Local initiatives to reduce energy consumption; examples from the UK's HECAction programme

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1 - SYNOPSIS

Local government can be an effective agent for encouraging the improvement of residential energy efficiency.

2 - ABSTRACT

The UK's Home Energy Conservation Act 1995 (HECA) requires local authorities to draw up strategies to increase residential energy efficiency in their area by 30% in the next 10 to 15 years, with the objective of both reducing CO_2 emissions and alleviating fuel poverty. This paper is based on a review of the 'HECAction programme', under which local authorities bid for government funded awards to implement schemes linked to HECA.

HECA utilises local authorities' unique ability to influence the energy decisions of public and private sector householders, which results from their role as providers of both social housing and general services. The HECAction programme is now in its third year and has funded more than 100 schemes.

The paper presents results from a review of the programme, conducted in the second half of 1998. It identifies the opportunities and constraints facing local authorities in implementing HECA, and the types of scheme that have been particularly successful under HECAction. These include bulk purchase schemes (whereby local authorities pass on bulk discount prices on energy efficient goods to local people), low interest loan schemes (to help overcome the financial barrier to purchasing energy efficient goods) and schemes to train and employ previously unemployed people in the installation of insulation.

This paper discusses issues raised from the review, including the types of scheme implemented under HECAction, the effectiveness of these kinds of schemes, and ways in which the implementation of HECA can be facilitated. It suggests that HECA could provide a template for international action and that the HECAction approach to levering private sector funding should prove attractive to many governments.

3 - INTRODUCTION

The results of a review of local authority schemes to promote residential energy efficiency are described in this paper.

The paper begins by providing information on the UK context and a background to the Home Energy Conservation Act' (HECA), which puts a duty on local authorities to draw up strategies to improve residential energy efficiency. There are approximately 360 local authorities in England and Wales to whom the Act applies. The population covered by each ranges from less than 10,000 to almost one million.

The paper goes on to provide details on the government funded HECAction programme and to describe the kinds of scheme that are funded under this programme. It ends by outlining the potential for replications of this type of approach to energy issues.

4 - THE UK CONTEXT

Residential energy use accounts for approximately 30% of all primary energy demand in the UK Energy use in this sector is forecast to rise due to an increasing energy demand per person, caused by a greater use of central heating and appliances, and an increase in the number of households (with an estimated requirement for an additional 4 million homes over the next two decades) (DoE, 1996a). 80% of residential energy demand is for space and water heating, most of which is now met by natural gas which accounts for 67% of the energy used in homes, with electricity accounting for just 19% (DTI, 1997).

67% of UK dwellings are owner-occupied, with public sector stock at 20% and the remainder of property privately rented. Levels of insulation have increased significantly over the past three decades, but there is still considerable scope for improvement in energy efficiency. For example, 77% of homes in the UK with cavity walls still do not have these walls insulated. Retrofitting of many homes will be required to improve the average level of energy efficiency – the rate of new build in the UK is slow, at around 1% per annum (DoE, 1996a).

Promotion of energy efficiency is not helped by the context of falling fuel prices. Due largely to the ongoing process of privatisation and liberalisation of the fuel utilities and their markets, electricity prices fell by 2.5% between 1990 and 1996, with gas prices falling 8.5% during the same period. These reductions are despite the introduction of a tax ('VAT') at 8% on domestic fuel bills in 1994. (VAT on other items is 17.5%, but had previously not been charged on domestic fuel. The tax on fuel has more recently been reduced to 5%.)

Environmental concerns are not the only motivation for improving residential energy efficiency. A large proportion of the UK population (around 8 million households) are classified as being 'fuel poor', i.e. they cannot afford to adequately heat their homes, as a result of low incomes and inefficient, old housing stock (Boardman, 1991). Improved efficiency would reduce the incidence of fuel poverty and would also lessen the burden on the health service each winter due to illness arising from cold homes. Where efficiency improvements are made on the houses of the fuel poor, energy consumption is only likely to reduce once acceptable comfort levels are achieved.

Energy efficiency could make a major contribution to efforts to stabilise CO_2 emissions. A report for the UK Electricity Association estimates that residential sector CO_2 emissions could be reduced to a level approximately 20% below that recorded for 1990 purely by accessing all the 'no regrets' potential for energy efficiency (Wade *et al*, 1997).

