Care for Older People)
<http://www.gov.scot/resource/0039/00398295.pdf>)

Level One of the four-tier Energycarer approach (see Project Summary above) is already being embedded in inter-organisational procedures and is improving referral mechanisms from care and health workers to Home Energy Scotland. Examples include:

- Healthy Homes for Highland
- NHS Western Isles Financial Inclusion Pilot
- Urban Energycarer-style initiatives have begun with the GPs at the Deep End link worker projects
- The NHS in Ayrshire and Arran alongside the Energy Agency are piloting in-home monitoring and the testing of health outcomes of insulation projects (*Area Based Schemes Wall Insulation – Interim Report, Executive Summary; Cassandra Dove, Energy Agency May 2016.*)

The Scottish Government has recently circulated a paper to the Scottish Rural Fuel Poverty Task Force summarising these and other health and energy efficiency programmes (*Discussion Paper – Potential Solutions – Referral Mechanisms; Scottish Rural Fuel Poverty Task Force – Meeting 5 – 23 February 2016.*)

The Energycarer pilot is expected to cost just 2% of the Scottish Government's annual energy efficiency budget. **This is significantly lower than Irish plans**

mentioned above and it may be justified to explore even greater levels of investment and have greater ambition.

The introduction of the pilot would be timed so that it is established prior to the new Scottish Energy Efficiency Programme being introduced in order to be able to maximise uptake of any new schemes (see proposed project timeline – **Appendix Nine**). It is suggested that the pilot is either funded from within the area based scheme budget, through partial redistribution of the existing allocation, or that the loans element of the SEEP are reduced to allow more targeted grant funding.

Wherever the funding comes from, it is vital that it is allocated to tackle the issues experienced in remote rural areas specifically. The Scottish Government has recently announced that its target to eradicate fuel poverty in Scotland by the end of 2016 is not going to be met; if remote rural areas are not given serious and sustained attention, the target will never be met.

Fundamentally, the project will help to establish more effective outcome monitoring. To date, we have only Energy Performance Certificate forecasts of cost and carbon savings on which to evaluate our programmes; this project will give us additional indicators of successful delivery in terms of warmth and health outcomes.

Finally, the project will test the adequacy and efficacy of the energy efficiency sector. If the eradication of fuel poverty is to be an effective National Infrastructure Priority, and the delivery of healthy, affordable warmth a strategic goal, then it is a reasonable expectation that:

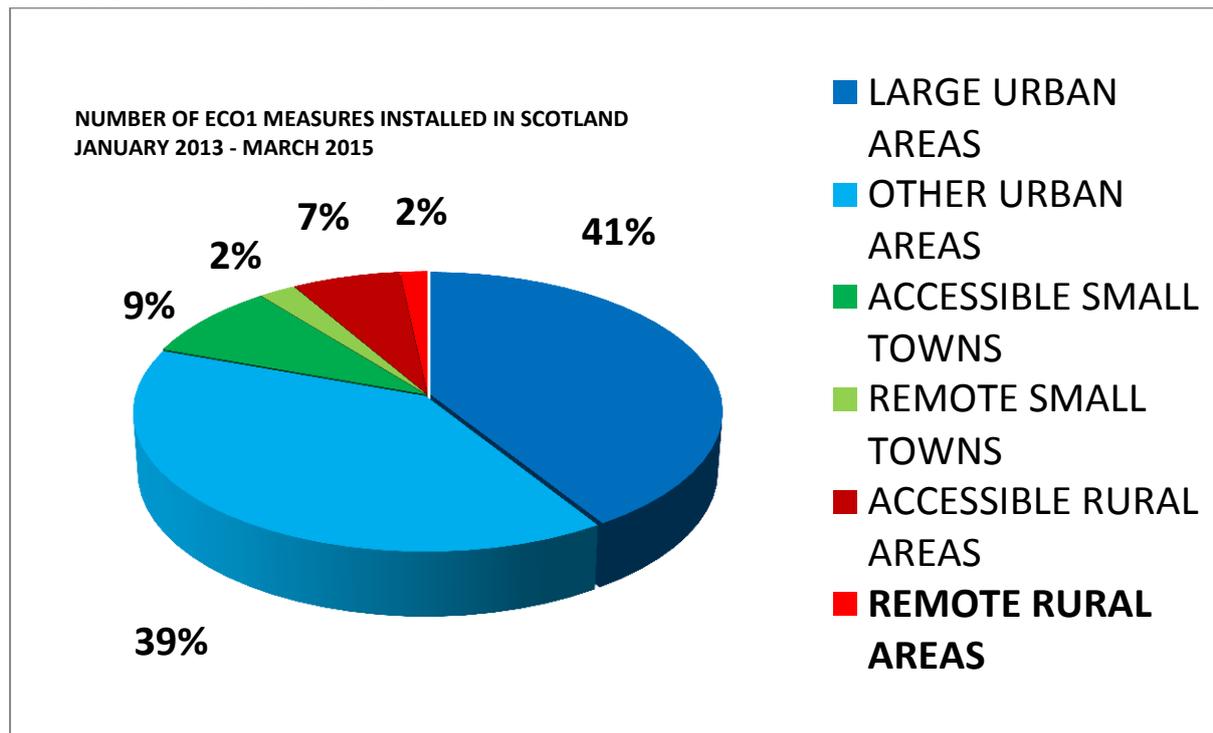
If a health service professional prescribes warmth, an energy efficiency professional will deliver warmth.

