ENERGY EFFICIENCY SCHEMES IN RURAL OFF-GAS GRID AREAS:

Calor has long held concerns regarding access to, and the delivery of, properly targeted help and support for fuel poor and vulnerable rural householders living off the gas grid and who want to improve the energy efficiency of their homes. The Energy Company Obligation (ECO), in all its forms, systematically failed rural off gas grid homes due to a combination of poor policy design and discretionary delivery by obligated suppliers. As such rural off gas grid households continue to be least likely to receive help whilst experiencing the most severe levels of fuel poverty.

Historic Failure of Energy Efficiency Schemes:
The Government’s previous energy efficiency schemes – CERT and CESP – almost completely bypassed the countryside owing to a combination of poor policy design and the understandable desire of the ‘Big 6’ obligated suppliers to hit their targets for the lowest possible cost. This meant that they pursued energy efficiency measures almost exclusively in urban areas. Furthermore, the data used by the Big 6 to identify eligible households missed them out entirely:

- CESP targeted areas with significant levels of low income households. These were identified through the Indices of Multiple Deprivation (IMD).
- The CESP eligible areas were further broken down by Data Zones in Scotland with average populations of 750 people and approximately 300 households.
- Those eligible for a CESP scheme were from the 15% most income deprived areas in Scotland, based on comparable level of income deprivation.
- However due to these criteria, few rural off gas grid areas qualified as they didn’t have the density of households required to qualify for assistance.

In light of this, Calor lobbied hard during the design phase of ECO for dedicated rural support, and as a result the Government included a rural ‘safeguard’ in the Carbon Saving Communities obligation (CSCo) part of ECO. However in spite of this, during the first year of ECO there was significant under-delivery of measures to rural off gas grid households within both Affordable Warmth and the rural CSCo elements of ECO. In recognition of the serious under-delivery of ECO into rural areas, and following a formal consultation process, a series of amendments were made to ECO in mid-2014 to encourage measures in non-gas fuelled homes, and into rural areas. However, there is still no evidence of any significant deployment for householders who are both rural and located off the mains gas grid. In fact the Government has confirmed that it doesn’t capture this data – see below. The issue lies within the Government’s definitions of ‘rural’ and ‘off gas grid’.

The difference between ‘Rural’, ‘Off Gas’, and ‘Rural Off Gas’:
Currently no metrics exist to differentiate between ECO delivery to rural off-gas grid, rural on gas grid and urban off-gas grid households - “what you can’t measure you can’t manage!” Responses to Parliamentary Questions have confirmed that the UK Government does not currently capture this information, yet doing so would help ensure that policies can be monitored and adjusted to ensure there is more equitable delivery and sufficient amount of investment and activity is devoted to households which are both rural and off the gas grid.

A settlement can be rural but still have access to mains gas. UK Government defines ‘rural’ as a settlement of up to 10,000 households, suggesting a community still on-gas, potentially on the urban fringe. This same definition is used in Scotland under ECO. This means that the reported recent increase in ‘rural’ ECO support is unlikely to be benefitting settlements which are smaller in size (less than 1,000 people) and almost exclusively off the gas grid. Whilst the ECO limit remains at 10,000, smaller rural off gas grid communities will continue to be missed whilst delivery is focused into larger ‘rural’ on gas communities which are easier and cheaper to both find and deliver measures into. Furthermore, whilst the widening of the eligibility criteria from the lowest 15% of areas identified under the Index of Multiple Deprivation (IMD) to the lowest 25%, has undoubtedly driven additional delivery, this has not been where it is most needed in off gas grid rural areas. Indeed the widened criteria is likely to further skew delivery away from the most deprived rural areas towards the easier to reach semi-rural/suburban areas where it is easier and cheaper to target multiple or clustered homes. Finally off gas grid doesn’t always mean rural - around half of all off gas grid households are located within urban areas and rely primarily on electricity for heating. Changes to incentivise delivery of ‘non-gas fuelled measures’ via ECO Affordable Warmth have
prioritised the replacement of electric heating systems which, whilst meeting the ‘off gas grid’ criteria, tend to be located in urban areas e.g. high rise flats. Yet again rural off gas grid households, typically fuelled by heating oil and LPG fired systems, are missing out.

**Energy performance certificates (EPCs) and Standard Assessment Procedure (SAP) methodology:**
Calor Gas has been critical of the design of EPCs for over a decade as the principal measure on the EPC is based on running costs (£s) and as such they are unreliable as a measure of “energy efficiency” in off-gas grid areas. The current EPC system in Scotland grades houses by their notional cost of providing energy for heating and hot water per square metre. SAP ratings between 1 and 120 must be provided before buildings can be erected or converted. The lower the energy cost, the higher the rating. These SAP ratings are effectively transposed into the EPCs where they are shown in the form of bands from A (cheap to heat) to G (expensive to heat). As all energies used to heat properties in off-gas grid areas (heating oil, electricity, solid fuel and LPG) are more expensive than natural gas then it follows that any buildings’ EPCs will automatically score lower grades – typically at least one if not two grades lower i.e. an ‘F’ (rural) rather than a ‘D’ (urban). This has serious implications for the future treatment of rural property owners. Calor is aware that the Scottish Government is considering the regulation of energy efficiency for owner occupiers (see REEPs below) which could see EPCs used to measure mandated energy efficiency improvements before owners could market their properties for sale. This could seriously disadvantage rural property owners who would face much higher retrofit costs if such a policy was implemented without addressing these primary concerns.