Historically, responsibility for encouraging residential energy efficiency in the UK has rested with central government. Activities have included a grant programme to subsidise the cost of insulation measures in the homes of low-income families and older persons (the Home Energy Efficiency Scheme), and national promotional campaigns.

5 - THE HOME ENERGY CONSERVATION ACT

In recent years, an increasing emphasis has been placed by the government on the role of residential energy efficiency improvements in meeting the UK's climate change commitments (Prescott, 1997). Partly as a result of this, responsibility for energy efficiency in this sector was partially devolved to local government through the 1995 'Home Energy Conservation Act' (HECA). As providers of social housing, and with a direct influence over many aspects of local people's lives, local authorities are considered to be well placed to bring about changes in this sector.

The Home Energy Conservation Act originated as a Private Members Ballot Bill. Under the UK legislative system, a Private Members Ballot is held early each Parliamentary session. Most non-ministerial Members of Parliament enter this ballot, and if they are one of the 20 drawn they can introduce a Bill of their choice. HECA

was introduced by the then Member of Parliament, Diana Maddock and became an Act of Parliament in June 1995.

Under the Act, all authorities with a responsibility for housing provision (i.e. district, metropolitan and unitary authorities, of which there are around 420 in the UK) became 'Energy Conservation Authorities' (ECAs). The legislation required them:

- _ To prepare a report setting out energy conservation measures that the authority considers practicable, costeffective and likely to result in a significant improvement in the energy efficiency of residential accommodation in its area, and;
- _ To publish the report and to send a copy to the Secretary of State for the Environment.

Guidance issued by the Department of Environment (DoE) instructed local authorities to aim for a 30% improvement in energy efficiency over 10-15 years.

Whilst lower CO_2 emissions are the primary driving force for HECA, and therefore energy conservation is the overall aim, the need to reduce fuel poverty is also recognised. Therefore an energy efficiency target is used.

Each HECA strategy had to include the cost of carrying out the works identified and the CO_2 savings that would result. The inclusion of information on the potential savings in nitrogen oxides and sulphur oxides was also encouraged, as were details of the number of jobs that would be created, the average savings in fuel bills and in fuel use which would be made, and anything else which the authority considered appropriate (DoE, 1996b).

The intention of HECA was to provide a focus for local authority activities in the energy field, bringing together housing investment programmes, environmental initiatives and fuel-poverty alleviation. The Act is the first piece of legislation to devolve responsibility for energy efficiency in the private residential sector to local government. Energy conservation authorities have responsibility for the provision of social housing and, as such, most have experience of residential energy efficiency issues (although very few had undertaken any work to promote energy efficiency to the private sector prior to HECA). In addition, ECAs have responsibility for local planning, economic development and the implementation of Local Agenda 21. They are therefore well placed to influence local culture and affect consumer choices.

In preparing their HECA report, authorities were encouraged to consult other organisations, such as housing associations, tenants organisations, consumer groups, local environmental groups and any others with an interest in energy/housing issues. The definition of energy conservation measures given in the Act includes: information, advice, education, promotion, making grants or loans, and carrying out works.

For any one household, increased energy efficiency will usually result in less energy being used. However, it has already been explained that in fuel poor households, increased efficiency may be taken as increased comfort. If HECA was targeting solely the fuel poor, it is unlikely that a dramatic reduction in energy use would be achieved (although the social benefits would still be considerable). However, HECA is directed both at the fuel rich and the fuel poor and estimates suggest that a 30% improvement in energy efficiency would translate to a 20% saving in energy (see, for example, SERA, 1997).

6 - RESPONSES TO HECA

While many authorities have responded positively to the Act, others are struggling, and 25% of HECA reports initially failed to meet the Act's statutory obligations. Concerned by this, one of this paper's authors conducted research in 1997 to identify barriers faced by local authorities in implementing HECA.

The research began by assigning 'scores' to the HECA reports, using a system devised by the author based on an assessment matrix produced by DoE. The assessment considered the extent to which the report considered the current condition of stock, different energy efficiency measures, plans for different tenures, the formation of external and internal partnerships, and proposals for further data collection. Figure 1 shows how the assessments

vary. (Please note that some high scoring reports were 'failed' by DETR because they had omitted one or more of the sections specified as required by HECA, such as the cost of measures identified.)