THIS IS THE ESSENCE OF THE ENERGYCARER PROPOSAL

WHO WILL BE HELPED - VULNERABILITY AND ELIGIBILITY

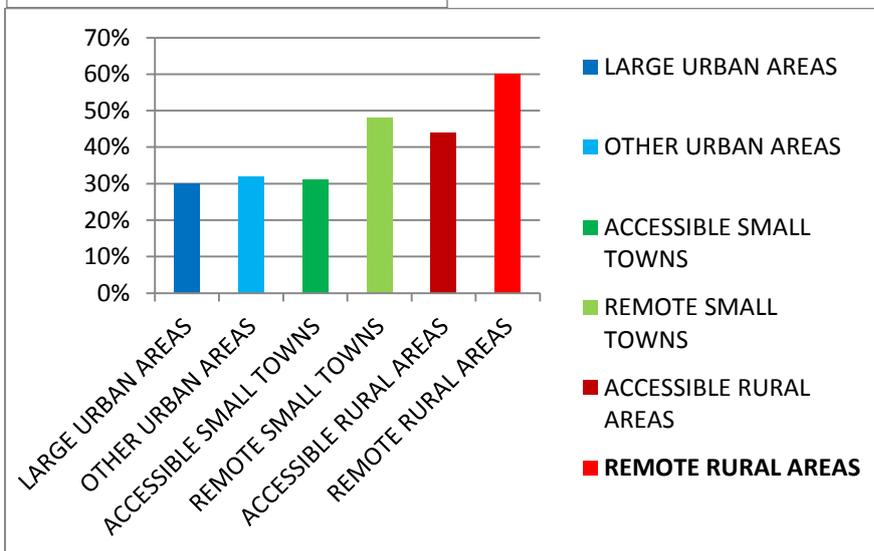
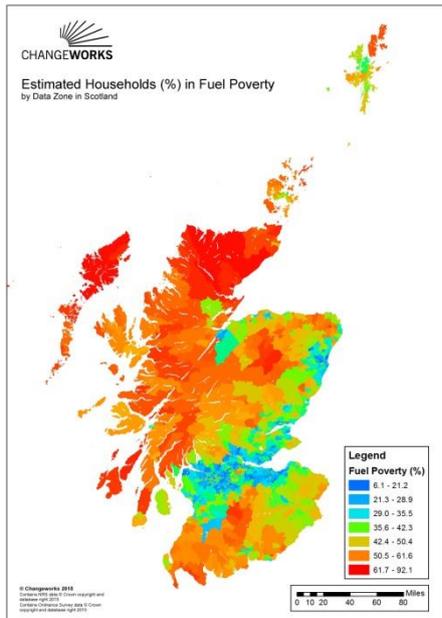
Vulnerabilities are factors that inhibit and/or prevent a household from achieving the necessary comfort levels and heating costs that together define affordable warmth.

The Scottish Rural Fuel Poverty Task Force is considering that future fuel poverty alleviation support should be directed and prioritised to the most vulnerable in society. This is a conscious prioritisation and recognises that, historically, fuel poverty alleviation has had more of a broad brush approach. We can see the impact of that lack of prioritisation in that, for example, although remote rural households suffer the highest degrees of fuel poverty in Scotland, the most recent report on ECO Delivery showed that only 2% of Scottish ECO measures from 2012-2015 (pie chart below) were installed in remote rural households.



