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Energy Efficiency Guide for Community Projects

What could improved energy efficiency do for your community?

Look at the community you live or work in. Are there pockets of poverty, problems with bad housing, concerns about poor health? Is unemployment an issue? Are there high levels of debt? Are the people who live there concerned about global warming, but unsure about what they can do to benefit the environment? The chances are that you can identify at least some of these issues. Would you believe a project that focuses on improving energy efficiency could be the key to tackling all of these problems.

What is energy efficiency?

Energy efficiency means getting the maximum benefit from the energy we use. It's about getting the most for our money and reducing waste. When we improve energy efficiency within a community, we lower the fuel use (and thus the fuel bills) of the people who live there, whilst increasing their warmth and comfort.

Who is this guide for?

If you wish to improve the quality of life in your community, this guide is for you.

Perhaps you are involved in an existing community-based project that is already tackling identified problems. By adding an energy efficiency dimension to an existing community initiative you can achieve additional benefits.

Alternatively, by developing a new community project that promotes energy efficiency, you may help to bring a community together in joint activity that can then move on to tackle some of the other problems within your community.

What are the aims of this guide?

- To explain how improved energy efficiency can benefit communities.
- To give practical advice on designing your own project including useful contacts and potential funding sources.
- To provide case studies of projects that have successfully delivered improved energy efficiency.
- To encourage individuals, community groups and local authorities to make use of energy efficiency projects to deliver social, economic and environmental benefits to their communities.

Energy Efficiency Guide for Community Projects

What information does this guide contain?

Part one: A guide to setting up an energy efficiency project in your community

1. Energy efficiency and the community

What are the benefits of energy efficiency and who should be involved? A brief look at the benefits improved energy efficiency can bring to communities, and suggestions about who might be involved in an energy efficiency project.

2. Planning your project

Is there potential for an energy efficiency project in your community?

A guide to identifying the issues, planning the focus and finding out the facts about energy efficiency in your community.

3. Getting your project up and running

How do I present my ideas to the community and what support is available? Suggestions on how to transform your ideas into a working project, and information about the training and funding available to help projects get underway and maintain interest.

4. Making it work

What makes a good energy efficiency project?

A list of points worth considering that will make your project a success.

5. What next?

Looking to the future.

Possibilities to consider beyond community-based projects and new areas in which projects may be developed in the future.

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How could improved energy efficiency benefit your community?

Improvements in energy efficiency can make a major contribution to tackling many of the problems that confront individuals and communities. It can:

- save money and reduce debts
- · reduce waste and improve the environment
- improve housing conditions
- create jobs and training opportunities
- improve health
- contribute to community regeneration

How can improved energy efficiency tackle these issues?

Saving money and reducing debt

When energy efficiency is improved in the home, fuel bills are reduced. For those on a fixed income, cutting down on energy costs means a warmer and more comfortable home for the same amount of money. For the better off, less money spent on energy means more money to spend elsewhere. For all, lower living expenses means less reliance on borrowing and an opportunity to pay off existing debt.

Reducing waste and improving the environment

Climate change is a major problem affecting our planet caused in part by the increased and inefficient use of fossil fuels. The results are becoming clear in the form of problems such as increased flooding of low-lying areas. The UK Government is committed to Climate Change targets to reduce carbon dioxide emissions. The Royal Commission on Environmental Pollution has called for a 60% reduction in carbon dioxide emissions by 2050. Energy efficiency can make a major contribution to meeting these targets.

Improving housing conditions

In the UK there are 4-6 million fuel-poor households, depending on definition, who cannot afford to keep their homes warm. People living in cold or damp homes, which they cannot afford to keep warm, may not know how to improve their situation at a reasonable cost. A project to improve energy efficiency can give households like this the knowledge and the resources they need to improve their living conditions.

Creating jobs and training opportunities

Less money spent on fuel bills means more money to spend elsewhere. As energy efficiency improves, more income becomes available to spend within the community, which can only help to bolster the local economy.

More directly, the work needed to improve energy efficiency has to be carried out by someone. Skills within the community can be developed, workers with relevant skills can practice their trade and others can be trained in specific areas of work including practical work, providing advice and administrative skills. Energy efficiency goods also boost the local economy.

Improving health

Our increasingly elderly population is particularly vulnerable to the cold and to respiratory diseases. The UK has an unenviable record of excess winter death rates far above those of countries with a similar climate. At the extreme is the problem of hypothermia, but many more of these deaths are the result of cold-related illnesses. If this problem is to be solved energy must be used more efficiently to reduce bills and increase the comfort of the elderly.

Children are another vulnerable group. Cold, damp housing can cause or exacerbate specific illness, in particular respiratory illness and cardio-vascular disease. Condensation dampness produces mould which, in turn, can trigger asthmatic attacks and lead to allergic reactions and bronchial diseases. Findings from research projects indicate that there is considerable health gain from heating, ventilation and insulation improvements.

In addition, living in a cold, damp home can have a detrimental effect on mental health - it is a deeply depressing experience. Worrying about paying for fuel bills can also increase anxiety and stress levels and energy projects can therefore also deliver benefits to mental and psychological health.

Finally, improvement in energy efficiency could save millions of pounds for the NHS. If cold-related illnesses are reduced, then the cost of treatment is reduced. In addition, if the homes of patients are warm and comfortable thanks to energy efficient improvements, people can be released more quickly from hospital, freeing up hospital beds and resources.

Contribution to community regeneration

An energy efficient community benefits in a number of ways: socially, economically, environmentally, in improved physical and psychological health and, potentially, through job creation. These benefits combine to improve the stability and development of the community as public perception of the area improves both within and outside the area.

In both rich and poor communities many households are interested in the contribution they can make to improving the environment and to tackling fuel poverty and deprivation within society. Yet, many areas lack a sense of community. Community projects are one way in which local people can contribute. An energy efficiency project which people can support may, by achieving guick results, become a focus to rebuild community spirit.

For a more detailed look at how energy efficiency can tackle a wide range of issues look at section A in Part Two of this guide on its links to other policies.

Energy efficiency starts in the home

It is estimated that 29% of energy use in the UK is in the domestic sector.

The housing fabric/construction of the dwelling is crucial to the efficiency with which energy is used. Insulation can be applied to walls, roofs and floor to reduce heat loss from the home. Other conventional energy efficiency improvements comprise draught proofing of doors and windows and double or secondary glazing of windows.

Another key to improvement of energy efficiency in the home is the use of modern, efficient domestic appliances and heating systems, which would ensure that the least amount of energy provides the maximum benefit.

Domestic appliances vary greatly in energy consumption, and significant savings in both energy and expenditure can be gained using modern, efficient fridges, freezers, lighting and washing machines, etc.

The cost of space and water heating also varies considerably according to the quality of the systems and their control by room and radiator thermostats, time-switchers or programmers and hot water cylinder thermostats. The heat source itself - the boiler or room heater - is also crucial in determining cost and energy consumption; a modern boiler is much more efficient than an older system and will use less fuel to produce an equivalent amount of heat.

Why is a community project the best way to improve energy efficiency in the home?

A community project can influence the actions of individuals by:

- promoting the take-up of grants for energy efficiency improvements
- increasing resources available for energy efficiency improvements
- ensuring that energy advice is available and accessible to local people
- placing energy efficiency on the local agenda and promoting understanding of energy issues
- training community activists to promote energy efficiency

Moreover, there are some changes that can only come about by community action. For example, at a housing estate level, the collective voice of a community project can make itself heard on issues like:

- decisions on housing modernisation including improved insulation and energy efficient heating systems
- installing heating systems using the most cost-effective fuels
- securing energy efficiency improvements at marginal costs when other improvement work is taking place
- allowing economies of scale/bulk purchase

Who should get involved?

- Members of existing voluntary and community groups who wish to discover how energy
 efficiency can complement the work of their organisation. Examples include organisations
 aiming to improve the environment, increase people's disposable income, or to generate
 employment, training and volunteering opportunities. Community health projects, family
 support organisations and faith groups working in the community may also be interested.
- Those who are interested in developing a new group or project to improve energy efficiency within their community.
- People whose work brings them into contact with communities which could benefit from energy efficiency initiatives. Examples include those working in the fields of urban and rural regeneration, economic development, social exclusion, health care, sustainable development and community planning.
- Anyone who may be interested in the potential for energy efficiency to be integrated into their work (for example, in education and training) in a manner which could benefit local communities.

If you can see the problems facing your community, then so can the other people who live there. They will know if they live in poor housing, or can't find a job. They may have children whose asthma is aggravated by the damp patches on their walls, or elderly neighbours who face the risk of hypothermia each winter. They may be worried about the environment or how they are going to pay next month's electricity bill. They will want to do something about these issues, but have no idea where to begin. They won't always make the link between these problems and energy efficiency. It's up to you to sell the idea of energy efficiency to your community.

Where to begin

If you want to convince other members of your community that energy efficiency will tackle the problems they face, you must arm yourself with the information they will need to hear. The next few pages will help you to do this, step by step. They will tell you how you can:

- draw up a list of the problems which are relevant to your community
- decide which issues your project will focus on
- supply yourself with facts and figures that support your proposals
- find out which organisations can support your project

Step One: Identify the issues

You should begin by making a list of the problems that your community faces. This won't be the complete list. You may come across further issues as you begin to talk to members of your community and other organisations involved in similar projects.

Here are some examples of the issues your community may face, which you can use as a guide.

Poor housing

- Are the houses in your community badly designed and built to low standards with poor insulation and inappropriate heating systems?
- Are the houses in your community cold and draughty?
- Are there houses that are old, limiting the choice of insulation measures?
- Are there landlords who are not looking after their properties?
- Are there owner-occupiers who are unable or cannot afford to improve their property?
- Have previous improvements led to increased fuel bills?

Poverty

Is the root problem in your area low income?

Environmental issues

- Is the community (or school, or organisation) keen to do its bit for the environment but doesn't know how?
- Is the community concerned about climate change and its effects? Is there something practical that can be done locally?

Lack of knowledge and advice

- Has a new heating system been installed, but no one has explained how to use it, so your bills have increased?
- Does no one seem to know about the grants which are available for energy efficiency improvements?
- Are the vulnerable people you work with being placed in the community from institutional care without knowledge of budgeting for fuel?
- Are many people excluded from assistance because they do not speak English as their first language?

Jobs and training

• Do you think that energy efficiency will interest people more if it helps to create training and job opportunities?

Health

- Are cold and damp homes contributing to respiratory diseases?
- Are poorly ventilated homes contributing to asthma?
- Are people not being released from hospital because of their housing conditions?
- Do hospital admissions in your area always increase dramatically during cold weather?

Location

 Is your community located in a rural area with specific issues such as housing in exposed locations and a limited choice of fuels?

Step two: Focus your aims

Now you have a list of issues, start to think about what you want your project to achieve. Make a list of the things that can be done to tackle the problems facing your community.

Once again, your list will probably get longer as you begin to talk to members of your community and other organisations.

Here is another list of suggestions, which you can use as a guide:

What sort of improvements could be made to homes and community buildings?

- Insulation
- Ventilation
- Energy efficient lighting and appliances
- Energy efficient heating systems and controls

What sort of information and advice could be made more available?

- Grants for energy efficiency improvements
- Home energy surveys
- What can be done for no cost
- How to use heating systems most efficiently
- The costs and benefits of various improvements
- Information and advice in appropriate formats or languages
- Making the most of the competitive market in electricity and gas

Is there scope for a campaign to increase resources for improvements?

Is there a need for education in energy efficiency?

Who would most benefit from training to raise awareness, general understanding and knowledge of the issue?