Research was then conducted to identify barriers faced by local authorities in implementing HECA. They were found to include officers' lack of experience, their lack of time and a lack of support from elected members (Jones & Wade, 1997). The most commonly cited reason for a lack of action on HECA was lack of funding. There is no provision in the Act for extra funding for authorities to help them implement HECA. However, the Government has made some money available via a competitive bidding process, 'HECAction', under which £11 million pounds was awarded between 1996 and 1998.



Figure 1 – Variation in HECA report 'scores'

7 - HECACTION

The HECAction programme was launched in 1996, with the dual objectives of pump-priming local authorities to help deliver their HECA strategies, and building associated energy efficiency partnerships. The programme is run by the Energy Saving Trust (EST) on behalf of DETR. The funding was awarded in three tranches - 1996 (\pounds 5m), 1997 (\pounds 3m) and 1998 (\pounds 3m). In the first three years of the programme, 122 schemes were funded, involving 169 energy conservation authorities (40% of the total). A further three rounds of funding were announced in December 1998 to be awarded in 1999, 2000 and 2001. Successful applicants are 'those judged most effective at stimulating energy savings' (EST, 1997).

HECAction is not intended to be a long-term funding source, but a means of kick-starting initiatives, which should be sustainable beyond the one-year period for which the funding is provided. The local authority must demonstrate that it has secured a minimum of 30% leverage from the private sector in addition to all public sector support. Successful schemes include bulk discount programmes, low interest revolving loan funds, and the setting up of companies to train and employ the long-term unemployed in installing insulation.

The first two years of the programme saw the majority of awards being made to local authorities with a good track record in this field. The criteria were altered for the 1998 round of funding, to encourage more bids from authorities that had less experience of running energy efficiency programmes (EST, 1998).

Through the HECAction programme, significant progress has been achieved by particular ECAs. These schemes have been particularly successful in developing partnerships and generating private sector investment. Over 79,000 dwellings have benefited from HECAction funding so far and table 1 illustrates the cost effectiveness of the schemes from the first two years (please note that at the time of writing, no breakdown of these figures was available). This shows that grants totalling around £8 million have generated more than 7 times that amount of energy savings. The programme is one of the most cost effective that the EST runs, saving energy at a cost of 0.8p/kWh (taking into account the cost to all parties, including consumers), which is a quarter of the price that electricity suppliers pay for electricity. The first two years of the programme will save a total of 2.5 million tonnes of CO₂, at an investment cost to the Government of around £3 per tonne (EST, 1998a).

Panel 1, 07 - Jones, Wiltshire and Wade

	Energy saving per dwelling	Cost saving per dwelling	Total savings (all dwellings)
	in kWh	in £	in £
Savings over average life of measure installed	26,700	730	58 million
Annual saving	2,023	55	4.4 million

(Source: BRE, 1999)

7.1. Types of scheme

HECAction schemes can be divided into three main types – those involving bulk discounts, those involving the provision of low/zero interest loans, and those with the additional objective of providing local employment. All schemes involve a range of public and private sector partners, such as banks and building societies, housing associations and private sector landlords, manufacturers, retailers and installers of energy efficiency measures, utilities and schools (see table 2).

All schemes have to include an element of advice provision. Many schemes involve a local 'Energy Efficiency Advice Centre' (EEAC) in the scheme, which have proved to be more accessible and credible than national campaigns. Other schemes have involved the set up of an in-house advice services, while others, particularly in rural area, have made use of a mobile advice unit.

Every scheme also requires marketing and promotion, and the design and implementation of the marketing approach is often be one of the key factors in determining how successful the scheme is. Those schemes using simple messages tend to work best. Energy efficiency has a number of different benefits (saving money, protecting the environment, and increasing comfort levels), and the one to choose depends in part on the target audience. It is best to consult the target audience before designing the scheme. There are also numerous ways in which to market a scheme, including advertising, press coverage and direct mail. Many HECAction schemes have successfully used media coverage, generated by press releases, to gain interest in the scheme. Some have even managed to get TV coverage on 'slow news days', and report that this generates an excellent response. In general, media coverage generates a better response than advertising. Direct mailshots can also be a very effective tool, especially where the local authority has a good database of local properties, allowing the letter to be tailored to suit the property and its occupants.

