

Improving the efficiency of housing in Cumbria

Summary

Cumbria is a large and sparsely populated county, which has traditionally made it a challenging place to set up wide-ranging schemes to install insulation and other efficiency measures in homes. Cumbria Energy Efficiency Advice Centre (CEEAC) has been successful in marketing the advantages of energy efficiency, arranging funding for discounts on installations, and then managing contractors to deliver a rapid, high-quality service to the customers. In the past two years this has resulted in the insulation of over 9,200 cavity walls and 5,300 lofts and a range of other measures. The result is savings of over 12,500 tonnes/year of CO₂, over £1.6 million/year in reduced fuel bills for the households involved, and homes that can be comfortably and affordably heated in the winter.

The two factors that have been most important to the success of CEEAC are funding and contractor management. CEEAC secures funding from a wide range of sources, which allows it to offer varying levels of discounts to everyone in a target area, rather than just to those who are worst-off financially. There has also been great effort to identify good contractors to carry out the installations, and set up a stringent quality control process to ensure that the work is of a high standard, and any problems are dealt with quickly and efficiently.

Cumbria EEAC represents an example of best practice in implementation of energy efficiency schemes for householders in the UK.

The organisation

Cumbria EEAC is part of the Community Services Directorate of Carlisle City Council, a local authority within Cumbria. It was established in 1996 to serve Carlisle, and Suzanne Burgess the current Manager was its first staff member. Under her direction, CEEAC had its remit extended to the whole of Cumbria in 2000, and expanded to managing installations as well as giving advice. The centre currently employs 12 people, some on a part-time basis. The goal of Cumbria EEAC is to increase the energy efficiency of households throughout the region, and it receives grant funding from various sources to enable it to do this.

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Context

Improving the efficiency of energy use is often the most cost-effective way of reducing carbon emissions. There is significant potential for improving the efficiency of homes in the UK, in particular through cavity wall and loft insulation, which are very cost effective. Improved efficiency also makes homes more comfortable, and can bring significant health benefits to people who were previously unable to keep their homes warm. It is for these reasons that there is both national and local grant funding to help with improving the efficiency of homes.

Cumbria is a large and sparsely populated county, and it has proved difficult to create programmes for installing insulation and other energy efficiency measures in this type of area. It is difficult to get information to householders, and sometimes too costly for installers to travel long distances to make a single installation. There are significant numbers of houses that are not yet properly insulated, but not all the owners are aware of the need to insulate and the savings they could make, or how to go about the process. Also, many are not aware of the grants and discounts that may be available. Cumbria Energy Efficiency Advice Centre (CEEAC) initially just provided advice on energy efficiency, but found that more was needed to achieve a significant uptake of energy efficiency measures. CEEAC has therefore established an integrated programme to provide advice, funding and installations throughout Cumbria.

Technology and use

CEEAC provides energy efficiency advice and arranges for the installation of energy efficiency measures and improved heating systems. These are all standard measures, in particular cavity wall insulation and loft insulation, which are easy to install in suitable existing properties, and are very cost effective. Between 1998 and 2004, CEEAC arranged insulation for between 3,000 and 4,000 homes, but the scale and scope of their work has expanded greatly in the past two years. In this short period of time, they and their contractors have installed cavity wall insulation in over 9,257 homes, and provided loft insulation for 5,350 homes and 750 hot water cylinder jackets. They have also given away over 8,500 low energy light bulbs, and carried out small programmes to install solar hot water heaters and air source heat pumps.

Standard glass mineral wool cavity wall and loft insulation are used. In cavity walls this is installed by contractors who drill holes in the brickwork, blow in the insulation and fill in the holes. Loft insulation is supplied in rolls. It can be installed by contractors, but in some cases CEEAC provide insulation materials, protective gloves and instructions for householders to carry out a DIY installation.

How users pay

There is a bewildering range of grant support available for improving energy efficiency in homes. Some funding comes from national funding programmes, in particular the Energy Efficiency Commitment (EEC) programme, which is an obligation on energy suppliers to invest in measures to improve energy efficiency. (The current round of EEC funding has finished.) Some funds are provided by local authorities for work in specific geographical areas. Further funds may be available for households with particular needs, and for particular technologies.

A key role of CEEAC is to access and manage these different sources of funding, and make them easily accessible to households who come for advice. Where possible CEEAC works in a specific area at a time, so that marketing and installation can be targeted, and local awareness created which boosts interest. Within Carlisle, where a programme is currently running, CEEAC began by identifying the council wards with highest fuel poverty, using the Fuel Poverty Indicator database provided by the Centre for Sustainable Energy, another Ashden Award winner, supplemented by local knowledge. Some households are eligible for free efficiency measures, and funding sources are managed so that some grant is available for every type of household. When a householder contacts the CEEAC help line, a quick assessment can be made of how much they would need to

pay, followed by a referral to the appropriate contractors for a survey visit and installation. Typical prices to householders are:

- Cavity wall insulation – from free to £125. In 2006 nobody paid more than £75
- Loft insulation – from free to £125. In some areas with greater fuel poverty, if a household did not qualify for free installation, Cumbria EEAC arranged for free insulation materials to be delivered with protective gloves and instructions for the householder to install it themselves.
- Solar thermal panels – these were initially subsidised by £400, giving a selling price of £2,250. Once the market was primed, the subsidy was removed.
- Air source heat pumps – installation costs are £6-7,000, but a £3,000 grant is currently available to help with the cost.

