



NORTH HERTFORDSHIRE DISTRICT COUNCIL

Home Energy Conservation Strategy

2000 - 2003

Review year 2001/2002

Policy and Strategic Partnerships

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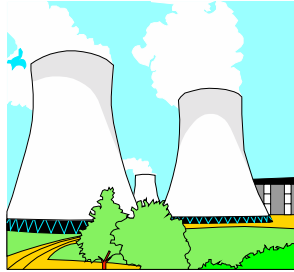
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FOREWORD

The burning of fossil fuels such as coal, gas and oil to produce energy releases carbon dioxide, sulphur dioxide and other pollutants into the atmosphere. Apart from the effect this has on overall air quality, it is now recognised that carbon dioxide is the main contributor to the “greenhouse effect”, which may be affecting global climatic patterns.



In the United Kingdom, homes are responsible for around a quarter of overall energy consumption and a similar proportion of carbon dioxide emissions. We all know that improving energy efficiency makes sense: not only does it provide greater warmth and comfort and lower bills, but it also reduces emissions of carbon dioxide (the main gas involved in the global warming threat) and other air pollutants. In addition, it helps conserve non-renewable fuel resources.

In preparing this report the Council has seen its role as an enabler of change since many measures identified will be outside of the council’s direct control to implement. In comparison with most of the private sector, the Council and Housing Associations are well advanced in improving energy performance in their own stock. Sharing this experience with other landlords and owner-occupiers in the district will be a factor influencing the development of strategies for the private sector.

Many improvement measures require financial outlay and it is recognised that current financial constraints will affect the rate of implementation of the strategy. However, there are also many simple measures that can be taken to reduce energy use, which are inexpensive or cost nothing at all.

The measures set out in this strategy demonstrate the Council’s commitment to improving energy efficiency. We hope that everyone who lives in or owns a house within the district will share that commitment and help us to make the strategy a success.

WHAT ARE THE BENEFITS OF ENERGY CONSERVATION?

It is clear that improvements in home energy efficiency can make a substantial contribution to reductions in carbon dioxide emissions and thus help counter the possible threat of global warming. In addition, more efficient energy use will help conserve the earth’s resources, reduce household bills and improve opportunities for affordable warmth.

The Council’s strategy is based on recognition that energy efficiency improvements have a wide range of benefits for the occupiers and owners of all residential property, as well as for the environment.

All occupiers benefit from greater warmth and comfort, a healthier living environment, lower fuel bills and reduced condensation and mould growth.

The owner benefits from the protection of the value of their property, reduced maintenance costs and if a landlord, more satisfied tenants.

Environmental benefits include the conservation of non-renewable resources, reduced carbon dioxide emissions and reduced emissions of other air pollutants.

HOW OUR STRATEGY HAS BEEN DEVELOPED

Corporate Approach

In recognition of the wide range of measures which can contribute to improvements in energy efficiency in the home, involving a number of service areas within the council, co-operation and exchange of information is of vital importance and is clearly evident on an informal basis between officers. The long-term strategy will require development of a corporate approach involving the Corporate Management Board if measures are to succeed.

A group comprising officers working in housing, environmental health, planning and other relevant disciplines has been set up to develop corporate working arrangements with all external groups and organisations referred to in this strategy. It is intended that this corporate approach will continue to play an important role in the implementation of the measures identified in both this strategy and the authority's strategy to tackle fuel poverty.

Consultation

The issues arising from the Home Energy Conservation Act (HECA) have been raised and considered at the meetings arranged to discuss the Council's Housing Strategy with representatives of community organisations, builders/developers, housing providers (including landlords) and funders. In addition it has been discussed at meetings of the Housing Association Forum.

Contact was also made directly with the public utility companies, other organisations relevant to energy supply and conservation, and with bodies holding databases of housing information, both to help build a knowledge of current energy performance and to assess the scope for future energy efficiency initiatives.

Local Agenda 21 work

A Local Agenda 21 Officer working group has been established with representation from all five directorates within the Council. The aim of the group is to raise awareness and understanding of the environmental and economic sustainability issues among officers to include environmental issues arising from the emerging Community Strategy into all service and financial planning. The group's terms of reference are attached as Appendix 1.