(Source Energy Efficiency Measures installed in Scotland under the Energy Company Obligation (ECO1) between 1 January 2013 and 31st March 2015)

Fuel poverty mapping (e.g. the Changeworks map and the Scottish House Condition Survey 2014) shows that policy and geography have combined to create a real world locational vulnerability in which rural areas are most likely to have high degrees of fuel poverty and within this remote rural the highest.



(Fuel Poverty Levels and Rates, by Detailed Location (SHCS 2014))

Rural households have by their nature additional, locational vulnerabilities in being further removed from competitive market provision of energy advice, energy efficiency installs and cheaper heating fuels. Two additional, significant characteristics of many remote rural properties are a more challenging weather environment and a higher proportion of harder to treat and harder to heat property types.

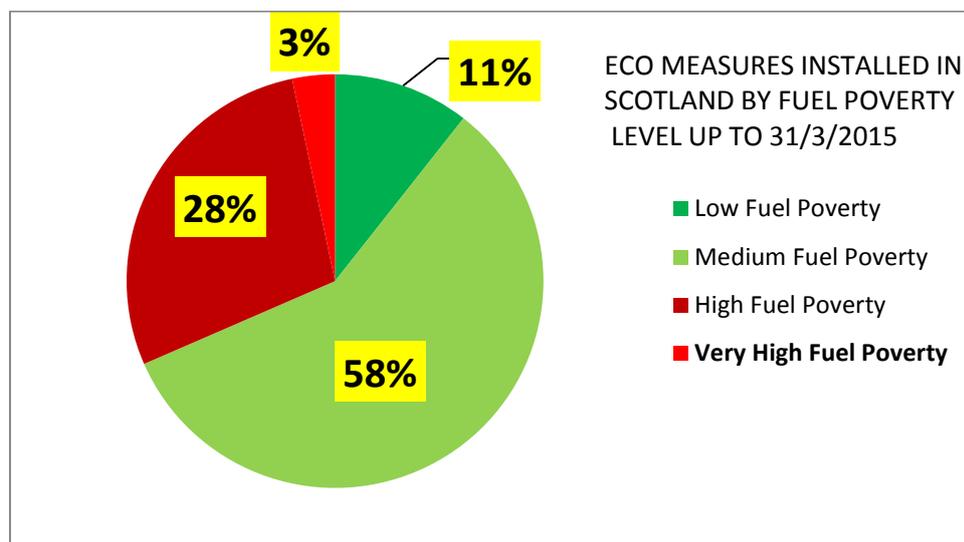
The Energycarer proposal has been designed to remedy some of this acquired disadvantage for remote rural Scotland and to prioritise the delivery of verified affordable warmth to households with the greatest need, particularly where the health of the occupants is compromised by a lack of affordable warmth.

In some respects all households experience disadvantage on a sliding scale of vulnerabilities.

Core vulnerabilities are:

- The extent of household poverty and disposable income
- The cost and choices of fuel available and the amount needed to be consumed to sustain warmth
- The qualities of a home in terms of fabric, ventilation and heating and any additional locational disadvantage
- The makeup and complexity of the family unit
- The health status and comfort needs of the occupant(s)
- The knowledge, understanding and behaviours of the household

One strange anomaly in terms of the historic allocation of Scottish energy efficiency funding is that, despite knowing for many years of the 2016 fuel poverty eradication target, a significant chunk of support from some schemes has not gone to households in poverty or significant fuel poverty. ECO delivery has, for example, been lowest in the households with the highest levels of fuel poverty (just 3% - see table below) and, increasingly, energy efficiency loans for the income rich are replacing grant schemes for the fuel poor.



Source: Energy Efficiency measures installed in Scotland under the Energy Company Obligation (ECO1) between 1 January 2013 and 31st March 2015, derived from table 17, page 30)

The vulnerability matrix in Appendix Two summarises the range of potential vulnerabilities that aggregate and impact on a household’s potential to achieve affordable warmth.

Eligibility for support from an Energycarer will be broad for the purpose of the pilot and will be fine-tuned under the experience of the pilot. The present Warmer Homes Scotland eligibility, which is driven by “passport” benefits, has the effect of creating a cliff edge of eligibility that is not subtle enough to pick up on all households where health and fuel poverty combine to create additional crises and where an informed remedy is lacking. It will be interesting to question to what extent might the identification of additional vulnerability factors create a “special circumstances” status, which could allow additional eligibility for core Government schemes.