- Local people and/or the frontline staff of housing, health, social services and other organisations who work with local people
- Key members of organisations who can learn to provide advice to other people

Step three: Gather the facts

Facts are what are going to turn your plan from a list of ideas into a real project. Facts are what will win your arguments, attract your funding, and empower your project. Without them, your ideas won't be taken seriously.

Below, you will find some suggestions of people and organisations you can contact. They will be able to supply you with the facts and figures you need to get started.

Your local HECA officer

Each housing authority has to meet the requirements of the Home Energy Conservation Act (HECA). Each housing authority has provided reports to the Government setting out its energy strategy and what it proposes to do to improve energy efficiency within the housing stock of the area. Look at these reports. They should be available in your main library or housing office.

Talk to the HECA Officer for your area. S/he will be able to refer you to other people within the authority (people in housing, planning, environmental health or social services departments) who can provide further information.

Your local authority

Energy auditing techniques exist which can assess a sample of homes to establish what package of measures would be most appropriate to each housing type. Audits like these produce a score on a scale that can be compared with other houses across the country. Your local authority might already hold information like this, or they may be able to carry out energy audits for you.

Your local Energy Efficiency Advice Centre

There is a national network of Energy Efficiency Advice Centres. Although they concentrate on telephone-based advice to households, they will have a lot of general information and a good knowledge of the local situation.

Your local health authority

If your project has a health focus, get in touch with the public health department of your local health authority and find out the relevant statistics for your area. What is the excess winter death rate? Are local hospitals reluctant to release patients back into cold damp homes?

Step four: Locate Potential Partners

Many public and private sector agencies are keen to work in partnership with community and voluntary organisations to deliver energy efficiency projects. From Government down, there is broad support for energy efficiency. There may be disagreement over the level of resources needed to create an energy efficient country, but your search for support for an energy efficiency initiative is unlikely to attract opposition.

Read though the following list, it will give you some ideas about the sort of organisations you can contact. You will see that there is no shortage of potential partners.

Central government

The Government is committed to tackling the problems created by Climate Change. More specifically, it has supported energy efficiency initiatives by funding the work of the Energy Saving Trust, backing the Home Energy Efficiency Scheme in England, and similar schemes in Scotland, Wales and Northern Ireland. Legislation such as the Home Energy Conservation Act and the Warm Homes Act emphasise this commitment, as does the Government's Fuel Poverty Strategy.

Local authorities

Local authorities are also committed to energy efficiency, partly through their own interest in the welfare of their local residents and partly as a result of encouragement from central government. The priority attached to energy efficiency will vary but the general situation is positive.

Health authorities

Health authorities are increasingly looking to find ways to prevent people becoming ill in the first place. Some have made the connection between cold, damp homes and poor health. Interest is growing within the health service about participation in joint initiatives with local authorities and the community and voluntary sector. There are groups within the health sector that focus on community and public health and health promotion. Individuals within the health sector, such as health visitors and district nurses, will have a particular interest in people's living conditions.

The private sector

Commercial companies may not seem to be obvious partners for community action, but their involvement in people's daily lives make them well placed to be of benefit to your project, and their desire for goodwill within the community may make them think twice about supporting your scheme. The gas and electricity companies are well worth targeting as potential partners because their regulator, Ofgem, actively encourages them to develop initiatives which benefit their customers. In particular they are urged to help the poor, the old and other vulnerable groups, who may not have experienced the full benefits of competition within the industry.

Energy efficiency organisations

There are organisations directly concerned with energy efficiency that may be keen to become involved in local community-based projects. These include the managers of the Home Energy Efficiency Scheme and its equivalents, insulation contractors, and the network of Energy Efficiency Advice Centres

Multi-agency projects

In some areas there may be a multi-agency approach to energy efficiency involving the public, private, community and voluntary organisations. Affordable Warmth Strategies have been prepared and are being implemented, and the first Warm Zones have recently been announced.

Charity organisations

Voluntary sector agencies with an interest in health and welfare may be interested in active involvement in initiatives. Age Concern, Help the Aged, disability and children's organisations, as well as welfare rights groups may all be interested in your project.

Contact details for these organisations are provided on the information sheets at the back of this pack.

By now you should have a good idea of what energy efficiency can do for your community. Now you've armed yourself with facts and you've got a clear picture your aims, it's time to get your project off the ground. However, you won't be able to get this project up and running single-handedly. You are going to need to have groups and individuals from your community on board and working with you. The next questions you should be asking yourself are:

- Which groups in the community should I present my project to first, and what is the best way to sell them my ideas?
- How can I build up support for the project within the community?
- What resources are available to support my project?

This section aims to help you answer these questions.

Step five: Finding your audience

Identify the key groups in your community.

What are the key groups active in your community that could take an interest in energy efficiency? Can you think of any community-wide organisations or voluntary organisations in your area which represent particular interest groups or have a housing, health, employment, poverty or environmental focus?

If you haven't already read through the list of potential partners in the previous section, have a look at it now; it may give you some ideas.

Seek out other energy-related projects in your area

There is little to gain by setting up a completely new project if there are existing organisations that work in related fields. In particular it would be counter-productive to antagonise existing organisations by setting up a new initiative on 'their' territory without consultation and agreement.

If you find another energy related scheme in your area, present your project to them, and find a way of working together. You may each prove to be a valuable source of information and support to the other.

Step six: Presenting your project

Tailor your presentation to suit your audience

Whether you are presenting a project idea to a community-based group, your local authority or a potential funder from the private sector, you will make a bigger impact if you talk about the issues that interest them. When you are preparing your presentation, think about which issues you should be linking energy efficiency with. Which issues are more likely to secure funding for your project? Here are some examples:

- If environmental benefits are the key to your audience then focus on the potential carbon dioxide reductions resulting from improved energy efficiency, and on the contribution energy efficiency can make to promoting sustainable development at a local level.
- If poverty is the issue, it is the contribution that energy efficiency can make to reducing fuel bills and debt that should be stressed.
- If substantial resources are being committed to an area through a Health Action Zone then the health benefits of energy efficiency need to be emphasised.
- Other local regeneration initiatives such as New Deal for Communities in England or Social Inclusion Partnerships in Scotland will have their own policy focuses. Emphasise the role that energy efficiency can play within that policy area.

Have a look at the section on Energy Efficiency: Its Links to Other Policy Areas in Part Two of this guide. You will find plenty of details there about the policy areas you might be able to link your energy efficiency project with. Read the case studies as well. They will show just how effective linking your aims to existing policy areas can be in gaining support for your project.

Back up your ideas with first hand evidence and background facts It may be worthwhile using a questionnaire to carry out brief survey amongst local residents or members of your organisation. Ask them for their priorities for improving their area. Ask them how their home environment affects their health and their income. Their answers will give you an idea of the main issues to which energy efficiency could be linked. Responses such as 'my house is cold/damp/expensive to heat'. 'I want my home to be environmentally friendly/green' will provide a good indication. Responses like this can also be quoted as first

Use the information you gleaned from the local authority on housing conditions to provide the background facts. A few simple energy saving statistics will also go a long way to impressing your audience. You will find plenty in the final section of this guide.

hand evidence of the problems that need tackling in your community.

Step seven: Building up support

It's never too early to begin building wider support for a project. Financial support is dealt with below, but other kinds of support are useful:

The local media

Get the local media involved. Local newspapers and radio stations are always interested in stories from local communities. Keep them involved from the beginning of a project. It's up to you to make the story interesting. If you have convinced local people, you should be able to convince the media. Invite them along as the project progresses, particularly to events which provide a photo opportunity. You will inspire more public support if you present your project positively - as a community doing something for itself rather than a community complaining about inactivity from the local council.

Local authority staff

Get support within the local authority. You need to find a 'champion' - someone who will support your project within the bureaucracy. Start with the council's HECA officer, Local Agenda 21 officer or community planning officer, but also try contacting departments responsible for housing, environmental health, social services and so on until you find out who is most enthusiastic.

Community groups

Is there anyone else within the community who may be interested? Housing associations and local landlords will be important in certain areas. You will benefit from the support of local organisations that may have members who could work with the project - faith groups, the local branch of Friends of the Earth and other environmental groups for example.

Children and young people

Involving children and young people in energy efficiency initiatives can produce huge benefits. Children are enthusiastic about projects that benefit the environment. This enthusiasm can be harnessed to encourage adults, even in the simplest of ways; imagine how children will delight in taking the message about energy efficiency into the home by instructing their parents on the finer points of saving energy.

Educational resources are available from a number of organisations:

- CREATE (the Centre for Research, Education and Training in Energy) is the national coordinating body for energy education. It produces guidebooks, publishes a free teachers' newsletter, Energywatch, and provides an information service to school managers, teachers and pupils.
- NEA (National Energy Action) is a charity committed to improving knowledge and understanding of energy efficiency both within school and college curricula and by young people. NEA produces a range of resources, aimed at pre-school and school-age children, young adults and scouts and guides groups.
- CSE (the Centre for Sustainable Energy) promotes energy efficiency and sustainable energy planning by providing a wide range of publications, advice and training facilities
- CAT (the Centre for Alternative Technology) is a visitor centre that demonstrates technology for a globally sustainable future, including energy efficient buildings. It also sells a wide range of leaflets and books, including Teaching about Energy, a resource aimed at 7 to 12-year-olds.

Contact details for these organisations can be found at the back of this guide.

Step eight: Locating resources

Training and funding are two assets that will allow your project to flourish, and they are probably more easily obtained than you think. You may have established a strong core of support for your ideas, but for your project to work it will need more that approval and enthusiasm.

Can you identify a need for training?

- Would your project benefit from more detailed information?
- Is there room for refinement in your understanding of the issues or in focusing the aims of your project?
- Are any of the people involved in the project still sceptical about the links between health and energy efficiency?
- Is a key aim of your project to provide advice and support to other members of the community?

If the answer to any of these questions is yes, then you have identified a need for training.

What training is available?

It is universally agreed that training is the key to boost the capacity of individuals or community groups to help overturn adverse working or living conditions. By offering community activists or individuals training in energy efficiency and environmental action they can take action themselves to promote a sustainable future.

There are many training options open to community workers and volunteers. We set out below some of the options open to you. Some are free, some cost money. Funding is covered next which can help pay for those training programmes which incur charges.

- CREATE (the Centre for the Research, Education and Training in Energy) offers several customised energy awareness training courses for frontline staff and residents. These range from one to two hour sessions to three-day courses depending on individual needs. The courses are very practical and aim to equip participants with the knowledge and skills to give energy advice to residents as part of their daily work. Contact Sandy Carter on 01942 322271
- Centre for Sustainable Energy (CSE) CSE provides a range of different energy awareness training packages designed to meet the learning needs of householders, community groups and their members, from full NEA / City and Guilds 6176 3-day structured course with exam, through to shorter 'taster' or workshop sessions. Contact Liz Green on 0117 930 4097 ext 206
- ecsc run Energy Resources for Tenants, which is the free programme designed to train community activists and workers to take a strategic approach to energy efficiency and community participation. It is managed by the Energy Conservation and Solar Centre and funded by the National Lottery. Representatives of tenants and resident groups and staff from across England receive a residential two day intensive covering energy advice, grants, local and national policy and community participation. This programme has now joined the DTLR / housing corporation Capacity Building Programme. Contact Brian Whitington on 020 7922 1664
- Energy Action Scotland (EAS) provide various courses ranging from basic half day introductions to 3 day accredited Energy Awareness courses plus training on surveying and auditing. Contact Scott Restrick, Technical and Training Officer on 0141 226 3064 for more details. EAS, Suite 4A, Ingram House, 227 Ingram Street, Glasgow, G1 1DA, fax 0141 221 2788, www.eas.org.uk
- **EEAC network** Your local Energy Efficiency Advice Centre (EEAC) may be able to provide training or to suggest other local training providers. Call freephone on 0800 512 012 to talk to your local EEAC adviser.