STRATEGIC POLICY AIMS

The Council recognises the many benefits of energy conservation and is committed to improving energy efficiency standards in the district's housing stock. As its longer term objective, the Council is seeking to achieve a 30% reduction in energy use over the assessed position at 1st April 1996.

The programme of measures within this strategy is designed to work progressively towards this target over the remaining 10 years. The following aims underpin the proposed action programme and seek to ensure a sustainable energy strategy:

- ❖ To create housing conditions which provide affordable warmth.
- ❖ To reduce air pollution caused by the production and consumption of energy.
- ❖ To reduce the consumption of non-renewable fuel resources.
- ❖ To increase public awareness of energy use and its effect on the environment.
- ❖ To foster and facilitate the installation of energy efficiency measures in private sector properties.
- ❖ To operate positive policies for improving the energy efficiency of the Council's own housing stock.
- ❖ To promote changes in behaviour to reduce unnecessary energy consumption.
- ❖ To encourage the incorporation of energy efficiency measures in new build and refurbishment projects.
- ❖ To develop corporate working arrangements within the council, with landlords and other agencies to implement the strategy.
- ❖ To take account of financial and other personal circumstances when implementing this strategy and, further, by the creation of a Fuel Poverty Strategy.

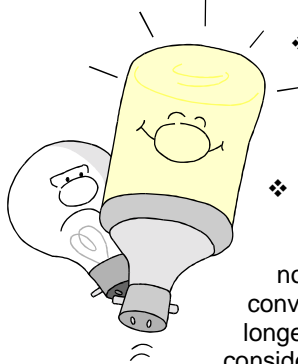
TARGETING OF IMPROVEMENT MEASURES

Many of the available options are relatively inexpensive to implement.

- ❖ The cheapest improvement is hot water tank insulation. This holds true for total costs, average cost per GJ saved and the cost for a 1% reduction in overall energy use. However, in view of the relatively high proportion of dwellings already having this measure installed, the overall improvement in energy performance, given a 100% take up, would be less than 1%.



- ❖ Draught proofing and loft insulation are the next cheapest in terms of total cost and are relatively simple to install. It should be borne in mind that draught proofing in particular would also have a positive effect on perceived comfort levels.
- ❖ The two improvements which show the largest energy use reduction are cavity wall insulation (low cost installation) and condensing boilers (higher cost installation); both have a part to play in energy efficient housing.



output.

- ❖ Increased insulation or the use of low-energy light bulbs, behavioural changes such as switching off unnecessary lights or turning down thermostats, will also reduce energy use.
- ❖ Lighting accounts for around 10% of the average annual domestic energy bill and energy savings can be made by using low energy light bulbs or systems, and by turning off lights that are not needed. Low energy light bulbs are initially more expensive than conventional filament lamps but they are more efficient and last much longer. Over the lifetime of a low energy lamp there will be a considerable saving against a conventional filament lamp for the same output.
- ❖ Standard 30mm fluorescent tubes can be replaced with 26mm tubes, which will save about 7% on the energy cost at no extra capital cost.
- ❖ Landlords will be encouraged to provide advice on the benefits of low energy lighting, to provide low energy lamps (possibly through sponsorship or promotion), to install low energy lights and efficient lighting controls in communal areas.
- ❖ During periods of heavy snowfall a team of officers could undertake a visual survey of the area to assess whether properties have adequate thermal insulation; snow clears quickly from a roof with inadequate loft insulation below. Where properties are identified that do not appear to have adequate insulation they will be targeted with information literature.

The Council carries out regular updates on the condition of its own housing stock, taking into account improvements made throughout the previous year; this information is available within the Housing Improvement Programme and Home Energy Conservation Act submissions and has shown continuous improvements in recent years. It is always difficult to assess levels of insulation, heating, window replacement etc which have taken place in privately owned properties; we have commissioned an outside agency to conduct a telephone survey in recent years to measure such improvements and this again shows increasing awareness of the need to reduce energy use, bills and improve levels of warmth.