The advantage of the way that Cumbria EEAC works is that whenever they start in a new area they have something to offer everyone, whether it is free installation, a grant or free materials for DIY installation. This leads to a positive attitude towards the organisation, and also to the issue of insulation and efficiency, with no perceived “unfair” favouring of certain households over others. Rates of uptake are often very high. For instance in one Carlisle ward over 75% of suitable houses have been insulated, and most of these were in private ownership where it is often more difficult to persuade people to have measures installed.

Training, support and quality control

The insulation technology installed by the Cumbria EEAC contractors is simple and does not need any explanation regarding its use. Where heating systems are installed, the contractor ensures that the user has sufficient information to make good use of the equipment.

One of the most difficult tasks for organisations providing subsidised efficiency measures, is to ensure that customers get good service. Some contractors appear to take the attitude that if people are not paying, then they will not demand high standards of work – particularly in rural areas where there is not the incentive of many other local referrals. CEEAC sees one of its key roles as working on behalf of householders to ensure the highest standards of service from contractors.

In order to achieve high standards, CEEAC encouraged a reputable insulation contractor to set up a branch in Cumbria, and to train and use local staff to do the installation work. CEEAC makes clear to contractors the standards of service that are expected, including completion of surveys within 10 days of referral and installations within 14 days of survey. The contractors must log the outcome of all surveys with CEEAC within one day of undertaking them, and produce a full report on all jobs completed or cancelled on a weekly basis. All work is followed up by a customer questionnaire, which has a very high response of about 65%. The efforts that CEEAC has taken to improve quality standards show up in the level of customer satisfaction. In monthly summary reports, between 93 and 99% of respondents agree or strongly agree that the contractors provided an excellent service. Contractors are given positive feedback for this high level of approval, and are also told very quickly about any complaints. CEEAC staff now know that if complaints about “leaving a mess” and “not repointing properly” start to increase, then it usually means that a new installation crew has started! By showing that high quality work is provided, CEEAC has developed an excellent local reputation, and this results in many word-of-mouth referrals

Ensuring that contractors deliver good-quality work on time, and handle any problems well, is one of the most difficult tasks for EEACs around the country, and Cumbria EEAC is leading the way in demonstrating best practice for contractor management.

Benefits

The work of CEEAC has clear environmental benefits. Using average factors for energy and carbon savings for different efficiency measures developed by the Energy Audit Company (another Ashden Award winner) CEEAC estimates that the measures installed in the last two years alone are reducing emissions of CO₂ by over 12,546 tonnes/year and saving householders over £1.6

million/year in fuel costs. The programme has cost a total of £4.1 million. £1.3 million has come from the EEAC/Carlisle City Council, about £400,000 from household contributions and the balance from EEC funding and other grants, making it highly cost-effective.

For many householders, adding insulation can improve health, by making it affordable to heat homes properly in winter, and also by reducing damp. For some specific households in the region, CEEAC has proved to be a real lifeline, arranging for quick installation of heating systems in the event of old systems failing, and providing grants to make new and efficient heating systems affordable for people still depending on coal to heat their homes.

The work of CEEAC has brought about 20 new jobs to Carlisle, mostly for insulation installers and also within CEEAC itself.

Potential for growth and replication

There are still a large number of households in Cumbria that could benefit from low-cost insulation measures and upgraded heating, and most are eligible for some level of grant assistance for installing energy efficiency measures. CEEAC estimates that still only about half the suitable properties have cavity wall insulation. There is significant demand from householders, and CEEAC is currently expanding the installation rate to keep up with this. There is also significant potential for the work of CEEAC to be replicated by energy agencies within other local authorities across the UK. The key points to be replicated are their efforts to ensure that some level of funding is available to all people in a target area, and their work in managing contractors to deliver rapid high-quality service.

Management, finance and partnerships

The work of CEEAC is managed by Suzanne Burgess, with Nikki Tattersall as assistant manager. In the past two years it has increased its staff from 4 to the current 12. The staff include four energy advisors, a project officer, a development officer and several support workers.

Until recently the energy efficiency installation work has been contracted to one approved installer, with CEEAC marketing the service, acting as initial point of contact, preparing schedules for survey and installation work, and following up householders after the work has been completed. In order to keep up with the high demand for installations, CEEAC is – for an initial trial period – working with a management contractor who will be responsible for surveys and will subcontract work to different installation contractors where needed. In this way CEEAC staff will have less responsibility for day-to-day project management and can focus on awareness-raising, marketing and developing new areas of work such as insulation programme for homes without cavity walls. Although it is early days, initial indications are that this is indeed reducing the administration and management time within CEEAC and as a consequence many more outreach events have been planned. All of the new contractors are embracing the good practice developed over the last 2 years and a newsletter is planned to keep the installers informed about the benefits of their excellent service.

CEEAC has been funded from a variety of sources, including the Energy Efficiency Commitment (EEC), Carlisle City Council, Scottish Power, Climate Energy and it has also accessed funding for demonstration or pilot projects when available.

As its remit has expanded from Carlisle to the whole country, Cumbria EEAC has worked closely with a range of borough and district councils, housing associations and various local groups. Working with partners enables CEEAC to start contact with different groups and has mutual benefits: for instance, CEEAC lets people know about the free assessment of fire risk which can be carried out by the Fire Service, and in return the Fire Service mention the possibilities of energy efficiency improvement when appropriate.

This report is based on information provided to the Ashden Awards judges by Cumbria EEAC, and findings from a visit by one of the judges to see their work.

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