- Global Action Plan provides a range of community based energy training as part of our range of practical programmes. We work with a wide range of different audiences including secondary school communities, families on low incomes and employees from both large and small organisations. Contact Gavin Ellis on 020 7405 5633
- NEA is the national energy efficiency charity which develops practical solutions to fuel
 poverty. NEA provides a range of energy awareness and other energy efficiency training. In
 addition to the three day NEA/City and Guilds Energy Awareness course, the only
 nationally recognised certificated course for energy advisors, NEA can provide a range of
 other courses and training material individually tailored to the needs of a wide range of
 organisations. Contact Liz Stevens on 0191 261 5677
- Optima Energy offers 1hour, half day or one day courses covering, why be energy
 efficient? background to fuel poverty, heating systems & controls, paying for fuel, heat loss
 & insulation, tackling condensation etc. Courses can be tailored to fit the needs of
 individual groups or organisations. Contact Richard Macphail on 020 8743 0017
- SCARF (Save Cash & reduce Fuel) energy advisors are available to give presentations to schools in Aberdeen, Aberdeenshire, Moray, Angus, Dundee and Perth & Kinross. Each school will receive a copy of an Energy Efficiency Resource pack full of useful information. SCARF also run an annual Calendar Competition for primary schools. SCARF is a registered City & Guilds examination centre and an accredited NVQ Assessment Centre. Contact: lean Morrison on 01224 213005
- **SELEEAC** The South-East London Energy Efficiency Advice Centre provides talks and training on energy efficiency in the home to community groups in the London Boroughs of Lewisham, Bromley, Lambeth and Southwark. Contact Kara Goodge 020 8314 6339
- Working Herts takes on and trains long-term unemployed people to do insulation and water saving works throughout Hertfordshire and Southern Bedfordshire. Over the last four years we have insulated about one thousand houses per year, working closely with local LA21 officers, District Councils and Housing Associations as well as with ECSC on their private "Warmer Homes" project. Thanks to sponsorship from Three Valleys Water, whilst doing the energy work trainees also examine pipework and report on faults in the plumbing systems, install water-saving devices in customers' homes, and provide stock condition survey information. Contact Paul Watkinson on 0208 386 4848.

How does funding work?

There are two types of funding:

- Funding that will pay for your project's set-up and running (revenue funding). This provides money to pay the costs of community-based projects, such as staff and office costs.
- Funding that will pay for actual energy efficiency improvements (capital funding). This provides the money that pays for insulation and heating system improvements to homes.

What funding is available?

You can find the main sources of funding listed below. The list is divided into two parts:

- 1. Funding for local projects (which deals mainly with revenue funding)
- 2. Funding for energy projects (which deals mainly with capital funding)
- However, you will find a degree of overlap some funds will pay for both home improvements and project running costs. In addition, you should be aware that many of the sources of funding also fund non-energy projects, which will increase the competition for funds.

1. Funding for local projects

Unless your project becomes part of a local regeneration programme, local funding is more likely to cover some of your revenue or project costs rather than the physical improvements of properties.

Local authority and regeneration funding

You may be able to obtain grants for community projects, including start-up grants, from your local authority. Or, if you are in a regeneration area, there maybe a special "community chest" to which you can apply. Contact your local authority for details.

- Single Regeneration Budget funding is Government funding for deprived communities to tackle social exclusion, promote sustainable generation and promote growth in the local economy.
- New Deal for Communities is a Government fund to help turn round the poorest neighbourhoods in the country.

The National Lottery and Charitable Trusts

Grants from local trusts and charities may cover your running costs or specific aspects of your work, for example, producing information packs or setting up a website.

- The National Lottery Charities Board (NLCB) provides grants to community projects and the New Opportunities Fund can also fund projects with a health, environment or education dimension.
- Awards for All grants from the NLCB are available for local community action and can be accessed quickly.
- There is a wide range of national and local grant-making trusts, listed in guides which are usually available in main libraries.

The private sector

Local businesses may offer financial support for local projects, particularly if the project is in a related field to their main business (for example, healthcare companies may support health projects). Even if companies are unable to give financial support, they may encourage their staff to volunteer, or they may provide in-kind funding or second staff to community projects. It's always worth asking about this sort of support.

Environmental projects

Some areas have small environmental grants linked to Local Agenda 21 (LA 21) activities which you can apply for if your work contributes to the local strategy. Contact your LA 21 co-ordinator for further details.

- The Government's Environmental Action Fund is one example of a grant scheme for environmental projects which has funded community energy efficiency projects.
- The Landfill Tax Credit Scheme, which can be accessed via Environmental Trusts, may fund certain categories of environmental projects.

Health Projects

It's worth applying to the wide range of charitable trusts which fund projects to tackle specific illnesses. The contribution that energy efficiency can make to preventing cold and damp related illnesses such as heart attacks, strokes and respiratory illness may make your project eligible.

Health Action Zones are funded by the Government to improve health in deprived areas
with high rates of illness. Many HAZs will have a focus on preventing illnesses exacerbated
by living in cold and damp homes, even if there is no explicit mention of energy efficiency.

This list provides just a general guide; there is no substitute for local research to find out what is available. Try looking for information at your local library, asking at your local authority and the Council for Voluntary Service or Rural Community Council. A number of CVSs/RCCs operate Funding Information Services for the voluntary and community sector which can provide comprehensive details for your locality.

2. Funding for energy projects

Much of the available funding is for individual eligible households. The schemes listed below offer financial assistance for energy efficiency improvements to homes. An aim of your project is likely to be promoting the take-up of these grants within the local community.

The Home Energy Efficiency Scheme (HEES)

HEES is the main Government-funded scheme in England and Wales to tackle fuel poverty and provides assistance to approximately 250,000 households per year. It provides grants for heating and insulation measures for low-income households. A similar scheme operates in Northern Ireland (Domestic Energy Efficiency Scheme) and the equivalent scheme in Scotland is the Warm Deal.

Energy Efficiency Commitment (EEC), formerly known as Energy Efficiency Standards of Performance (EESoP)

All energy suppliers in England, Wales and Scotland are required to achieve energy savings targets as specified by the energy regulator, Ofgem. Expenditure is expected to be £110 million during the two-year period from April 2000 and to rise to £450 million over the period 2002 - 2005. Many suppliers set aside part of their budget to fund work for individual customers, including work in partnership with the voluntary sector and community groups. A similar scheme operates in Northern Ireland.

Local authority grant schemes

Local authorities may fund their own energy grant schemes, using funds from various sources including EESoP (see above), HECAction (a scheme run by the Energy Saving Trust which local authorities can bid for) and the Capital Receipts Initiative (Government funding allocated for housing projects). Examples include insulation schemes for those ineligible for other grants and discount/bulk purchase schemes providing insulation materials at a reduced cost. Local authorities may also fund energy efficiency improvements through a range of other grant programmes, for example:

- House Renovation Grant, to make a dwelling fit for occupation or to bring the property into reasonable repair.
- Home Repair Assistance, to fund small-scale improvements or adaptations to the dwelling.
- Disabled Facilities Grant

Electricity and gas company sponsorship

In addition to the Energy Efficiency Commitment electricity and gas companies may be interested in funding initiatives which benefit local communities. They may be willing to negotiate affinity deals, normally with a local authority or large landlords which would result in lower fuel bills.

Warm Zones

Warm Zones are a new national initiative which seeks to address severe fuel poverty at a local level in communities throughout England. A pathfinder programme will pilot the initiative in five areas of the country. The initiative is based on a systematic house-by-house survey and will offer a comprehensive energy efficiency programme to all households.

SchoolEnergy

Schools can apply to CREATE for a SchoolEnergy grant which provides 50% of the cost of the capital outlay of installing energy efficiency measures (up to a maximum of £3,500).

Energy Resources for Tenants

Tenants groups taking part in the Energy Resources for Tenants programme can apply for grants of up to £5,000 to enable them to develop in their communities practical ideas and schemes stimulated by the training.

A good start to obtaining local information is to contact your local Energy Efficiency Advice Centre which has access to an Energy Saving Trust database of funding sources for energy schemes. The information is available directly from the Trust via the Internet: www.saveenergy.co.uk

Before You Continue...

Refine your ideas

By now it should be fairly clear what type of project you are interested in. The next section will give you some valuable information about how to make your project a success. But before you read on and make the final decisions about your project, it is worth considering these points:

- Extremely ambitious projects can attempt to tackle all the energy efficiency issues within a community. They can bring improvements to homes worth millions of pounds to the community.
- Alternatively, projects with relatively modest aims such as promoting existing grant schemes can be very attractive in a very short period of time.
- Your aims may be simplier. You might simply wish to be the catalyst that will prompt other
 organisations such as the local council to take energy efficiency seriously and start
 allocating resources to energy efficiency initiatives. This is worthwhile too.
- The main reason there are not more energy efficiency projects is that many people still
 haven't made the link between energy efficiency and the benefits it can bring to their
 particular field of interest. If you can simply draw attention to this link, the effects will be
 potentially far-reaching.

You are convinced an energy efficiency project is a good idea. You've convinced other people in your community and they are keen to be involved. You know what's needed in the area, roughly what kind of project is necessary, and you have identified sources of funding. Now it's time to think about how you can make your project work. This section will tell you what makes a good energy efficiency project and guide you through the points you will need to consider if your project is to succeed.

What makes a good energy efficiency project?

A successful community energy efficiency project will aim to achieve a sense of ownership and involvement within the community. It will engender trust and respect amongst the various people involved. It will produce satisfied customers. It will achieve its targets. Finally it will be sustainable, that is, it will continue once the original funding has expired.

These are ambitious aims, but don't be daunted - the rewards are potentially great. A look at the Case Studies section of this guide will show you that it is possible to achieve all this. The following few pages are here to give you some ideas about issues you will need to bear in mind if you want to make your project a successful one.

How can I make my energy efficiency project a success?

These are the areas you will need to consider. The points on the list aren't listed in any order of priority and not every point will be relevant to your project. Some of them have already been discussed in earlier sections. Simply treat this as a checklist that you can go through before you start work in earnest.

- 1. Planning
- 2. Clear objectives and targets
- 3. Consultation and input
- 4. Needs identification
- 5. Communication
- 6. Motivation
- 7. Monitoring and feedback
- 8. Support for involvement from community leaders
- 9. Accessible funds and resources
- 10. Effective management

1. Planning

How well have you planned your project? Good planning is key to ensuring a successful project. Consider whether your project is legal or whether it is realistic. Don't promise more than you can deliver. On the other hand, don't underestimate what you can achieve. Projects can fail if they do not anticipate a level of demand they simply cannot meet. You must have contingency plans so that you can expand your project if necessary.

Consider how you are going to make your project transparent. In other words, plan how you can deliver a project that is clear and understandable to others. If you are successful, then others will want to follow in your footsteps. They will want to know how and why you were successful. So design your project so that it is easy for others to copy.

2. Clear objectives and targets

Make it crystal clear what you are trying to achieve. Do you want ten lofts to be insulated? 85% of the village to attend an energy efficiency briefing? To create one new job? Are you aiming to bring about new legislation? You need to have a vision which will motivate people. From this will flow your specific objectives and targets.

