

Scottish Rural Fuel Poverty Task Force
Issues with installing measures in hard to treat properties

1. Issues

- a) Poor weather conditions in many exposed rural locations create challenges in the selection of measures and installation that complies with national or area based energy efficiency scheme timeframes and ECO rules:
 - i) Cavity walls in exposed locations would benefit from external wall insulation (EWI) - which would make good any issues with damaged render as well as providing insulation. Where cavities are already filled with glass / mineral wool then these can present a damp problem and the insulation is best removed. But the RdSAP would not show a recommended measure if the cavity is already filled, so ECO would not be available. If the cavity is not already filled then the recommended measure would be cavity wall insulation (CWI) and a bead or foam system could be provided. Arguably, these measures would not provide the same thermal performance in exposed locations compared to EWI. Filling the cavity and then applying EWI would be technically possible – and would provide the best thermal performance - but are not allowable for ECO. In theory, weather conditions are a factor in specifying hard to treat cavities but this doesn't seem to result in approvals for EWI on cavity wall buildings
 - ii) Stringency of pull-out and wind load testing required mean that the time to go through building warrants and install measures is lengthened compared to less exposed areas – creating problems in delivery of schemes to deadlines
- b) Many old properties in rural areas have extensions, a high proportion of which are cavity wall. Properties with small cavity extensions struggle to attract ECO funding and therefore remain uninsulated unless additional funds can be found
- c) A high proportion of timber frame properties are found in rural areas, which are difficult to insulate. Internal Wall Insulation (IWI) is recommended but this is often unattractive to householders due to disruption, the need for redecoration and potential loss of room size (although systems exist that minimise loss of room volume and do not involve loss of traditional features). EWI is generally not advisable due to possible loss of the ventilation that is required in order to prevent dampness and rotting of the timber frame. Some systems (such as ECAP) exist that can cope with the ventilation issues but this does require venting of the EWI system and isn't suitable for all properties. Also the thermal gain by applying the EWI to the outer leaf will be undermined by the venting of the space behind (as you will be insulating the layer of cold air behind the insulation board). The problem is exacerbated by the fact that some RSLs are installing EWI on timber frame properties (and do not access ECO) resulting in many requests for EWI work on neighbouring private sector properties. Further investigation is required to clarify the options for use of EWI in these circumstances and to identify practical solutions for these property types
- d) Use of ECO means that measures must be selected that result in a high carbon saving according to the RdSAP but these are not always the measures that provide most thermal comfort to the householder (e.g.

installation of underfloor insulation can be very useful in exposed locations but results in a small carbon saving and attracts low amounts of ECO – some ECO providers may not fund it at all)

- e) Problems with RdSAP software have resulted in many measures that are essential for insulation of hard to treat houses being under-valued in terms of carbon saving (and therefore attract less ECO) or omitted entirely. Previously, lack of recognition of room – in- the- roof meant that carbon savings were undervalued for that measure, resulting in many jobs not attracting sufficient ECO funds to go ahead. More recently, software issues resulted in IWI not being recognised as a measure by many software systems
- f) The fragmented nature of rural populations mean that installation jobs cost more to deliver but are less attractive to ECO providers, who prefer jobs to be concentrated within areas
- g) Householders are often unwilling to accept IWI or room in the roof options due to concerns over loss of room volume or existing traditional features and the potential disruption while work takes place. This lack of confidence regarding these measures have a greater impact in rural areas, where predominant build types have fewer treatment options available to them. In fact, IWI systems do exist that minimise loss of room volume and allow cornicing and other existing features to remain in place, untouched. Use of multi skilled teams can work room by room, allowing the householders to remain at home during the install, with minimised disruption.

2. Analysis of the root cause of the issue

- a) The ECO rules are complicated and do not take into account the conditions that pertain to rural areas
- b) Ongoing issues with RdSAP software that still doesn't adequately take into account rural build types
- c) The lengthy and complicated process for ECO compliance, reporting and draw down mean that administration costs escalate, which add to the cost of each installation job
- d) Technical issues with installing measures on some rural build types and a narrower range of options available
- e) The priorities for carbon saving are sometimes in opposition to those for fuel poverty and there is a disconnect between policies to address carbon reduction and fuel poverty. Energy efficiency schemes that are tied to ECO funding are essentially chasing carbon saving in order to secure sufficient funds. But some of the measures that we would recommend in order to address fuel poverty and debt do not result in sufficiently high carbon savings as identified by current software

3. Evidence

A long list of examples available from HEEPSABS schemes.

An indicator of the presence of “unproductive” costs: One installer involved in delivery of HEEPSABS employs 55 staff – 20 of which are administrators. A similar sized company that is not involved in ECO employs 3 administrative staff – the rest are employed to install measures.

4. Possible Future Solutions

- Identify an alternative to ECO
- Scottish Government to allow the design of energy efficiency schemes that do not rely on ECO
- Allow for measures that are locally relevant and based on individual property needs – as recommended by local surveyors rather than being tied to software calculations
- Allow standard cavities in exposed locations to be identified as hard to treat cavities that can be treated by EWI under ECO (or Scottish Government) rules
- Undertake research on treatment of timber frame with EWI – the impact on dew point, potential dampness issues and thermal performance