There is a cliff edge to eligibility but not a cliff edge to vulnerability.

However, in essence, a cold-vulnerable household is one where an occupant has health and support needs, and requires an accessible and well-performing home environment that delivers affordable warmth and healthy humidity levels. If the appropriate comfort levels are not delivered then health suffers and ultimately the ability of the individual to remain in their home is threatened.

Scotland has an aging population and it is a strategic Scottish Government health and social care priority to enable people to remain in their home, comfortable, safe and healthy for as long as possible, with the aim of reducing time spent in expensive hospitals and care homes. The Government also recognises that safe and warm affordable housing and care at home are key components of successful health and social care delivery for all.

This Energycarer pilot scheme proposes that the delivery of verifiable affordable warmth becomes a similar strategic goal aligned to the same “prevention is better than cure” philosophy as these other services. The proposed service is a significant fit for two of the Scottish Government’s “National Outcomes” – “We live longer healthier lives” and “We have tackled the significant inequalities in Scottish Society”.

“Affordability” in the context of this definition is based on assessment of four elements – fuel type, national average costs, regional average costs and primarily the resources of the household - taking into account any eligibility for

utility company support like warm home discount, statutory benefits and Government heating and insulation schemes. **“Affordable” in essence means that a warmth outcome is realisable within household budget availability to the extent that it does not compromise other key household needs.**

EXISTING, LOCALLY CONTROLLED, LOCALLY DELIVERED SERVICES

The successful development of Handyperson, Care and Repair, Telehealth and Telecare (*Technology Enhanced Care*) Services are all on the rise as they strive to deliver appropriate in-home support to match the demographic, health and cost pressures of an aging population and support the ethos of quality care in the community for all. These services, considered together, aim to secure people healthy and for longer in their homes, to reduce overall health and social care budgets and also preserve the happiness, physical and mental health of residents.

These in-home support services all have common elements of **local delivery appropriate to local context**; they utilise local specialist contractors procured and managed locally, and in a rural context provide valuable **person-centred and accountable delivery**. Delivering energy efficiency via this model, which has a proven track record of success in the Care & Repair and Handyperson programmes, has immense potential, and will help tackle the current market failure for rural households trying to access professional energy efficiency advice and delivery in their homes. **An Energycarer pilot would be a key stimulant to enhancing the local energy efficiency market and ensure enhanced equality of access to energy efficiency and fuel poverty support.**

As **Appendix One** details, a wide range of ailments are exacerbated by cold and/or damp housing; it is estimated that cold and damp homes cost the NHS in the UK £1.6 billion per annum (Fuel Poverty Advisory Group, 2015). The delivery of effective affordable warmth in the home provides a more secure and reliable base for recovery, or can slow the onset of particular illnesses.

The current eligibility and provision landscape

Under the umbrella of energy efficiency and fuel poverty measures, vulnerable households are currently supported by energy companies through a range of targeted priority service schemes – including Priority Services Register, Warm Home Discount and Special Assistance Schemes.

These households are also supported by Government and ECO funding through their eligibility for improved insulation, draught protection and heating measures delivered in Scotland via HEEPS and other schemes.

However although these measures, where implemented, will improve the 'modelled' energy efficiency of a property, existing schemes do **not guarantee or verify that affordable warmth is delivered** and cannot and do not confirm that a home is proven to be effectively heated to match the accepted target healthy temperatures and comfort levels.

Also, not all cold-vulnerable households are eligible for such support, which is frequently based on entitlements to benefits rather than actual health status and the bureaucracy of having to apply for this support is often sufficient to deter many potentially eligible households from claiming it. It is essential that energy efficiency measures are prioritised for those in true poverty and those with the greatest need.

A health professional may in theory "prescribe heat" but it is argued here that the current model of energy efficiency delivery cannot verify delivery of that prescription. Scotland needs to make best use of its energy efficiency budget to deliver real affordable warmth with the consequent real world cost, health and carbon savings.

An Energycarer delivers this holistic, person- and home-centred approach and through monitoring confirms attainment of goals.

WHAT IS AFFORDABLE WARMTH?