Keep your aims not only relevant to your community but also relevant to the bigger picture. Many of the people in your area will find it easier to understand concerns that directly affect themselves, concerns like health, local employment, or the state of the village hall. Other members of your community will be more interested in big issues like the environment. If you establish clear targets in both areas, you will bring on board wider support.

3. Consultation and input

Speak to community representatives. Consult those who come into direct contact with the community at large - GPs, health workers, and teachers, for example. Talk to the people your project is aiming to benefit. There are many ways to do this - large scale meetings, individual interviews and questionnaires are just some of the consultation methods you can use. Keep communicating with these groups during the course of the project. Customer satisfaction surveys can be used to highlight aspects that could be improved. Set up a local steering group of local people who support the project. Your goal is to ensure a project that is community-led and participative, rather than imposed,

4. Needs identification

If you are going to keep your community project on target and maintain support, you must identify the needs of the various players. In other words you must be constantly aware of the needs of the community, funders, contractors, individuals, homeowners, landlords, the local authority, housing associations, voluntary organisations and managing agents.

Try to keep everybody's needs in mind. If it will help, draw up a list, keep consulting it, and make changes and additions to it whenever and wherever necessary.

5. Communication

Plan what you are going to say and how you are going to say it carefully. Consider how you are going to sell the benefits of energy efficiency to the various players. Think about the best way to show how the project is relevant to your community. Be prepared to give facts about the benefits of energy efficiency. Set out the available options for individuals choosing to get involved in the project. Have you considered how people will communicate back to you?



6. Motivation

How will you motivate people to get involved now? How will you motivate people to get involved in six month's time? Ensure that you plan for the long term as well as the short term.

7. Monitoring and feedback

You will need to think about how you are going to show that you have achieved your objectives. You should keep accurate records of your project. Keep the following in mind:

- When designing your project ensure that you make concrete plans for data collection. For example, ask for participants to keep a diary of meter readings, complete surveys, undertake energy audits, and install equipment to monitor temperature changes.
- Your funders will probably insist on reports, so that they have a clear record of how their
 money has been spent. Make sure you are clear about what it is that funders need in terms
 of monitoring and feedback. The reports they ask for must be produced on time and in the
 required format.
- Do any other partners have needs for monitoring or feedback? Ensure you know about these before the project starts.
- You need measurable indicators. If your target is to increase the energy efficiency of the village by 20% how are you going to measure this? How will you measure behavioural change?
- Independent verification and analysis may be necessary. Find out how you can build this into your project.
- Make sure that you have good and useable data. Ensure as much as possible that people are reporting on specific activities that can be clearly measured.
- How you present your results can be important. It is always worth spending time to make your reports look professional.
- It may seem obvious, but make sure your monitoring relates to the project objectives. It is very easy to monitor the wrong things because they are easy to measure.
- If you want other groups to copy your project, make sure you provide the right kind of information in a way that is easy to understand.
- Monitor customer satisfaction. This will give you a clear indication of how well you are meeting your targets.
- Keep on the look out for good stories. These will help you to present a clear and effective picture of how successful your project is.

8. Support for and involvement from community leaders

Make an effort to get community leaders on your side. Involve them - their influence and experience will prove a great resource. If you can get MPs, MEPs and other important people on board too, all the better.

Community leaders need to be supported in their work on your project. They may need materials with which to spread the message, and they could be invited on to a steering/advisory group for the project. Training might also be appropriate for them. This will ensure they become effective members of the project team, but it will also help to keep your project running and running. When you train individuals, you build their capacity to carry out tasks other than those they would normally do. Once the leaders in your community have learned the appropriate skills they will continue to make use of them, long after the initial funding has dried up.

9. Accessible funds and resources

Do your research. Get to know what resources are available within the community. Seek out other organisations who might be interested in co-operating with you. Try to structure your project to involve other organisations.

Links with other organisations will help you in your search for funding. Look for local trusts with available funding. What experience have other organisations had in raising funds in your area?

Once you have identified possible sources of funding, you can also research the funder. What are their objectives? What are their constraints? For instance, a funder may need publicity opportunities in return for their financial support or they may require specific targets to be met within specified time frames. Be flexible, funding and resources will have a big impact on the success or failure of your project. However, don't allow the agenda of potential partners or funders to compromise the integrity of your project, or distract you away from your community-based goals.

10. Effective management

You need to be clear who is managing the project and what they are expected to do. They have to be capable of doing the job, probably in addition to all the other work they are already doing, whether in a paid or voluntary capacity.

Imagine that your community energy efficiency project is up and running. Your mind is crammed with ideas and knowledge about energy efficiency. You feel there is potential for energy efficiency everywhere you look and you have the skills and knowledge to do something about it. This section makes some suggestions about other projects you might get involved with if you are really interested in taking things further. They include:

- 1. Area wide initiatives
- 2. Innovative energy efficiency projects
- 3. New building projects
- 4. Further projects to consider

1. Beyond the local community: Area wide initiatives

Communities can look outwards as well as inwards. They can become involved in broader energy efficiency initiatives. Area wide initiatives give community organisations an opportunity to work with others to develop ideas that promote energy efficiency throughout whole towns, cities or regions. You can make the effects of your efforts ever more far-reaching. As a bonus, when your community begins to work with others, it will expand its pool of contacts, skills and knowledge.

Affordable warmth strategies

Your local authority may have brought together its own departments with community and voluntary organisations, the health services and others to develop a co-ordinated Affordable Warmth strategy for your area. It may have published this strategy already. Ask for a copy and read it. You will find it contains an action plan which explains exactly how the strategy's proposals will be put into action. You will be able to judge the progress of your local authority's Affordable Warmth strategy from this - just look at how much of the action plan has been implemented already.

Get involved in the strategy. As part of a community project your involvement is crucial. Your input will ensure that the proposals are relevant to your community. Keep an eye on the action plan and make sure that its proposals are being implemented.

If there isn't an Affordable Warmth strategy in your area you could persuade the local authority to develop one. Remember they are being encouraged to do so by Government - additional pressure from local communities may give them the extra push they need.

Targeting other sectors

A number of areas, cities and regions have looked at energy use in the broadest sense. They are encouraging energy efficiency in all sectors - commercial and industrial as well as domestic. Get involved in these activities if they are taking place in your area. There is a role for community organisations in influencing energy use within other sectors:

- You can encourage local industries and commercial organisations to use their energy more
 efficiently to improve the environment.
- You can encourage local authorities to ensure the most efficient use of energy within their offices, public buildings and schools.
- You can improve the energy efficiency of community buildings such as village halls.
- You can promote the use of energy efficient transport and the use of walking and cycling rather than car use.
- You can make sure the domestic sector is not overlooked. You already know how
 improving energy efficiency here can make a major difference. You can ensure that the
 contribution schemes to improve homes and benefit individuals can make is not
 overlooked.

2. Beyond insulation and advice: developing innovative energy efficiency projects

Your community energy project will probably concentrate on the obvious solutions to improving energy efficiency: making sure that people know how to make their homes more energy efficient and promoting take-up of grants for improvements to insulation and heating systems. This can make a significant difference to fuel bills, comfort and environmental improvements at reasonable costs.

However, there are other technologies and measures, relatively uncommon at present but which are likely to become more important in future. Investigate the cutting edge of innovation in energy efficiency, solar power or wind power for example. Rethink the traditional modes of energy consumption. Can you build any of these new technologies into an energy efficiency project? (Take care, new technologies are often expensive. Make sure you will not be creating additional costs for vulnerable households.) Examples of innovative initiatives include:

- In Sheffield the city-wide community heating system uses heat recovered from a municipal refuse incineration plant produces electricity and heat from Combined Heat and Power stations. The system has provided that using bio-fuels or CHP as the primary heat source can make a significant contribution to reducing CO₂ emission.
- Berwickshire Housing Association has installed a small scale CHP system in a sheltered housing complex. In consultation with the residents the system has included the provision of a communal laundry facility.



3. New building projects

You have concentrated on how to improve the energy efficiency of existing homes, but what about new buildings? Consider how community involvement could have an impact here.

- Are there any regeneration projects in your community? Projects which aim to restructure
 deprived areas are looking to provide better homes. Community input into projects like
 these can ensure that energy efficiency is built into the process new dwellings should be
 affordable to heat and be environmentally friendly. There is also the potential to create
 employment and training opportunities in rebuilding communities.
- Though modern homes are built to reasonably energy efficient standards they could be better. House builders say that people are not willing to pay the extra costs involved in making a home more energy efficient, even though it will repay itself many times over in lower fuel bills. Education is needed to ensure that very energy efficient dwellings become the norm. Environmental organisations can assume the role of educator, as can those involved as parish or local councillors. Tenants' representatives can play their part too by pressuring their local councils to build homes to the maximum standards.
- Why not build your own home? Self build groups, partly out of interest and partly out of disappointment at what is on offer at a price they can afford, have got together to design and build their own homes. Many do so for environmental reasons and build to the highest standards of energy efficiency.

4. Links to new projects

In setting up and delivering an energy efficiency project you may have noticed other types of community projects which are absent from your area. If energy efficiency has whetted your appetite you may wish to move on by developing other types of community project. While the list is long, here are a few examples of new community initiatives which are lacking in many areas but which could be developed out of energy efficiency projects.

- People can't afford to pay for energy efficient appliances or energy efficiency improvements because they have no savings but they fall outside of the eligibility criteria for many of the grants. Consider the potential for setting up a credit union as a community-controlled method of promoting savings, to enable people to reduce debts and escape from moneylenders.
- An energy advice service continually identifies complex problems due to debt. Could you
 develop a partnership between your energy efficiency project and advice agencies so that
 energy advisors know about money and debt advice whilst money advisors know about
 energy efficiency?
- How can you ensure that energy efficiency in your community really does improve employment and training opportunities? What if homes are being improved but there is still no work for local people? There is certainly the potential insulation and heating industries have identified a lack of labour and skills, particularly as energy efficiency initiative have expanded. Can you link up with local training providers to ensure that they are actively exploring the scope for creating training and job opportunities linked to energy efficiency.
- The environmental benefits of an energy efficiency project may lead you to an interest in other environmental initiatives. There is great potential for recycling projects in many areas where they are underdeveloped. Consider putting your energies into environmentally friendly transport initiatives and projects which promote biodiversity.

We hope that this guide has ignited your enthusiasm and provided you with a framework you might use to begin building an energy efficiency project in your community. Section two provides helpful information on energy efficiency, including facts and figures.

Good luck. It will take plenty of energy to set up your project, use it efficiently!

Part Two - helpful information about energy efficiency

Even a quick glance through this section will give you some idea of just how many and varied are the links which energy efficiency has to other areas of policy. The great benefit of this broad scope is that your project will have wide appeal built in. You can sell your project to almost any group. But it also means there is already a framework of schemes and organisations out there that you can make use of (or that can make use of you) to achieve the aims you have set for yourself.

This section will go into detail about how energy efficiency relates to the following areas:

- 1. Health
- 2. The local economy and employment
- 3. Poverty and affordable warmth
- 4. Minority ethnic and language communities
- 5. Sustainable development
- 6. Education
- 7. Rural issues
- 8. An ageing population
- 9. Housing
- 10. Well-being

1. Health

Cold homes lead to poor health

In recent years a number of research projects have set out to establish how warmer homes could improve the health of residents and, in particular, children. Cold, damp housing can cause or exacerbate specific illness, in particular respiratory illness and cardio-vascular disease. Condensation dampness produces mould which, in turn, can trigger asthmatic attacks and lead to allergic reactions and bronchial diseases. Results of research projects indicate that the health gains from heating, ventilation and insulation improvements are considerable.