Partner	Scheme	Barrier overcome	
Manufacturers/installers	Bulk discount schemes	Financial (by lowering the purchase price)	
Credit unions/banks	Revolving low interest loans for the purchase of energy efficient materials	Financial (by providing the capital for purchasing the goods)	
Health authorities	Training programmes for health care workers to disseminate energy advice and information on grants to their fuel poor patients	Information	
Schools	Energy efficiency education programmes for school children	Information	
Energy Efficiency Advice Centre	Advice programmes	Information	
Utilities	Free provision of low energy lightbulbs as incentive to purchase materials (provided under the utility funded 'Standards of Performance' scheme)	Financial	

Table 2 – ECA partners and energy efficiency initiatives; some examples

(Source: EST, 1997)

7.1.1 Bulk discount programmes

Local authorities have a good track record in negotiating installation contracts for housing improvements on their own stock. The Home Energy Conservation Act provides opportunities for authorities to negotiate good deals on behalf of residents not only of council-owned properties, but of privately-owned properties as well.

Many local authorities have found that bulk discount schemes are a very effective way of encouraging people to invest in energy efficiency. In return for the local authority promoting and endorsing a particular product or service, installers and manufacturers can offer substantial discounts on normal retail prices. Consumers respond well to discounts and special offers, providing the financial incentive is large enough: typical discounts of 30% are not uncommon, depending upon the product.

The principle of bulk discount schemes is to reduce the price to the point where it is affordable and attractive for householders to use their own resources to purchase the efficiency measure. For lower income householders, this may mean significantly reducing the cost, for example, of a new, low energy appliance to that of a second-hand appliance. A discount will not be sufficient to reduce the cost by this amount, so other funding - in the form of a cashback or grant - is required in addition to the bulk discount in order to get the price low enough to be sufficiently attractive.

Case study - Woking Borough Council's Guaranteed Home Energy Saving Scheme

Woking Borough Council won $\pm 100,000$ from the 1997 round of HECAction to fund an innovative scheme targeting the replacement boiler market in the private housing sector. The council negotiated a bulk purchase of energy efficient gas condensing boilers and heating controls with a heating equipment manufacturer. A combined approach to energy advice was taken and boilers and heating insulation were being fitted by the same team.

The bulk purchase agreement with the supplier enabled a discount of 40% off the list price to be offered to householders. The council used the HECAction funds to purchase the boilers, rather than just negotiate a discount price. The boilers were stored at a plumbers' wholesaler and a revolving fund was established whereby money received from the purchase of boilers was used to buy more boilers from the manufacturer at the same discounted price. This concept helps the scheme to be financially sustainable.

The scheme was marketed through local press and radio and by a leaflet drop to 32,000 households. A leaflet was also enclosed with council tax bills.

Although in its early days, the scheme has already been very successful and the number of gas condensing boilers sold has exceeded expectations. Consumer demand has led to the addition to the scheme of oil fired condensing boilers.

(Source: EST, 1999b)

7.1.2 Loan programmes

Several authorities have received HECAction funding to set up a loans scheme. Such schemes can help householders overcome one of the major barriers to investing in energy efficiency – lack of sufficient capital. By linking repayments with savings on fuel bills, schemes can help householders to invest without any reduction in disposable income.

Schemes often use part of the HECAction grant to set up a revolving loan fund, offering low or no interest loans to enable lower income customers to afford energy efficiency investments. This type of approach has encountered more problems than the bulk discount focused schemes, largely because it transpired that local authorities are not legally able to offer low/no interest loans to the public. However, once this fact was established, authorities turned to partners such as credit unions or housing associations to administer the loans on their behalf, and this approach has proved to be successful in many cases. The most successful schemes have linked the loan offer in with a bulk discount, to reduce the overall cost to the householder.

Case study - London Borough of Tower Hamlets

London Borough of Tower Hamlets was awarded £125,000 in 1997 to set up a revolving loan fund which is promoted alongside a discounted package of insulation products, to help householders finance energy efficiency measures.