ENERGY EFFICIENCY MEASURES

In seeking to identify those energy efficiency measures which are practicable and cost effective, a range of initiatives have been considered, which fall into the following categories: -

Carrying out works – this includes:



- Draught proofing
- Hot water tank and hot water pipe insulation
- Loft insulation
- Cavity wall insulation
- Secondary or double-glazing
- Low emissivity glass
- Floor insulation
- Upgrading heating systems
- Using energy saving light bulbs/other appliances
- Solar water heating
- Installing aluminium foil behind radiators on outside walls

Changes in behaviour – this includes:

- Switching off unnecessary lights
- Turning down thermostats
- Avoiding wasteful use of hot water
- Using economy programmes on dishwashers and washing machines
- Using only water you need when boiling kettles and pans
- Avoiding covering radiators with curtains or blocking with furniture

Making grants and loans – resulting in the carrying out of improvements. The Authority can also direct those in most need to the funding available to finance necessary works.

Information, advice, education and promotion - results in the carrying out of work or behavioural changes.

The strategy within this document relies on measures from each of these categories, with use of appropriate targeting to provide for low cost effectiveness and value for money.

REQUIRED MEASURES TO PRODUCE SIGNIFICANT IMPROVEMENT IN ENERGY EFFICIENCY

Overview

Within the figures shown in the annual HECA report, for the installation of insulation works, it has been projected that works on loft insulation, tank and pipe insulation, draught stripping and improved heating controls will have been carried out to all properties within the Council's own dwelling stock during the time scale laid down by government. An amount is set aside within the annual housing budget solely to address energy efficiency measures.

Timescale

With the introduction of the Home Energy Conservation Act (HECA) in 1995, the government recognised that in order to achieve the target of a 30% reduction in energy consumption, very substantial new investment in all stock sectors and major behavioural changes by householders would be required. The 15-year timescale was deemed appropriate to reflect these constraining factors. The programme of measures, which we have identified, is designed to produce positive year on year advances towards the government's target.

Cost of Measures

It will be evident that the predominant part of the investment required will need to come from the private sector, in particular from owner-occupiers.

The Council will, as far as practicable, continue to fund improvements to its own stock through the Capital Programme and Revenue Contribution to Capital Outlay (RCCO) from council house rents. The pace of implementation will depend on the availability of resources given current financial constraints and other competing housing priorities.

Wherever possible, funding partnerships will be sought using private finance to develop energy efficiency initiatives in the private sector. Maximum use will also be made of available grant funding. The council has made applications for grant funding in respect of the following:

❖ HECA Action Grant Scheme

Funds have been obtained from the HECA Action Grant Scheme by a consortium of authorities, North Herts District Council and other district councils, to set up an Energy Advice Centre and insulation scheme.

❖ Other Potential Funding Sources

The Council will seek to participate, whenever practicable, in the national framework and regional schemes, operated under the Standards of Performance.

PROPOSED MEASURES FOR STOCK SECTORS

The Council's Housing Stock

In accordance with its adoption of the DETR's Energy Management Declaration of Commitment, the Council has been progressive in implementing measures to improve the energy efficiency of its own stock.

In recent years a wide-ranging programme of energy efficient improvement works has been carried out to the Council's stock. However, in seeking to improve energy efficiency, the Council recognised that a technical approach in isolation would not achieve the objective. It is necessary not only to deal with the physical condition of buildings but also to provide promotional material, information and support to residents.

Following a sample energy survey of 2000 properties carried out in May 2000, by our Consultant, Access Telemarketing, the Council's energy data base has been updated to assist in programming future improvement works. The database shows current levels of energy performance in terms of both SAP ratings and weekly fuel costs.

Energy efficiency measures are included in all briefs for improvement works to the council's stock to ensure that adequate provisions for ventilation, insulation and draught proofing are included as a matter of routine. Design specifications have been reviewed to increase the energy efficiency content.

In 1995 the SAP rating of the stock was assessed to establish a bench mark value. Over the past few years the authority has achieved improved ratings as a result of the initiatives undertaken. We will continue to assess the average SAP rating for our housing stock year on year to measure future improvement.