Living in a cold, damp home can also have a damaging effect on mental health - it is a deeply depressing experience. In addition, the worry about paying for fuel bills can increase anxiety and stress levels.

Warm homes improve health

Community energy efficiency projects can benefit both physical and mental health. When targeted correctly, projects can reduce respiratory diseases resulting from damp homes, link energy advice with community health support, provide assistance to people being discharged from hospital or campaign in winter to reduce cold-related illness. They can be linked into Health Action Zone programmes and fixed to bids for healthy living centres.

- In Cornwall a study of schoolchildren badly affected by asthma demonstrated that their symptoms improved significantly after energy efficiency work had been done with the associated benefit that the children's school attendance was much better.
- In Birmingham the local Care and Repair agency carried out energy efficiency improvements to the homes of older, vulnerable householders, as part of a partnership project established by the City Council and the Health Authority in which GPs 'prescribed' the improvements.

2. The local economy, employment and training

Releasing extra money into the community

In households that can already afford to pay their energy bills, any efficiency improvements will effectively increase the household's disposable income. Ideally, lower fuel bills create households which spend more money within the community bolstering the local economy.

Community energy efficiency projects can aid this process by targeting those with high fuel bills. Their aim should be to ensure that advice and grants which reduce expenditure on fuel is getting through.

Meanwhile, discount schemes for energy efficient appliances, run in conjunction with credit unions for example, can release funds for other expenditure.

Job creation and training opportunities

The work involved in carrying out energy efficiency improvements is comparatively low-skilled and labour intensive. This keeps the cost of job creation in this field low. The cost of job creation in energy efficiency is some £22,000 per person year; this is considerably lower than estimates for job creation costs in the rest of the economy.

Energy efficient projects can ensure that skills are developed within the community, that workers with relevant skills can practise their trade and others are trained in specific areas of work including practical work, providing advice and administrative skills. Projects can involve Intermediate Labour Market and other training organisations to create jobs and training opportunities.

If providing energy advice is one of the project's aims, supplying this service will create volunteering opportunities within the community.

Merseyside Council for Voluntary Service in Liverpool (now called Local Solutions)
 established a Safe & Warm scheme delivering security measures and insulation in the city.
 Unemployed local people were taken on under the Environmental Task Force option of the
 New Deal, and participants work towards an NVQ Level 2. The initiative is funded via
 Capital Receipts funding from the City Council.



• In Nottingham an Intermediate Labour Market organisation, NECTA, which specialises in green construction, worked with Notts Community Housing Association to construct 6 social housing units with very high energy efficiency standards. As well as providing affordably warm homes, the project gave valuable experience and training to over 100 long term unemployed people, of whom 55 went on to gain permanent employment.

3. Poverty and affordable warmth

Fuel poverty and social exclusion

The Government is worried about social exclusion. It recognises how cold, damp homes are linked to this problem. Families who cannot afford sufficient warmth for health and comfort are less likely to invite in friends and neighbours as their home does not present a comfortable and welcoming environment; this particularly affects social development in children who cannot invite their friends to visit and stay. The Government plans to measure its success in promoting social inclusion by looking for a reduction in fuel poverty amongst older households and those with children.

Energy projects can form a part of a multi-faceted attack on poverty. At a local level, energy efficiency has already been integrated into anti-poverty strategies which aim to combat poverty and social exclusion. Projects can tackle fuel debt whilst, at the same time, providing money advice. They can be targeted at specific groups where social exclusion is a major issue, for example low-income families with young children.

Affordable warmth

Across the UK fuel poverty is being tackled at a local level through the development of Affordable Warmth strategies and fuel poverty action plans. An Affordable Warmth strategy sets key aims, objectives and tasks which are published and their progress monitored. Whilst in most cases strategy development is co-ordinated by the local authority it is crucial to involve other organisations. Community groups, voluntary organisations and the health service are just a few examples of the type of groups that should be involved.

Community projects can be linked to an Affordable Warmth strategy and designed to ensure that every possible household achieves adequate warmth at a price it can afford. Projects can develop referral networks, for example in partnership with Citizens Advice Bureaux, Welfare Rights Services and other advice agencies, to ensure that everyone who is entitled to grant aid applies.

• In Coventry, a consortium of local advice centres, together with the Citizens Advice Bureau and NEA, have secured National Lottery Charities Board funding to deliver the Coventry Fuel Poverty Initiative. The aim is to ensure that the best possible advice is given to low-income households encompassing and integrating benefits advice, money advice and debt counselling, energy advice and referrals for grant assistance for housing and energy efficiency improvements.

- In Luton the local community developed an Affordable Warmth strategy under the leadership of the local authority. Participants devised a system to identify households suffering from fuel poverty, referrals being made by a range of energy awareness trained frontline staff from the local authority, health and community organisations. In addition to the provision of free insulation work and heating improvements available through energy schemes, the Citizen's Advice Bureau undertook to assist where money advice was needed, a welfare rights organisation undertook to provide an income maximisation service, and a local authority team provided other necessary improvements for elderly and disabled households.
- The London Borough of Camden has developed a strategy in consultation from the outset with a wide range of organisations and groups, and with many of its own internal services represented. In this ethnically diverse borough, minority community support and participation were essential elements of the inclusiveness of the development process and of the final strategy. Delivery has included the appointment of an outreach worker and a local EESoP energy efficient appliances scheme.

4. Minority ethnic and language communities

Breaking down barriers

Social exclusion issues are worsened in cases where households are isolated from the main community for language and cultural reasons. There is evidence that the take-up of energy advice and energy efficiency improvements is lower where these barriers exist. Community-based initiatives can overcome these barriers if they are based in the specific community and involve trusted community leaders. Information and leaflets should be provided in appropriate languages and/or English speakers within the community (for example general advice workers, school children) need to be trained. It's well worth thinking about how training provision can be adapted to account for cultural differences.

- 10 energy advice workshops were delivered with Asian women's groups in Gloucestershire, using interpreters and translated material where appropriate, including information about HEES and other grants, condensation and health links.
- A community group in the London Borough of Southwark prepares regular energy efficiency information, translated into Vietnamese and Cantonese for its members.
- Across London, four hundred minority community organisations belong to a network which aims to raise energy awareness with their membership, and which has distributed 14,000 low energy lamps to their members and promoted the national Fridgesaver scheme to non-English-speaking households with great success.



5. Sustainable development

What is sustainable development?

Sustainable development is defined as development that meets the needs of the present without compromising the ability of further generations to meet their own needs'. In other words, we need to meet our own needs but ensure the needs of our children and grandchildren are met too.

However, environmental targets should not compromise social justice or quality of life and vice versa.

A sustainable energy policy should increase production from renewable sources, improve energy efficiency and at the same time tackle fuel poverty. It will protect scarce resources and reduce greenhouse gas emissions.

Local Agenda 21

Local Agenda 21 (LA 21) emphasises that sustainable development needs to be planned at a local level and involve all stakeholders - residents and businesses as well as the local authority.

LA 21 strategies have now been developed in all areas and most will have an energy component. They will include targets or indicators which will be used locally to measure progress. These will vary from area to area but may include such things as domestic CO₂ emissions or average energy ratings. This is reinforced by the Home Energy Conservation Act which requires local authorities to develop a strategy to reduce domestic energy use by 30% in a 10-15 year period.

Protecting the environment through local action

Communities are ideally placed to 'think globally, act locally' and can contribute to LA 21 targets and the whole process of developing LA 21 by demonstrating how improving health, housing and job prospects can make better use of natural resources and protect the environment.

- In Nottinghamshire, Sherwood Energy Village is setting out to create a complete working community in a former coalfield area as a sustainable example of local economic regeneration. The village, designed by a partnership of local organisations, aims to demonstrate a 'zero CO₂ autonomous industrial community' and homes in the village will be very energy efficient, with no emissions.
- Nottingham's LA 21 organisation, Nottingham Green Partnership, funded a project which employed a community artist to work with a local community centre to construct a permanent sculpture with an energy saving message. The ideas for the sculpture came from children attending the summer play-scheme.

6. Education

How can energy efficiency be linked with education?

Energy efficiency provides a good example of a topic which can be linked to a wide range of educational projects. It can be targeted at all groups and across a large number of subject areas. Energy efficiency can contribute practical examples to subjects including English, Maths, Science, Geography, Art and Design and Technology. Projects can include studying the energy efficiency of the school, which can be linked to SchoolEnergy grant-aid for improvements, and to homework which helps families to save energy in the home and access grant-aid and energy advice. It is also worth investigating the Government's Surestart programme, which can incorporate energy efficiency education initiatives.

What are the benefits?

By persuading schools to participate in community energy efficiency initiatives, the links between school and community can be improved.

Targeting young people is an effective way of getting the energy efficiency message into the home.

Community education can employ energy efficiency projects as a way of promoting learning.

- The energy efficient measures installed through the SchoolEnergy Programme are generally expected to pay for themselves within three to five years. During 1997/98, 209 schools participated in the programme. 89 of those schools provided data which showed considerable savings for both fossil fuels and electricity. The average saving made during the first full year following the installation of measures was 132,584kwh.
- Leicester City Council was successful in obtaining £128,510 Surestart funding for a three-year project, 'Safe and Healthy Homes'. This combines two key themes: 'home safety' and a warm and healthy living environment'. The project aims, through the provision of advice, information and grant aid, to ensure low-income householders with young children have homes that are warm, well-ventilated and safe.
- Ashfield Nursery School in Elswick, an inner city area of Newcastle Upon Tyne worked with NEA to introduce children, using a whole school approach, to a range of energy sources in order to discover where energy comes from. Parents were also involved and this had the added benefit of increasing their awareness of the importance of energy efficiency. A resource pack detailing this project was produced, together with a video showing the project in action.
- The Energy Efficiency Challenge for the Guides was launched in September 1998. The aim of the Challenge was to save 1 million kilograms of CO₂ by February 2000. A broader aim of the Challenge was to increase knowledge and understanding about energy efficiency by Guide members and enable them to extend this into their local communities. By the end of February 2000 Guide groups succeeded in saving in excess of 10 million kilograms of CO₂.



7. Rural issues

Specific issues facing rural communities

Increasing attention is being paid to the problems of rural areas. Energy efficiency issues are clearly a concern in areas where there is often a limited choice of fuels and a greater reliability on those which are least efficient. Rural areas have a higher proportion of older housing, often detached and exposed, and there is a lack of access to advice services. Energy efficiency initiatives could include volunteer referral networks to promote grant schemes. Energy champions' could promote energy efficiency within the community. Schemes could be set up to encourage the innovative use of small scale and renewable energy sources. Mobile advice could be organised. Improvements to village halls could be undertaken as an example to households.

- Daventry Energy Conservation Partnership, which covers 74 rural villages in addition to the
 town of Daventry, is a partnership between the local authority, voluntary and community
 organisations, the Health Service and insulation contractors. In liaison with parish councils,
 village energy wardens are recruited to provide the link between the partnership and
 village residents, and to help to organise Energy Days which provide advice and grant
 referrals for local residents. 25% of village householders have responded to the Energy
 Days.
- Rural Community Councils in Oxfordshire, Lincolnshire, Devon and Cornwall and Shropshire have worked with NEA, to improve the energy efficiency of village halls and hold energy efficiency events in the completed halls. The halls were improved by a combination of measures and included insulation and heating improvements. The energy evenings were promoted to the local community and the users of the hall. The subjects covered by the evenings were improving energy efficiency in the hall and setting up referral mechanisms to ensure grant providers serve rural areas.
- SWEEP (South Warwickshire Energy Efficiency Project) is a partnership scheme involving local authorities, the Energy Efficiency Advice Centre and village communities in rural Warwickshire, funded by HECAction. It includes grant referrals for eligible households and discounted insulation and heating measures for all households. Community members have been integral to promoting the scheme and the combined endorsement of the local council together with the community itself has led to a response rate of around 50% much higher than traditional marketing methods.