When it transpired that the Council could not offer the interest free loans directly, a local housing association took on this role, in return for an administration fee. The loans are unsecured, but advisors (staffed by the Council) explain to prospective borrowers how non-repayment of loans would affect other households in the borough. To date, no defaults have occurred.

It took much longer than anticipated to get the scheme up and running, due largely to the legal problems encountered. Furthermore, the Council found that in addition to being able to promote energy efficiency, the loans advisors also need to be trained in selling techniques. Once this training had been carried out, the request rate for loans increased significantly. However, the local authority stresses that it is important for the advisor to retain the 'non commercial' credibility that comes from being employed by the local authority, and to avoid using a 'hard-sell' approach.

(Source: EST 1999)

7.1.3 Business start-up programmes

Some HECAction schemes have involved the development of new community-based businesses, designed to offer quality training for the development of new skills in installing energy efficiency measures and providing energy advice. The authorities setting up these new businesses are endeavouring to ensure a long term employment market for the skills developed by the trainees. Partnerships with local housing associations are key to achieving this.

This type of scheme is significantly more complex than either the bulk discount or low interest loan approach, and will generally require additional funding sources to make it viable. However, schemes of this type have proved to be very successful at achieving their dual objectives of employment creation and energy savings.

Case study - Hertsmere Borough Council

In 1996, Hertsmere Borough Council was awarded a HECAction grant of £50,000 to set up a 'Social Firm' with the dual objectives of providing environmental services to householders (including improved energy efficiency), and providing employment for unemployed local people.

HECAction funded the start-up costs of the company and further funding was secured from local and central government. The company was also successful in getting the first Environmental Task Force up and running under the Government's New Deal programme, which provided additional funding to help cover the trainees' salaries.

Recruitment takes place mainly through local employment services and through advertisements in the newsagents and addressing tenants meetings (these have attracted a great deal of interest). In addition, the Chief Executive has close links with local organisations for the long term unemployed, who are involved in conducting pre-employment training such as re-skilling and motivating people.

Trainees are paid between £120 and £150 a week. The company's policy is to keep trainees on until they secure permanent employment elsewhere.

15 trainees have been taken on by Working Herts so far and two have secured permanent employment with other organisations. In the first six months of operation some 450 houses had insulation installed and water systems monitored, with customer satisfaction running at 98%.

(Source: EST, 1999b)

7.1.4 Targeting the fuel poor

Most HECAction schemes have tended to target higher income households. This is due to the eligibility criteria of the awards programme, requiring financial sustainability and a substantial amount of private sector leverage. Most local authorities have found it hard to fulfil these criteria while targeting low income households, many of which cannot afford to invest in energy efficiency. However, local authorities recognise that the greatest need for

increased energy efficiency is in the homes of lower income households, where the inhabitants would benefit from improved comfort levels.

Two successful approaches have been adopted when targeting dwellings inhabited by low income households. Both involve a third party funding the measures, rather than the householders themselves. The first involves targeting landlords in the private rented sector, where high proportion of tenants are low income. The second focuses on the fact that increased energy efficiency can reduce ill health in many households, and uses this argument to persuade the local health authority to get involved and, in some cases, to fund measures in the homes of those at risk of ill health. Further details of both approaches are provided below.

7.1.5 Private rented sector

Private rented accommodation is acknowledged as a difficult sector to tackle. Tenants are transient and have little incentive to invest in energy efficiency, while landlords may not be convinced that there are benefits from investing in the building's energy efficiency. The role of the local authority is to persuade landlords that by investing in the building fabric, they can increase the property value and reduce their maintenance costs.

The results of schemes tackling this sector have been mixed. Some have been remarkably successful, while other have failed to attract landlords to invest in energy efficiency in any significant numbers. The most successful schemes use a variety of incentives to attract landlords, including low/zero interest loans for landlords to invest in insulation, combined with a bulk discount and grant component, which together significantly reduce the cost to the landlord of the measures. Some authorities have also made it a condition of receiving a council grant for general property improvements that landlords qualify for inclusion on an approved list, with there being a minimum standards of energy efficiency as one condition for inclusion on the list.

Case study – Edinburgh City Council

Edinburgh City Council was given a grant of $\pounds 100,000$ in the 1997 round of HECAction funding and a further $\pounds 107,000$ in February 1998 to fund its Re-Warm scheme. The programme offers grants and loans to private landlords in the city of Edinburgh to install efficient condensing boilers in their properties. Major clients of private landlords promoted the scheme, with marketing emphasising benefits to landlords from investment, such as increased capital and rentable value, reduced maintenance costs and rent arrears.