The following programme of further action is proposed: -

Use of the Housing Energy Management Matrix

The Council realises that in order to make the level of impact needed to significantly improve the energy efficiency of its housing stock, it needs to operate a planning mechanism which enables the planning, implementation and monitoring of performance in all areas.

The Department of the Environment's Housing Energy Management Matrix has provided a means of achieving this. This will be used more extensively in the future to discover weaknesses in our strategy to allow us to plan our improvements more effectively.

Energy Policy

The energy policy adopted in 1996 incorporated a facility for periodic review to ensure it remained relevant and useful in guiding the approach. A new policy is in development and is currently undergoing consultation. It will have affordable warmth as its key target and will place emphasis on practical assistance.

A key objective of the policy commitment is to provide appropriate Council officers with an energy efficiency guidance manual that will identify situations and provide recommended responses, in order to ensure equity and consistency in service delivery.

Stock Profile

Whenever improvements likely to affect the energy performance of a property are carried out, information is entered into the stock profile database to ensure a constant and consistent source of accurate and reliable data.

As part of our present review of our IT systems and, subject to the availability of staff and resources, we are aiming to include energy information on the Council's integrated property database.

Landlord Benefits

The Council recognises that investment in energy efficiency improvements can lead to lower management and maintenance costs as well as increased tenant comfort and satisfaction.

Motivation and Marketing

The successful implementation of an energy efficiency strategy requires explanation and support for those who are intended to deliver the service and for those who will benefit from it.

The Council aims to clearly publicise energy efficiency improvement programmes, explain why the measures are important and what the likely effects in terms of weekly fuel costs will be. We will make use of Contact and Outlook – tenant and resident publications – for information.



Council staff responsible for delivering energy efficiency services regularly receive information detailing the progress being made. We will continue to explore and develop more efficient methods of encouraging staff participation in the planning and delivery of services. Progress remains difficult, however the issue will continue to be reviewed on a regular basis.

Advice and Training

Energy advice is a key element of an effective energy efficiency strategy and needs to be provided in a form clearly understood by and useful to residents.

To support the written material which is provided to all Council tenants, training of housing staff has commenced, to deliver personal energy advice, which is available on request or where a need has otherwise been identified.

A general information pack has been prepared, which will help residents to understand the various elements of energy efficiency, as well as dealing with associated subjects such as condensation, selecting fuel tariffs and budgeting and paying for fuel. The pack is available to all residents.

Delivering an energy efficient service requires knowledge and skill. We in Housing Services recognise that knowledge gaps may well exist and have developed a training programme for housing and technical staff. A number of officers have completed the training programme and the Council is actively aiming to develop the training programme even further. All our front-line staff have access to specific energy advice and training, particularly important in light of the development of our Fuel Poverty Strategy, and general training in energy efficiency will also continue for all staff.

Housing Associations

The Authority had previously sought information from its housing associations regarding completed insulation and heating works, and indeed proposed measures to improve energy efficiency. Responses from 1998/99 were poor but did improve in 2000/01.

However, as if to reflect the general move towards improved housing standards nationally and the need for greater energy conservation, all Housing Associations having or developing units in management have been contacted this year, and the response has been much more positive than in previous years.

Those who have returned the questionnaire (45% of the associations) manage 75% of the housing association stock in the area. Of those who responded, a clear and very positive

message emerged about the way forward on the energy efficiency measures to be undertaken in respect of new and existing housing.

This year, the authority has been working closely with the housing associations to establish a reliable database on energy efficiency issues relating to their housing stock, i.e. SAP/NHER ratings being logged and proposed new/refurbishment issues noted. There is obviously still a long way to go in respect of the logging of information.

The housing association stock in the area generally has a property age of approximately 25 years (+ or minus 5 years). As such, energy efficiency ratings are expected to be higher than the authority's own stock and concern with energy efficiency matters may not be such a priority. The local housing association, the Howard Cottage Society, has approximately 1100 units of accommodation and the age of its stock is similar to that of the Council. They too are making considerable efforts to improve the energy efficiency of their properties.