Verifiable, affordable warmth means achieving the Government's expected warmth outcomes at a cost equivalent to no more than the regional average for the relevant fuel, property type and property size, while taking into account household income levels. *(The averages are regional since there is significant variation in access to mains gas and the cheapest electricity tariffs, and generic, modelled national averages do not account sufficiently for local variations in fuel type availability, fuel type costs and consumption levels)*

The Scottish Government, through its 2002 Fuel Poverty statement and subsequent policy statements, aspires for all Scottish households to achieve key affordable warmth outcomes.

“For elderly and infirm households, this is 23°C in the living room and 18°C in other rooms, to be achieved for 16 hours in every 24.

For other households, this is 21°C in the living room and 18°C in other rooms for 9 hours in every 24 (or 16 in 24 over the weekend); with two hours being in the morning and seven hours in the evening.”

It must be recognised that not all households can afford the notional regional average price. Many households under-occupy multi-roomed buildings, have low incomes and few choices in the purchase of fuels. However, it is argued that it should be possible to make effective use of a package of improvements to at least secure delivery of warm zones in cool properties if a whole property approach is not realisable; the Energycarer will look to implement the most effective, economical solution to deliver the outcome. This may be seen as an admission of failure, but in many properties monitored by LSHA a reallocation of energy spend and heat input to key rooms delivers a warmth outcome not achieved by trying to heat an entire property, and supported switching to cheaper suppliers allows reallocation of finances.

The major outcome is the verifiable achievement of the desired warmth targets

Indirect outcomes, which will need to be properly assessed and evaluated, include the extent to which the project contributes to improved health outcomes. This is a challenging area, but indicators will need to be developed that show how an Energycarer’s work contributes to stabilising health and improving health, avoiding care home and hospital admission and facilitating discharge, among others.

Key Outline Performance Indicators will include

- No. of households assessed, supported and monitored
- No. achieving the target affordable warmth outcome
- No. of successful collaborations between Health, Housing & Social Care Sectors
- No. of eligible households successfully accessing Government heating and insulation programmes
- Evaluation and performance testing all of the applied solutions
- Live Learning, Annual and Final Project Reports

(Detailed project targets are listed in the Project Summary)

REMOTE RURAL MARKET FAILURE

The relationship between high rates of fuel poverty and a lack of suppliers of remedies is a pretty clear one. The Energy Saving Trust and Changeworks carried out a supply chain analysis of remote rural and island areas and published their report in Spring 2015. (*SUPPLY CHAIN ANALYSIS OF REMOTE RURAL AND ISLAND AREAS (EST and CHANGEWORKS SPRING 2015)*)

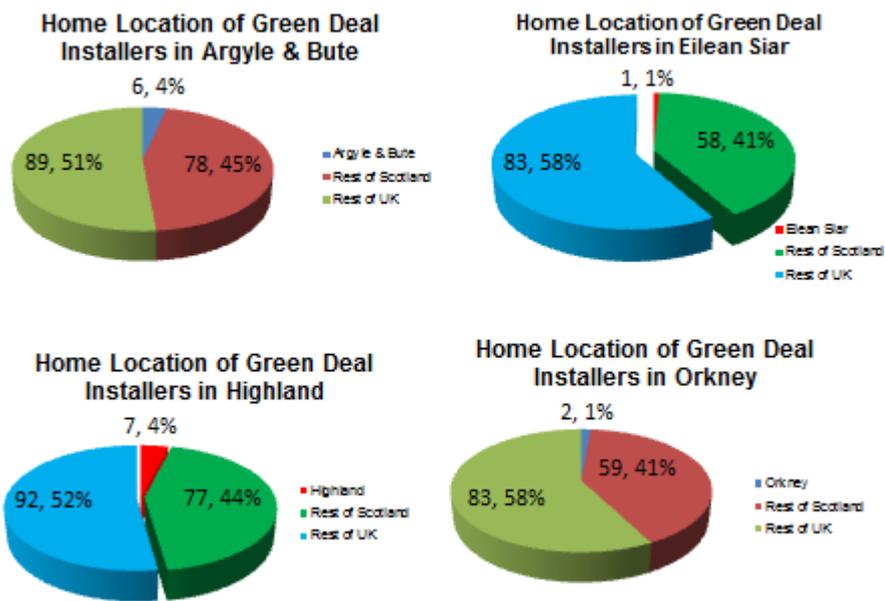
The report, which was principally an analysis of the availability of green deal and other statutory providers, identified significant market failure. It identified very few locally-based practitioners, but sadly there was no discussion at all about the overall wider supply chain context in remote and rural and island areas and no assessment or mention of comparable supply chains that exist and function well, such as the Care & Repair service that already delivers similar measures.