The scheme provided private landlords with a grant of up to £700 and an interest free loan of £1,400 for installing gas condensing boilers into properties without central heating. The landlord provided additional funds for the installation of the rest of the central heating system. The second scheme is targeted at properties where there is an existing central heating system, and aims to encourage replacement of conventional boilers with gas condensing boilers as well as upgrading the heating controls. A grant of £300 and an interest free loan of £500 were available for the second scheme. The repayment term for the interest-free loans for both schemes was 10 months, and landlords were required to borrow the full amount of the loan.

An additional incentive in the scheme was that the main installer offered free thermostatic radiator valves and large discounts for the provision of loft insulation, cavity wall insulation and draught-proofing.

The most effective marketing strategies were found to be:

- Letters sent by the Council to all landlords who had registered as being interested in the scheme;
- Accommodation services and letting agents contacting their clients.
- Significant coverage was also secured in local newspapers and on local radio.

The initiative has been very successful with the initial target of 86 installations achieved. A second phase offering a reduced level of grant and loan and a new marketing effort highlighting the reported benefits to landlords and tenants of the initial grants programme will be launched shortly. A further 91 boilers are planned to be installed under the re-launched programme.

Financial sustainability is provided by repayments on loans coming back into the fund during the first year; these funds can then be lent out again.

7.1.6 Health and energy efficiency

The link between cold homes and ill health is well established and several local authorities have involved their local health authority as a key partner in their HECAction scheme. Health authorities can offer assistance with developing a project and can encourage staff to attend training in energy efficiency advice provision, in order for their clients to be advised on how to reduce their fuel bills, stay warm and access grants. In some cases, the

health authority has provided grant funding to pay for energy efficiency measures in the homes of vulnerable patients. In these cases, health workers will recommend to the council clients whose health would benefit from improvements to the energy efficiency of their home.

Several local authorities have reported that health professionals are very busy and do not have much time to attend training on energy efficiency, therefore it is important to design the training to be relevant and convenient for the maximum number of staff. A survey can be conducted prior to the project starting to find out what kind of training would be most useful. They also report that a scheme will be most successful if the relevant line managers are involved from the outset, as this will help to help ensure their full commitment. This can be done by forming an advisory group to oversee the project's design.

Case study – Telford and Wrekin Council

Telford and Wrekin Council was awarded £50,000 in 1997 to run the 'Improved Health & Housing' scheme, which links health and energy efficiency. The aim of the scheme is to accelerate the rate of installation of energy efficiency measures by increasing awareness among health care professionals of the link between health and energy efficiency. The scheme builds on existing work by the Wrekin Health Partnership - a multi-agency forum.

A dedicated member of staff has been appointed to run the scheme. An energy/health information pack was developed for GPs/health care workers, to help them assist those at risk from cold homes. The pack is intended to enable the health workers to act as a referral mechanism to signpost patients in the right direction for further advice and help with energy efficiency issues. A series of presentations was held for health care workers to launch the pack, with the additional aim of encouraging them to invest in energy efficiency themselves, and three levels of training in energy efficiency were offered to health professionals.

The scheme seeks to encourage patients and householders to become more energy efficient through private investment, grants and assistance schemes. A bulk discount price on insulation is offered by a local installer, and this is promoted to all householders in the region. In addition, a mobile display/exhibition has been developed, which tours GP practices in the area, with a permanent display left at each practice.

Alongside this, the Health Authority provided £13,500 to fund a series of pilot energy efficiency grants, through which insulation is provided free of charge to low income, vulnerable people whose health would benefit from the work. The lead officer in the primary health care team is responsible for identifying patients whose health would be directly improved by an agreed package of energy efficiency measures (including insulation and off-

peak water heating timers) as well as extractor fans. The maximum grant per household is ± 500 , with patients on income related benefits asked to contribute just ± 10 . Those not in receipt of benefits are asked to contribute 20% of the cost. Work is organised by the Council's care and comfort agency or by the patient's choice of installer (the latter only on production of two acceptable estimates).