It is intended to develop a greater dialogue in the future with housing associations through regular meetings plus sub group meetings on energy issues that will improve the authority's understanding of the stock held by the local housing associations.

The Council has prepared and will shortly be implementing its fuel poverty strategy and the working experience on this issue will be shared with associations in the area. From these discussions it is hoped that a more focused and collective view on fuel poverty in the area can be obtained.

The current year's energy efficiency improvement works being undertaken by the associations include:

- Replacement double glazed windows - associated with refurbishment issues
- Provision of insulation to lofts
- Overcladding solid wall properties
- Improvement of central heating systems

This has led to a percentage improvement in energy efficiency of 2.5% (27.5 tonnes reduction in CO₂ emissions). The monitoring systems used to obtain the above figures by the associations vary but include using either NHER or Elmhurst methods of measurement.

Other issues being explored by the associations also include:

- Grey water recycling - to a new build scheme in partnership with the Building Research Establishment
- Timber framed buildings - A new build scheme with the Amphion building system
- New development schemes to meet the Eco Homes Standards

Owner Occupied and Private Rented Sector

With due regard to the limited influence the Council has over the private sector, this strategy has of necessity emphasised the advisory and promotional measures to ensure as far as possible that owner occupiers, landlords and tenants are fully aware of the benefits of improved energy efficiency and the various means of achieving those improvements, including the cost savings that would result. We will continue to develop, wherever possible, ways to facilitate the carrying out of improvements.

Information and support for landlords will be important, since it is recognised that properties in the private rented sector contain some of the poorest standards of insulation. Landlords renting out properties in the district will receive advice and information to improve the insulation standards of their properties. This will be reinforced during contact with landlords, whose properties become subject to action under the Housing Act for unfitness or disrepair. Advice and information will also be given to tenants of such properties. These initiatives are addressed in our Fuel Poverty Strategy, which accompanies our annual HECA submission.

Houses in Multiple Occupation

Typically, occupants of houses in multiple occupation are from lower income bands. While no data is available on levels of energy efficiency within these properties, it is probable that few are insulated to acceptable standards. The Council operates a register of Houses in Multiple Occupation and these premises are inspected on a regular basis, usually with the landlord present. As part of the Council's routine monitoring of such properties, we will continue to encourage landlords to improve energy efficiency standards and insulation works will be required where grant assistance is given for the provision of amenities or fire safety works. The opportunity will also be taken to advise occupants on simple energy saving measures. Both landlords and tenants will be made aware of the availability of grants under the Home Energy Efficiency Scheme.

The new HEES scheme will take into account houses in multiple occupation.

INITIATIVES TO ENCOURAGE HOUSEHOLDERS TO UNDERTAKE WORKS

Home Energy Efficiency Scheme (HEES)

HEES has operated since 1991 and replaced the thermal insulation grants available through the Energy Grants and Home Insulation Scheme.

The objectives of the scheme include:

- Promoting the take up of grant aid for basic energy efficiency measures by eligible households.
- Improving the energy efficiency of homes through basic insulation measures. The works available for grant aid include loft insulation, lagging of water tanks, pipes etc. heating installations and central heating controls, draught proofing and insulation of hot water cylinders and tanks.
- Increasing awareness of the efficient use of energy through the provision of energy advice.



Changes to the HEES scheme in April / June 2000 offered increased support to the private sector, and we have undertaken to keep landlords and tenants informed. To this end, our tenants newsletter 'Contact' published in January 2001, contained a feature on improved HEES entitlement, outlining which benefits entitled householders to assistance with home insulation and giving a freephone number for further information.

Grant assistance of up to 100% of the approved work, subject to a specified grant maximum, is provided only to householders in receipt of Income Support or similar benefit. In addition, grants of up to 25% of the full grant maximum are available to householders aged 60 years or over.