8. An ageing population

Protecting vulnerable social groups

Older people are more at risk from health problems caused by living in cold and damp homes. Restricted incomes mean that many suffer from fuel poverty and cannot afford to maintain or modernise their home. Many elderly people live in homes which are too large for their needs and expensive to heat.

Energy efficiency initiatives can make a major difference to elderly people, particularly when integrated with projects and grants for home improvements. Energy companies provide special services such as gas safety checks for pensioners and many grant schemes target the elderly - there is a need for advice and information projects which ensure that these are taken up by older people. Older people living alone and the frail elderly can benefit from using smaller energy efficiency appliances and simple, easy-to-use and conveniently located heating controls. Energy efficiency initiatives can enable independent older people to remain in their own homes, rather than be taken into care.

- Winteraction, a consortium of voluntary and community groups and statutory agencies in Newcastle Upon Tyne, runs a winter campaign each year which distributes over 9000 information packs to older people, has trained hundreds of their carers in basic energy awareness, and operates a winter helpline. The Winteraction Peer Group Advisers Scheme trains older volunteers to provide energy advice at home for older and disabled householders. The work has been recognised with the award of an Age Concern Coldwatch award.
- The Health and Energy Link Programme (HELP) in Fife, is working to provide older residents with heating and insulation. The project relies on referrals from district nurses and community health visitors who visit over 75s in their homes, and who have received basic energy awareness training.
- Age Concern Wigan in partnership with Pensioners Link and Victim Support successfully applied for National Lottery Charities Board funding to deliver their Safe as Houses project. The project combines improving domestic security with home safety audits, energy advice and referrals for energy efficiency improvements.

9. Housing

Substandard housing means a greater challenge for energy efficiency New housing is built to good standards of energy efficiency. However, for many years British house-building lagged behind many other countries in terms of energy efficiency, with low levels of insulation, and inefficient heating systems, wasting huge amounts of energy and, of course, money.

The average age of property is getting older and many owner-occupiers cannot afford to improve homes to a modern standard. Lack of knowledge has also meant that opportunities have been lost to incorporate energy efficiency measures into home improvements such as new windows and floors, at little extra cost.

While much has been done as a result of government grant schemes and investment by local authorities and other landlords, there is a long way to go. The issue extends across the housing stock from older properties, occupied by low-income owners and tenants, to upmarket homes where the occupiers need to be convinced that they should stop wasting energy to benefit the environment.

Energy efficiency projects can promote take up of existing grant schemes for energy efficiency improvements. They can develop and secure funding for improvements to specific estates. They can set up discount schemes to encourage homeowners to improve their properties and provide advice, information and encouragement to householders.

- The Devenish Energy Project in Enniskillen is a partnership between community organisations, the Western Regional Energy Agency and Network. By linking with the Domestic Energy Efficiency Scheme and a Northern Ireland Electricity grant scheme all households can receive a package of energy efficiency improvements together with energy advice.
- In Birmingham Summerfield Care and Repair, a community-managed Home Improvement Agency, delivers the Kick Start scheme in partnership with the city council and the local credit union to fund energy efficiency and heating improvements to the homes of vulnerable people, in addition to those available through HEES and renovation grants.

10. Well-being

Government commitment to community well-being

In 2000 the Government issued guidance for local authorities in England which identified tackling fuel poverty as a 'local well-being issue'. As can be seen from the examples above this can apply to energy efficiency in general. The guidance identifies providing affordable warmth as a key Government priority. It recognises the links between energy efficiency and wider environmental, economic development, health and housing issues. Local authorities are encouraged to develop a corporate commitment to improving energy efficiency and the guidance encourages the development of partnerships with community and voluntary organisations and health and social services organisations.

This marks an acknowledgement at Government level of the links between energy efficiency and a wide range of policy areas. The links are also being made within local authorities and the health service. They are looking for ideas to deliver their commitment to energy efficiency. Community energy efficiency projects are ideally placed to demonstrate practically on the ground how energy efficiency can benefit local people.

This section contains six case studies of energy efficiency projects which will provide you with more detail of what can be achieved. This will give you just a small selection from a wide range of energy efficiency projects, but hopefully it will be enough to provide inspiration and help refine your ideas.

From the case studies you will see the importance of partnership - community organisations working jointly with other organisations from the public and private sectors. The roles which local communities have played are varied. In some cases the idea for a project has come from the local community; it has been the community which has secured local authority or private sector support and funding to deliver the project. In other cases the project idea has come from people within the public sector; by working with local organisations they have been able to persuade their community that an energy project is worthwhile.

Case study 1 - Beat the Cold, North Staffordshire

What policy areas was this project linked to?

Energy Efficiency and Health Energy Efficiency and an Ageing Population

What were its aims?

- To co-ordinate activities across North Staffordshire to relieve the effect/problem of cold with regard to the elderly, people with disabilities, families on low income, the homeless, etc.
- To encourage older people to be more demanding rather than accepting that feeling cold in winter is a normal or natural thing.

Who were the partners?

- Beat the Cold originated as a partnership between Staffordshire Social Services and Stoke-on-Trent Council for Voluntary Service.
- In 1999 Beat the Cold became a charity in its own right.
- Organisations involved in Beat the Cold's advisory forum include:
 - Local authorities
 - North Staffs Health Authority and Combined Healthcare NHS Trust
 - Voluntary organisations including Age Concern, Disability Solutions, North Staffs Carers Association, WRVS
 - Community groups
 - The Benefits Agency
 - Radio Stoke community broadcast unit
 - NEA, npower and British Gas

Where did it find funding?

- Beat the Cold began as an informal working party.
- From 1995 grants from Midlands Electricity enabled the appointment of a co-ordinator.
- In 1999 Beat the Cold secured a substantial grant from the National Lottery Charities Board.

• Beat the Cold attracts substantial funding into local communities through increasing access to grants for energy efficiency activities.

What did the project involve?

The project activities include:

- Producing a simple 'lifestyle' advice leaflet that is revised and updated every year, in four
 versions for different localities featuring useful national and local contacts. It is designed for
 use by people with impaired vision or poor literacy and is distributed widely by district
 nurses, health visitors, doctors, dentists, pharmacies, area housing offices, social services
 area offices, home care assessors, care workers, fuel companies, and well over one hundred
 voluntary agencies and community groups.
- Holding and updating information to benefit clients and partners on
 - National energy efficiency grant schemes
 - Local authority schemes funded by, for example HECAction, the Single Regeneration Budget
 - Initiatives by other agencies, e.g. Help the Aged, Energy Saving Trust
 - Fuel company initiatives, e.g. special needs registers, discount schemes
 - Care & Repair handyperson schemes
 - Health service information and local initiatives
- Home energy checks
- Talks and events to deliver simple lifestyle advice (safe indoor temperatures, dressing and eating well, warmth at night) and details of HEES and other grant schemes. About 100 talks are delivered each winter.
- Training and briefing sessions (on, for example, affordable warmth and good health, national
 and local grants and schemes, using fuels and heating systems, carbon monoxide awareness
 and paying for fuel) are delivered to other agencies and groups working with vulnerable
 people including the Benefits Agency counter staff, Age Concern volunteers, occupational
 therapists, residents associations, Older People's Services Forum and Rotary Clubs.
- Specific initiatives are undertaken from time to time including
 - Advice linked to 'flu jabs
 - Locality specific advice for particular estates
 - Work with local authorities to prepare funding bids

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Case study 2 - community projects in Stroud

What policy areas was this project linked to?

Energy Efficiency and Sustainable Development Energy Efficiency and an Ageing Population Energy Efficiency and Rural Issues

What were its aims?

To improve energy efficiency within the Stroud area, Stroud Council has facilitated a series of community energy efficiency projects, which are described below, each targeting a particular group or area within the community.

- The Riverside Project aimed to raise awareness of energy efficiency and provide energy advice, insulation measures and energy efficient appliances to people over 60, and others on low incomes in remoter parts of the authority.
- The Energy Champions project aimed to develop a network of informed volunteers who
 would act as a focal point to promote energy efficiency within their community.
- The Solar Energy Club to promote solar water heating installations.
- Focus on Families, targeting families with children under 5.

Who were the partners?

- Women's Royal Voluntary Service (WRVS), providing meals on wheels
- · Various departments of Stroud Council led by the council's energy efficiency co-ordinator
- Gloucestershire Social Services
- Severn Wye Energy Agency
- District and parish councillors
- A wide range of community and voluntary organisations, residents associations and women's institutes
- A furniture recycling project

Where did it find funding?

- Stroud Council has committed funds to a series of energy projects from its own budget, successfully applied for HECAction funding with neighbouring authorities, and allocated staff time to the initiatives.
- Midlands Electricity
- The projects attracted a range of energy efficiency grants to the targeted groups.

What did the project involve?

- The Riverside Project included:
 - Energy efficiency lunches providing practical advice and information in an informal and enjoyable setting, at which energy efficiency resource packs including a free low energy light bulb were distributed.
 - 'Fun and Facts in the Community' days were arranged in four village halls on Saturdays comprising displays and promotions with advice and information of interest to most people within the communities, on a range of issues including energy efficiency. Energy questionnaires, prize draws, entertainment for children and refreshments made the day as enjoyable and participative as possible.

- The events provided opportunities to promote HEES and other local and national initiatives, and the Council disseminated advice and information about their own grants for insulation measures and electrical appliances.
- Council funding was available for people within the target area to provide
- Energy efficient fridges, freezers or microwaves to Meals on Wheels recipients and to top up and extend the range of energy efficiency measures, including cavity wall, loft insulation and draught proofing, provided by the Home Energy Efficiency Scheme.
- The Energy Champions scheme provided City and Guilds Energy Awareness Training for volunteer energy champions recruited through village events or other parish organisations.
 They are trained to provide energy advice through home visits and presentations in their parishes, with Council support.
- The Solar Energy Club provides specialist training and product discounts to facilitate solar water heating installations.
- Focus on Families was funded by HECAction to enable local councils to work in partnership with family organisations to provide energy advice for families with young children under 5.
- Stroud and neighbouring authorities have received HECAction funding to work in partnership with estate agents to provide energy awareness training for their staff and energy efficiency information packs for house movers.

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Case study 3 - Carstairs Environmental Improvement project

What policy areas was this project linked to?

Energy Efficiency, Poverty and Affordable Warmth Energy Efficiency and Sustainable Development Energy Efficiency and Housing

What were its aims?

- To provide energy efficiency improvements for rural local authority housing in an area with a high proportion of both elderly and unemployed residents and without mains gas.
- To promote access to Warm Deal grants and energy advice for residents in private sector housing in the same area.

Who were the partners?

- Local community groups
- South Lanarkshire Council Energy Unit
- Local companies and employers

Where did it find funding?

- £161,676 via a Scottish Power Energy Efficiency Standards of Performance (EESoP) scheme
- Warm Deal Grants for energy efficiency improvements

What did the project involve?

- The project was undertaken between September and December 1999.
- 410 local authority properties received improvements:

Energy efficiency	No. of households	%age of
measures	benefiting	LA Stock
Cavity wall insulation Loft/pipe insulation CFLs (2 per household) Radiator reflector panels Specific energy advice	194 329 185 160 104	47% 80% 45% 39% 25%

- 780 households had access to energy efficiency advice and information.
- NHER ratings (a measure of the energy efficiency of a dwelling) increased by an average 14% (1.4 points).
- Fuel bills were reduced by up to £300 a year for participating households.
- CO₂ emissions were reduced by 404.6 tonnes a year.
- Information days were held and broadened to include other agencies.