**HEEPs and REEPs:**
The Scottish Government’s Home Energy Efficiency Programme for Scotland (HEEPs) includes an Area Based Scheme (ABS), whereby, responsibility for delivery of the programme has been given to local authorities, who are expected to be able to target the funding based on their understanding of housing stock and their own Local Housing Strategies. However, funding is still allocated based on a mix of data, including SIMD, council tax banding and the Scottish House Condition Survey. The ABS scheme targets hard-to-treat housing with solid wall insulation and is designed to lever ECO funding in to Scotland. However, to date, it is not clear how many homes have benefited and in what areas.

The Scottish Government has also promised to implement ‘Regulations for Energy Efficiency in the Private Sector’ (REEPs), although any consultation on this has now been delayed until after the 2016 Scottish Parliamentary elections. It is likely that these regulations will be enforced on point-of-sale. i.e. homes will need to meet a certain EPC score before they can be sold. Unless the principles of financial sustainability and equitability are enshrined, there is the possibility that these regulations could disproportionately disadvantage rural home owners. The REEPS working group intends to use Energy Performance Certificates (EPCs) to underpin the regulations.

For off-grid homes, this could be very expensive for the following reasons:

- The REEPs technical working group recognises the flaws with EPCs and is exploring the possibility that off-grid and hard-to-treat housing would require ‘variability’ in setting standards. However, it remains the case that it will be more expensive to retrofit hard-to-treat houses off grid to achieve a higher grade than on-grid.
- REEPS could exacerbate the existing disadvantages experiences by rural homeowners. Access to the RHI and FIT is determined by a minimum EPC rating (D or higher), so in order to meet a future REEP standard, many rural homeowners will not have equitable access to funded incentive schemes in order to improve their property’s EPC rating.

**The Cost of Government Energy Efficiency Programmes to Off Gas Grid Rural Households:**
In November 2014 The Telegraph\(^1\) reported that rural householders had paid over £40million into ECO and yet had received on average less than £2 per household in return. As ECO is funded via a levy on consumer bills, the cost burden is being disproportionately carried by poor and vulnerable off gas grid consumers who are failing to benefit from the schemes.

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\(^1\) [http://www.telegraph.co.uk/finance/personalfinance/energy-bills/11217467/Rural-homes-neglected-under-energy-efficiency-scheme.html](http://www.telegraph.co.uk/finance/personalfinance/energy-bills/11217467/Rural-homes-neglected-under-energy-efficiency-scheme.html)
Scottish Government’s draft heat generation statement:
Any future recommendations to tackle rural fuel poverty should also take into account present policy on heat. There is little in the draft statement that focuses specifically on off-grid solutions. For instance, Calor questions whether a significant proportion of off-grid households will be among the 40,000 set to benefit from the increased funding for district heating. Likewise, measures to extend the gas grid will not reach many rural communities beyond the periphery of urban/rural Scotland.

At present the ‘heat hierarchy’ places too much emphasis on the future role of electricity to provide an increasing proportion of Scotland’s heat supply. Calor has significant concerns regarding the technologies currently supported by the Scottish Government in order to reduce carbon emissions. The current heat statement continues to place a great deal of emphasis on the role air and ground source heat pumps could play towards meeting domestic energy demand to 2050. Various authoritative studies from organisations such as the Energy Savings Trust have questioned the widespread application of these technologies as cost-effective and technical solutions in existing properties.

It is evident that instead of providing support, and in spite of recent changes, Government policy continues to actively disadvantage rural off gas grid householders. Whilst changes have resulted in increased delivery into semi-rural areas, deeply rural off gas grid households continue to receive little support. Action is needed now to amend energy policy to ensure that the off gas grid rural fuel poor not only contribute to the cost of delivering energy policy, but actually start to see some benefits. Key policy suggestions would include:

1. Ensure that current and future government energy policy does not unfairly disadvantage rural off gas grid householders – this will require a new approach to the way off-grid homes are assessed
2. Ensure that policies on heat, energy efficiency, building standards and fuel poverty are aligned and complement each other.
3. Provide equal access to government incentive and assistance schemes by mandating ECO Suppliers to deliver into rural off gas grid areas, and to monitor activity levels (something Scottish Government should consider via the new powers promised in the Scotland Bill)
4. Ensure that effective off-grid heating technologies, such as heating oil and LPG condensing boilers, continue to be made available in schemes such as the HEEPs cashback scheme (although this has now been cancelled due to a lack of funding).
5. Get the funding right - dedicate appropriate resources to tackling rural off gas grid fuel poverty as part of the national fuel poverty scheme.