Facts and figures distilled from the EST/Changeworks document include:

- There are more certified renewables businesses than certified energy efficiency businesses – it is the renewables industry that dominates existing supply and renewable heat is the presumed major growth area rather than fabric-led energy efficiency measures
- There are few Microgeneration Certification Scheme (MCS) certified installers in the islands
- Why do companies not go for Certification? Anticipated lack of a financial return and a limited market.
- Why do companies not engage in this market? Concern over additional time and cost to access remote areas and a challenge to cope with the bureaucracy and costs of training and certification needs
- Concern that the Green Deal ORB is not an effective tool for finding truly local businesses, which are obscured by the many companies claiming to deliver nationally but with no real intent to deliver to remote areas. The ORB exaggerates available delivery, for example only one registered company in the entire study area is really local and delivers an internal wall insulation option.
- Concern over future of Green Deal, which is only being kept alive by the Green Homes Cashback voucher scheme
- Concern that HEEPS schemes are dominated by large external suppliers working with local authorities rather than small local businesses

- No Green Deal Assessors located in the south of the Western Isles

The Green Deal Orb paints a very poor picture of the number of available local installers in the Highlands & Islands. The following charts were prepared in March 2016 and show very significant market failure. In the entire Highlands & islands no local authority has more than 4% of theoretically accessible installers local to their population. **Given that most of the other ‘providers’ will not travel to remote communities, this is a significant barrier to delivering enhanced services and is another issue that the Eneycarerer pilot project will tackle directly.**



The EST findings and the Green Deal Orb pie charts confirm that not enough is currently being done to consolidate and expand on the work of the existing, locally-based providers in the Highlands and Islands such as TEAS, AliEnergy, ILM, Pentland, LSHA, THAW and Shetland Islands Council; in fact, the EST/Changeworks report failed to highlight the positive groundwork done by all of these organisations to deliver support to remote communities and their potential role as a base to expand diversified services. Further afield, organisations like SCARF and The Energy Agency have accumulated decades of experience in delivering community support and are increasingly working with the NHS and directly with cold-vulnerable communities.

For years we have built up expertise in small communities only for the project funding to end and the skilled workers disappear. Climate Challenge Fund and Leader have supported and resourced many new starts, but too often have not secured long term value from their funding.

Three important recommendations from the EST supply chain analysis report

- The Scottish Government should consider how best HEEPS programmes could be developed and promoted to small rural and island businesses as there is little current involvement. **Suggests pilot projects.**
- Encourage a one stop shop for remote rural and island areas to aggregate demand and coordinate supply
- Ring-fence Green Homes cashback funding for remote rural and island areas and provide additional travel funds

It is logical then, given this market failure, to seek instead to build on the successes of existing practitioners and supply chains. Care & Repair is able to run effective, audit compliant, local tendering systems and ensure delivery in remote areas of the Highlands & islands using local contractors and there is significant crossover in the type of work undertaken, including structural modifications, access improvements, plumbing, electrical and heating work. In fact, the Care & Repair Model has already road-tested the Energycarer approach:

“The provision of advice and information is a central part of Care & Repair's role, as well as providing practical assistance with grant applications and co-ordinating repairs. Care & Repair is a home-based and personalised service, which puts the client in control of decisions. Staff visit people at home and assist them through the entire process of deciding what work is to be done, arranging finance and organising the building works.”

(Care & Repair Scotland Business Plan 2016 – 2019)

In 2014-15, the 35 Care & Repair teams across Scotland reported 184,448 interventions that helped older people and people with disabilities to remain independent by providing advice and assistance in repairing and adapting their homes, **showing that local procurement and delivery can function very well.**

The Scottish Government document, “Age, Home and Community: A Strategy for Scotland’s Older People: 2012 - 2021” confirmed the Government’s desire to shift the balance of care by supporting people to live independently in their own home; the report has identified the work of Care & Repair teams as a

crucial part of shifting the balance of care from acute services to prevention - from dealing with crises, to preventing them from happening.

The Energycarer pilot will build on this model to ensure verified delivery of affordable and necessary warmth, not just for an aging population but for a broad range of eligible, cold-vulnerable households in remote rural communities across Scotland.