 The project provided a focus for the development of additional environmental projects, including the two local primary schools registering to work towards ECO schools status, a litter pick up campaign, siting of a recycling centre, tree and bulb planting and landscaping of amenity areas.

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Case Study 4 - South Wales Credit Unions Soft Loan Pilot Initiative

What policy areas did this project make links to?

Energy Efficiency, Poverty and Affordable Warmth

What were its aims?

- To promote and facilitate the uptake of energy efficiency improvements by members of the eight participating credit unions through provision of available grants and a dedicated soft loan facility.
- To promote the take-up of EESoP and HEES grants for energy efficiency improvements.
- To raise awareness of fuel poverty and energy efficiency amongst staff and volunteers of the Wales Co-operative Centre and South Wales Credit Unions,
- To establish a loan fund to allow credit union members to purchase energy efficient appliances.
- To refer credit union members on for practical assistance and advice as appropriate.

Who were the partners?

- Wales Co-operative Centre
- South Wales Credit Unions: Bargoed, Barry, Caerphilly, Ely, Newport, Paysaver, Penarth and St Mellons Credit Unions took part.
- NEA, the national energy action charity acted as project manager.
- The local electricity company SWALEC

Where did it find funding?

SWALEC EE SoP funding with household contribution of £4 towards costs.

What did the project involve?

- The project took place in May June 2000.
- 2215 credit union members took part in the scheme, paying £4.00 for two CFLs and an energy efficient cordless electric kettle.
- All participants received information about other energy efficiency grant schemes.
- Wales Co-operative Centre staff and credit union volunteers attended two one-day energy awareness training sessions.
- An infrastructure was established which would enable schemes promoting a wider range of energy efficiency improvements through soft loans to be developed.
- The project has developed a methodology that could be replicated elsewhere, which both promotes energy efficiency and encourages membership and participation in credit unions.

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Case study 5 - The Beechmount Project, Belfast

What policy areas was this project linked with?

- Energy Efficiency, Poverty and Affordable Warmth
- Energy Efficiency and Sustainable Development
- Energy Efficiency and Education

What were its aims?

The project is an energy efficiency pilot project focussed on the alleviation of fuel poverty and contributing to sustainable improvement in Beechmount.

Beechmount is an urban housing area in West Belfast. It is characterised by high levels of unemployment and suffers from a high level of deprivation. Housing is primarily owner-occupied, Victorian terraces.

The objectives of the first phase of the project were:

- To carry out an energy audit of the housing stock and explore the links between energy efficiency and health, environment, economic development and education.
- To make recommendations for action, which could be delivered by a community-led partnership.

Who were the partners?

- Blackie Community Groups Association
- Bryson House (a local charity)
- Department of the Environment (Northern Ireland)
- Northern Ireland Housing Executive

Where did it find funding?

- The Beechmount report was funded by the Department of the Environment (NI).
- The other partners provided assistance in kind and allocated time to the project.
- Delivery of future phases would cost approximately £3.8 million and will require a large fund-raising initiative.

What did the project involve?

- Engaging local residents, developing their skills and capacities, to make sustainable community improvements, is the core premise upon which this community energy planning process has evolved. The Blackie Community Groups Association has played a major role in developing and implementing the project. The essential role of local community structures in achieving sustainable behavioural changes should not be undervalued.
- In order to integrate the need for change into the community's social infrastructure, local children have been engaged in energy and environmental study activities through local primary schools. Children have a significant role to play in underpinning behavioural change in households today and as householders of the future.



- A range of information gathering and assessment mechanisms were employed to provide a status assessment of the area's energy efficiency and environmental condition. 43% of householders completed a doorstep questionnaire survey. Technical energy surveys, walkaround surveys and the establishment of a focus group further supplemented and validated the data collected.
- With regard to energy efficiency, the housing stock has an energy rating just below the Northern Ireland average. In general, housing appears to lack basic insulation and heating systems are inefficient and poorly controlled. The data suggests that a significant number of Beechmount residents suffer from fuel poverty. A high proportion of respondents report health conditions, particularly respiratory disorders.
- The potential of both energy and environmental improvements to create locally-led economic development opportunities was explored. The project recommendations highlight opportunities for local people to become engaged in training and employment programmes linked to those development opportunities.
- The report recommends the implementation of an integrated energy efficiency assessment process, which encourages a comprehensive approach to provision, recognises ability to pay, and includes independent assessment based on achieving a target energy rating. To manage this programme, the report's second major recommendation proposes a community/statutory partnership development body, to apply for funds and implement the proposals contained in the report.
- The report also identifies other environmental improvements which could be linked to the initiative including a kerbside recycling project, a play and green area development scheme and secure back entries to terraces.

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Case study 6 - Birmingham Settlement Fuelsavers - Handsworth project

What policy areas was this project linked with?

- Energy Efficiency, Minority Ethnic and Language Communities
- Energy Efficiency and Housing

What were its aims?

The project area (Handsworth/Lozells, Birmingham) was characterised by housing stock in generally poor condition; the majority privately owned or rented including homes in multiple occupation, with some in local authority tenancy. Afro-Caribbean, Asian-Indian, Pakistani and Bangladeshi households made up of 58% of the population. The objectives included:

- To provide energy efficiency advice and related money advice services to low-income households.
- To promote the take-up of energy efficiency improvement grants available to private and local authority households.
- To make referrals to health, housing and other appropriate agencies.
- To promote the advice services available through community networks and local media.
- To establish a means of reaching households outside conventional community networks.

Who were the partners?

- Birmingham Settlement Fuelsavers, part of the Birmingham Settlement, a long established charity working in inner city Birmingham.
- Birmingham City Council Housing Department and Urban Renewal Division.

Where did it find funding?

 The project was funded by a grant from NEA, which was available as a result of a donation from Midlands Electricity.

What did the project involve?

- Home visits resulting from referrals direct to Fuelsavers and a variety of other community sources and carried out by Fuelsavers, City Council Practical Care Project staff and Age Concern provided specific energy advice to 196 (66% Black and Asian) households.
- 291 (99% Black and Asian) people attended 12 presentations to a wide variety of groups including churches, senior's clubs, women's centres and community resource centres. 'Save Energy, Save Money', a Birmingham City Council video was extensively shown in its Asian language versions. A further 439 people attended advice surgeries in Handsworth Library and the Asian Resource Centre.
- All participants received information packs including material in appropriate languages and 82 packs were also given out at the Vaisakhi Sikh Festival.
- More than 300 referrals for other services were made including 134 Home Energy Efficiency Scheme applications. 936 free low energy light bulbs (from an EESoP scheme) and over 1000 card thermometers were also distributed.



 The project took place in 1996. Since that time a series of initiatives with minority communities in Birmingham have taken place and a range of material developed in minority languages.

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Let's look now at energy efficiency in the home, how home energy use affects the environment and how to save money through energy efficiency. Use this section as a resource. These facts and figures will help you, when talking to colleagues, neighbours and community organisations about energy efficiency, to illustrate the kinds of benefits energy efficiency projects can bring.

Where does the heat go?

A home loses heat continually whenever it is warmer inside than outside. You cannot stop this happening but you can slow it down - and that will reduce your fuel bills, make you more comfortable, and benefit the environment.

In an uninsulated house:

- 33% of wasted heat is lost through the walls
- 26% of wasted heat is lost through the roof
- 8% of wasted heat is lost through the floor
- 12% of wasted heat is lost through ventilation and gaps round windows, doors etc
- 18% of wasted heat is lost through windows

Using heating systems and appliances inefficiently also contributes to wasted energy and increased fuel costs.

How to save energy, slow down heat loss and save money

There are many ways to save energy and money, ranging from those which cost nothing to those which cost substantial amounts of money but which pay for themselves over a fairly short period by reducing fuel bills. Community energy efficiency projects can:

- Encourage people to invest in those measures they can afford
- Educate people to follow the no-cost tips to save energy in their own home
- Ensure that eligible households secure grant-aid for energy efficiency improvements
- Persuade landlords to invest in the energy efficiency of their housing stock

The measures can be divided into three types:

- 1. No cost ways to save energy
- 2. Low cost ways to save energy and money
- 3. Higher cost ways to save energy and money

Remember that the higher cost options can often be grant-aided for people who cannot afford the investment, and that they pay for themselves through reduced bills.

- 1. Ten no cost ways to save energy and money
 - 1. Central heating turning the thermostat down by 1°C can save 10% of heating bills, saving around £30 per year.
 - 2. Hot water setting the cylinder thermostat at 60°C/140°F should provide a sufficiently high temperature for domestic use, saving £10 per year.
 - 3. Always use the basin or sink plug. Running hot water is expensive and wasteful.

- 4. Lights turn off unnecessary lights and adjust curtains and blinds to allow as much natural light as possible.
- 5. Electrical appliances do not leave televisions, videos, etc. on standby.
- 6. Fridges do not leave the refrigerator door open and avoid putting warm or hot food into the fridge. Defrost the appliance regularly.
- 7. Washing machines/tumble dryers wait until you have a full load before use. Try the low temperature programme where possible.
- 8. Dishwashers use the low temperature programme where appropriate.
- 9. Pots and pans choose the right size ring for pots and pans and keep lids on when cooking.
- 10. Kettles heat only the amount of water needed.

2. Nine low cost ways to save energy and money

- 1. Low energy light bulbs use around a quarter of the electricity, and will last ten times longer than an ordinary bulb. They cost up to £5 and save around £10 per year.
- 2. An insulating jacket for your hot water tank will cost around £10 and save around £10-£15 per year.
- 3. Insulate your hot water pipes to prevent heat escaping. The cost is about £1 per metre to save around £5 per year.
- 4. An ordinary shower uses only two-fifths of the hot water needed for a bath. Shower attachments for both taps cost around £5.
- 5. If you have a dripping tap fix it quickly; in just one day, a dripping hot water tap can waste energy and enough water to fill a bath.
- 6. Draught proof exterior doors.
- 7. Fit a seal or flap on your letterbox and cover the keyhole.
- 8. Fill gaps in floorboards or under skirting boards with newspapers, beading or sealant, for about £25 to save around £5-£10 per year.
- 9. Use cling film or polythene on windows as an alternative to double-glazing, costing from £10.

Grants schemes such as the Home Energy Efficiency Scheme or Warm Deal and electricity and gas EESoP schemes will meet the cost of some of these low cost measures for eligible households.

3. Three higher cost ways to save energy and money

The following measures require a greater initial investment, but they will pay for themselves in the future.

- 1. Insulation, to keep more heat in
- 2. Energy efficient heating systems and controls
- 3. Energy efficient appliances

The tables below give a typical cost for each measure, the annual savings in fuel bills which will result for a typical house, and the payback period, which is the number of years which it takes to recoup the initial cost by savings in fuel bills. Installing energy efficiency measures could also add value to your property.

1. Insulation

Insulation involves adding extra material to the structure of a building to keep the heat in better - rather like putting on an extra layer of clothing. Insulation can be applied to walls, windows, doors and roof spaces.