As a result of this project, the EEAC received 1,235 enquiries. Research previously conducted by the EEAC found that 68% of those who contact the EEAC subsequently invest in some kind of measure, implying that 840 households have invested in the one or more measure as a result of the scheme. In addition, 14 houses have been insulated using the health authority grant.

(Source: EST, 1999b)

8 - FACILITATING HECA IMPLEMENTATION

HECA could make a major contribution to the UK's commitment to reducing CO_2 emissions. As yet, there are no aggregate figures on how much progress has been made towards the HECA target of a 30% increase in residential energy efficiency. However, the ACE research has shown that authorities will need further resources to make substantial progress. HECAction is the only source of funding that is dedicated to assisting with HECA implementation. Under HECAction, several innovative and effective schemes have been pump-primed, but due to the relatively small amounts of funding available, the impact of HECAction has been limited. Through the first three rounds of funding, 40% of all ECAs in the UK have received some funding.

In December 1998, a further three rounds of funding were announced, but even this will probably not be sufficient to ensure that every ECA in the country can access some funding. Ideally, the HECAction programme should be ongoing for the duration of the HECA targets (i.e. until 2010).

In addition, many local authorities are struggling to find the staffing resources that are required to implement the Act. While larger authorities have been able to dedicate a full time officer to the Act, in the majority of authorities the person given responsibility for HECA can devote less than half their time to the Act, and in many cases less than 10% of their time. By making it a statutory duty for all authorities to have a dedicated HECA officer, this problem would be overcome.

There are many other ways that the implementation of HECA could be facilitated. One of the simplest and least costly ways would involve the set up of a co-ordinating body to oversee the issue of guidance and best practice information. In addition, bolder action by central government is required if there is any chance of the HECA target being met. This includes:

- _ Mandatory energy ratings on properties prior to mortgage agreements;
- _ Increased minimum efficiency standards on homes and appliances (currently under review);
- An obligation on energy utilities to provide information regarding energy consumption by district or by street, free of charge to local authorities;
- An increased duty on the energy regulator to provide funding for the EST from levies on the electricity and gas suppliers to fund a wider programme of activity.

9 - HECA AS A TEMPLATE FOR INTERNATIONAL ACTION

HECA applies only to the UK, but all signatories to the Climate Change Convention need to find ways to reduce residential energy use. The success of HECAction schemes has shown that the best results are achieved by programmes designed to suit the local environment. As a result of the direct involvement of local government with the lives of its residents, most people have a much closer relationship with their branch of local government than with central government, making them more receptive to local initiatives. This is true for many countries besides the UK.

There is scope for HECA to be introduced throughout the EU. It takes the concept of subsidiarity, which is at the heart of the EC's 5th Environmental Action Plan, to its logical conclusion. The concept was introduced because it was recognised that decisions best made at the national level should not be made at the international, or EC level. The same can be said of decisions best made at the local level. A similar approach has been adopted in Italy, where a law passed in 1991 places a requirement on Municipal and Regional Government to develop their own energy plans, with an emphasis on renewables and increased energy efficiency. It has been reported that the law is not well implemented, due largely to the absence of the necessary administrative and political controls (Beccali *et al*, 1997).

The HECAction programme, which has proved so successful in stimulating partnerships between the public and private sectors, could also be replicated in other countries. The programme has demonstrated how government funding can be used to pump prime initiatives, levering in substantial amounts of private sector investment.

10 - SUMMARY AND CONCLUSIONS

HECA could make a major contribution to the UK's climate change commitments by curbing residential energy use. HECAction has demonstrated that local government can play an important role in motivating and facilitating householders to increase the energy efficiency of their homes. Bulk discount schemes have proved to be the simplest and the most cost-effective; revolving loan funds have experienced teething problems but are now showing signs of achieving good results; while business start-up schemes are complex and costly to get going, but they achieve good results both in terms of increased energy efficiency and intermediate labour market creation.

While further money for HECAction has recently been announced, the funding levels would ideally be substantially increased to further assist local authorities in meeting their HECA targets.

Even with further funding for HECAction, HECA cannot form the core of the UK's energy efficiency policy. It needs to be supported by a range of central measures to encourage and facilitate change. Only then with local authorities be able to effect significant, permanent change in this area.

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