	Cost	Annual Savings	Payback Period
Cavity wall insulation Internal wall insulation External wall insulation* Loft insulation (250mm virgin loft) Loft insulation (200mm top up) Loft insulation (DIY) Draught proofing Hot water tank and pipe insulation	£280-£380	£70-£100	3-5 years
	From £900	£140-£170	5-6 years
	From £1,500	£140-£170	9-11 years
	£225-£250	£80-£100	2 years
	£210-£230	£20-£30	7-11 years
	From £140	£20-£30	7-11 years
	£85-£110	£10-£15	6-11 years
	From £20	up to £20	1-2 years

^{*}Additional cost where repair work is being undertaken

2. Heating systems and controls

Modern central heating systems are much more energy efficient than older types. Replacing a 15-year-old boiler could save you 20% on your fuel bills or 32% if a condensing boiler is installed. With the right heating controls (for example, room and boiler thermostats and timer/programmer) you could cut your fuel bills by as much as 40%.

Boiler	Cost	Annual Savings	Payback Period
Condensing boiler	From £150	£30-£40*	4-5 years

^{*}Over and above savings from upgrading to new boiler

Heating Controls	Cost	Annual Savings	Payback Period
Room thermostat Full controls* Thermostatic radiator valves*	£110-£140	£10-£15	7-14 years
	£125-£250	£50-£60	2-5 years
	£75-£100	£7-£15	5-14 years

^{*}Assuming other work in heating system being undertaken at same time

3. Energy efficient appliances

The European Union has introduced an energy efficiency labelling scheme that applies to fridges, fridge/freezers, washing machines, tumble dryers and washer dryers. The labels range from A (highly efficient) to G (inefficient). Wherever possible you should opt for the most efficient appliance available within your budget; any additional cost should be recovered in reduced electricity consumption.

If your current appliances are over 10 years old upgrading to an A-rated energy efficient model could save you the following on your electricity bill per year:

Fridge freezer £45
Upright/chest freezer £35
Fridge £25
Washing machine £15

Installation

Some of the improvements can be carried out on a do-it-yourself basis. However there are important reasons why a qualified contractor should be used. Some heating appliances such as gas fires and coal fires use air from the room they're in to burn. It is very important that insulation does not totally seal these rooms and adequate ventilation is provided. Ventilation will also help to avoid condensation. Plumbing, electrical and gas fitting are skilled work and only suitably qualified people should be used.

The Energy Saving Trust has set up a network of Energy Efficiency heating insulation and glazing installers who have signed up to an Energy Efficiency Code of Practice and can advise and install the best energy efficiency option to suit your needs.

The various grant and discount schemes including the Home Energy Efficiency Scheme Warm Deal, local authority schemes and gas and electricity EEC schemes use installers who have been carefully vetted and selected.

The bigger picture

How do improvements to individual homes relate to the broader environment? Here are some facts and figures which show the link between individual and local action and the UK-wide situation:

- Households spend £5.3 billion each year on domestic lighting and appliances.
- The average household produces more than 6 tonnes of CO₂ each year.
- The average household could save £200 a year by installing energy efficiency measures.
- If every household installed three low energy light bulbs the savings would pay for all the street lighting in the UK.
- As a nation we waste £5 billion worth of energy each year.
- If current trends continue, in 100 years' time the temperature will be 3°C higher than it is

Action at a community level to improve energy efficiency can help to improve these figures, and improve the quality of life for all.



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CAT

NLCB Corporate and UK Office

St Vincent House, 16 Suffolk Street, London SW1Y 4NL General/Reception Tel: 020 7747 5300 Enquiries Line Tel: 020 7747 5299 Recruitment Tel: 020 7747 5273 Minicom: 020 7747 5347 Fax: 020 7747 5214 www.nlcb.org.uk

Centre for Sustainable Energy

The CREATE Centre, B-Bond Warehouse, Smeaton Road, Bristol BS1 6XN Tel: 0117 929 9950 Fax: 0117 929 9114 www.cse.org.uk

Energy Action Scotland

Suite 4A, Ingram House, 227 Ingram Street, Glasgow GL1 1DA Tel: 0141 226 3064 Fax: 0141 221 2788 www.eas.org.uk

Energy Efficiency Advice Centres (EEACs)

Tel: 0800 512 012 for local help www.est.co.uk

Energywatch

3rd floor Artillery House, Artillery Row, London SW1P 1RT www.energywatch.org.uk

Groundwork Foundation

85-87 Cornwall Street, Birmingham B3 3BY Tel: 0121 236 8565 Fax: 0121 236 7356 www.groundwork.org.uk

Help the Aged

207-221 Pentonville Road, London N1 9UZ Tel: 020 7278 1114 Fax: 020 7250 4474 www.helptheaged.org.uk

Home Energy Efficiency Scheme in Wales, Eaga Partnership Wales

Unit 4,Ty Nant Court,Ty Nant Road, Morganstown, Cardiff CF15 8LW Tel: 029 2027 7260 www.eaga.co.uk

National Energy Action

St Andrews House, 90-92 Pilgrim Street, Newcastle NE1 6SG Tel: 0191 261 5677 Fax: 0191 261 6496 www.nea.org.uk

OFGEM

9 Millbank, London SW1P 3GE Tel: 020 7901 7170 Fax: 020 7901 7381 www.ofgem.gov.uk

Warm Front Grant (Eastern England)

Freepost ANG8305 Ipswich IP1 2ZY Tel: 0800 952 1555

Warm Front Grant (Rest of England) c/o Eaga Partnership Ltd

Freepost NEA12054 Newcastle Upon Tyne NE2 1BR Tel: 0800 316 6001 Fax: 0191 230 1830 www.eaga.co.uk

Warm Homes Scheme in Northern Ireland,

Eaga Partnership Northern Ireland Dinree House, Thomas Street, Dungannon, County Tyrone BT70 1HN Tel: 01868 753636 www.eaga.co.uk

Warm Deal in Scotland, Eaga Partnership Scotland

Suite 2a, 10th Floor, 80 Commercial Quay, Edinburgh EH6 6LX Tel: 0131 777 2501 www.eaga.co.uk

You may wish to contact your Local Authority for information on:

- LA21
 HECA
 Affordable Warmth Strategy
- Health Action Zones

Also consider contacting your local health authority for information.

Glossary

The world of efficiency is full of acronyms and other idioms which are not always obvious to those who are not familiar with the specific sector.

ACE Association for the Conservation of Energy

AMDEA Association of Manufacturers of Domestic Electrical Appliances

APHC Association of Plumbing and Heating Contractors

ARLA Association of Residential Lettings Agents

BBA British Board of Agreement

BEEF British Energy Efficiency Federation
BMF Builders Merchants Federation
BPF British Property Federation
BPP Best Practice Programme

BRECSU Building Research Energy Conservation Support Unit

CA Consumers' Association

Carbon Dioxide Carbon Dioxide (CO2) which is produced whenever fuel is burned, is one of

emissions the main "greenhouse gases", which contribute to global warming

CEED Council for Energy Efficiency Development

CFL Compact Flourescent lamp (otherwise known as a low energy light bulb)

CHIC Central Heating Information Council
CHPA Combined Heat and Power Association

CIBSE Chartered Institute of Building Service Engineers

CIC Construction Industry Council
CIGA Cavity Insulation Guarantee Agency

CIEH Chartered Institute of Environmental Health
CLAW Convention of Local Authorities in Wales
CORGI Council for Registered Gas Installers
COSLA Convention of Local Authorities

CREATE Centre for Research, Education and Training in Energy

CSE Centre for Sustainable Energy
CSV Community Service Volunteers
DCCP Draft Climate Change Programme

DEFRA Department for Environment, Food & Rural Affairs

DPAA Draught-Proofing Advisory Association

EAF Environmental Action Fund (DETR Fund, England & Wales only)

EAGA Energy Action Grants Agency (administers the government funded HEES

scheme and other fuel poverty initiatives)

ECA Energy Conservation Authority (local authorities are now energy

conservation authorities following the introduction of the Home Energy

Conservation)

EDAS Energy Design Advice Service

EEACs Energy Efficiency Advice Centres (supported by the Energy Saving Trust and

regional/local funders) provide free and impartial energy advice to

householders and SMEs

Glossary

EEC Energy Efficiency Commitment

EEP Energy Efficiency Partnership for Homes (generally referred to as the

Partnership rather than using the acronym)

Energy Watch Gas Consumers' Council

EEIs Energy Efficiency Installers (previously referred to as Energy Efficiency

Professionals - installers who have fulfilled EST's registration criteria to join

their approved network

EMAS Energy Management Assistance Scheme

ESCO Energy Service Company EST Energy Saving Trust

ETSU Energy Technology Support unit EWIA External Wall Insulation Association

DEES Domestic Energy Efficiency Scheme - Warm Front
FAERO Federation of Accredited Energy Rating organisations
FEEAC Federation of Energy Efficiency Advice Centres

FoE Friends of the Earth

GCC Gas Consumers' Council - Energywatch

GGF Glass and Glazing Federation

GLEEN Greater London Energy Efficiency Network

GPG Good Practice Guides (a series of guides published by BRECSU)

HECA Home Energy Conservation Act

HECA Forum Regional grouping of local authorities dedicated to the

implementation of HECA strategies

HEES Home Energy Efficiency Scheme - a government funded grant to help cover

the cost of basic energy efficiency measures, e.g. loft insulation, draught

proofing, cavity wall insulation and heating controls

HVCA Heating and Ventilation Contractors' Association

IDA Improvement and Development Agency (formerly the LGMB)

IDHE Institute of Domestic Heating Engineers

IOP Institute of Plumbing

ITSA Institute of Trading Standards Administration

Kyoto The international climate change conference which took place in Kyoto,

Japan, where the current climate change targets were agreed by governments

LEEP Lothian and Edinburgh Environmental Partnership

LGA Local Government Association

LGMB Local Government Management Board

LIF Lighting Industry Federation

NACAB National Association of Citizens Advice Bureaux

NAEA National Association of Estate Agents

NALIC National Association of Loft Insulation Contractors

NCC National Consumers' Council

NCIA National Cavity Insulation Association

NCVO National Council of Voluntary Organisations

Glossary

NEA (formerly Neighbourhood Energy Action) National Energy Action is a charity

dedicated to the elimination of fuel poverty through national and local

initiatives.

NEF National Energy Foundation (charitable arm of NES)

NES National Energy Services
NHER National Home Energy Rating
NHIC National Home Information Council
OFFER Office of Electricity Regulation
OFGAS Office of Gas Regulation

OFGEM Office of Gas and Electricity Markets (Gas and Electricity Markets Authorities

announced Utilities Act)

OFT Office of Fair Trading

OFTEC Oil-firing Technical Association for the Petroleum Industry

PES Public Energy Supplier (i.e. one of the electricity or gas companies)

PRASEG Parliamentary Renewable and Sustainable Energy Group

PUAF Public Utilities Access Forum

RECs Regional Electricity Companies (now replaced by the acronym PES)

RIBA Royal Institute of British Architects
RICS Royal Institution of Chartered Surveyors
RSPB Royal Society for the Protection of Birds

SAP Standard Assessment Procedure (government endorsed energy rating system

for homes, giving properties a score out of 100 - 100 being the most efficient

and 0 the least)

SBGI Society of British Gas Industries

SERA Socialist Environment & Resource Association

SME Small or Medium Sized Enterprise

SNIPEF Scottish and Northern Ireland Plumbing Employers Federation (EESop) or SoP (Energy Efficiency) Standards of Performance (funding offered by the

electricity suppliers to fund and promote energy efficiency initiatives)

TACMA The Association of Controls Manufacturers

Warm Deal New Scottish equivalent of the English HEES scheme, with very different

criteria

WEN Women's Environmental Network WWF World Wide Fund for Nature

WMA Water-heater Manufacturers' Association

Warm Front New version of Domestic Energy Efficiency Scheme (DEES) and Home

Energy Efficiency Scheme (HEES)

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