The Council sees HEES as an important means of securing improved standards of insulation for those householders most in need. We will continue to actively promote the scheme, ensuring that details are readily available to residents in our own stock and in private sector properties. Social services, housing, benefits and other appropriate council officers and advice agencies, such as the Staying Put Scheme, must be made aware of the HEES Scheme and be able to disseminate information to potential recipients of assistance. HEES leaflets will be made available at target locations such as housing benefit offices, social services offices, doctor's surgeries, community centres etc. The authority is also aiming to implement an Affordable Warmth Referral Scheme, which would allow anyone visiting a person's home to fill in a card asking for further information to be sent directly to them. This scheme forms part of our Fuel Poverty Strategy.

HEES grants are also available for multi-occupied properties in specified circumstances, subsequently, the authority will need to ensure that landlords remain informed. This is a further aim of our Fuel Poverty Strategy.

It is hoped that the promotion of the scheme in this way will ensure that the demand for HEES grants remains at a high level. All those issued with NHDC grants have received follow up letters and information on other measures they may use to improve energy efficiency in their home.

In light of the changes to HEES, NHDC is required to consider new initiatives to best serve the needs of those tenants no longer eligible for a HEES grant. One practical solution has been to promote an Energy Efficiency Discount Scheme, allowing residents to benefit from insulation improvements at a discounted rate.

The Council aims to keep all interested parties informed of ways in which grant aid can be accessed and maximised, investigating and advertising, wherever possible, the opportunities available prior to changes.

Training of Staff

It is important for those officers involved in the provision of front-line customer services, those carrying out visits etc, to have the requisite knowledge and skills in relation to energy efficiency to be able to provide appropriate advice. The Authority's Fuel Poverty Initiative has identified the need for basic, in-house training to increase the awareness of energy efficiency measures amongst its staff.

We have developed for staff in our reception and housing offices a basic flowchart, which is designed to 'signpost' the customer towards grants, assistance, initiatives or equipment, which may be available to them. This system is being built on and developed alongside the authority's Implementing Electronic Government Initiative (IEG) and its Fuel Poverty Strategy.

INITIATIVES TO ENCOURAGE HOUSEHOLDERS TO CHANGE THEIR BEHAVIOUR

Displays

Displays on energy efficiency have been held in local libraries in the district and two doctors' surgeries.

Stalls and displays at local events, similar to the one held at the Hitchin Initiative Environment Fair, are being considered, however, no firm dates have, as yet, been agreed. Packs containing information on energy use and savings have been sent to health centres and this initiative will be continued and expanded, where possible, to new public establishments.

Media Articles

We will continue to prepare regular articles on energy efficiency issues for the media, especially designed to coincide with the onset of the heating season. In particular, articles will be placed in the Council publications Contact and Outlook, which are distributed to every household in the district. Initiatives in the past have included competitions designed at raising energy awareness, with wind-up torches and or radios awarded as prizes. These initiatives have been well supported and it is envisaged that they will continue to play a part in our overall strategy.

The Council is also promoting energy efficiency to the traditionally 'hard to reach' groups, such as those who live in our rural areas, by raising awareness through Parish Newsletters and posters displayed on village noticeboards.

Promoting Energy Efficiency through the Schools

Initially it is proposed to operate the project in local junior schools that have shown an interest in participating.

A training pack is being developed designed to help educate children on a broad range of environmental issues, including those relating to energy conservation

The Council will continue to promote the Schools Education Pack (provided free by CREATE – a potential partner) with the aim of distributing a pack and advice to every school.

Our fuel poverty strategy will also take into account the need to keep children informed and educated about housing issues, particularly the need for adequate heating and insulation, the effects of inadequate heating on health etc, since they are the householders of the future.

Solar Energy Club

The District Council, through Hertfordshire Environmental Forum, is hoping to extend the East Hertfordshire Solar Energy Club to cover households within North Hertfordshire. The club has proven to be extremely successful in East Herts, as it provides householders with a more cost effective and accessible means by which to install solar panels.

POLICY FOR TAKING ACCOUNT OF PERSONAL CIRCUMSTANCES

The Council recognises that the personal circumstances of certain households require special consideration when exercising its powers in connection with the provision of energy efficiency measures. Low income levels means that some households cannot afford to heat their homes to an adequate, safe and comfortable level. The same lack of income also prevents these households from undertaking the necessary cost effective improvements to the energy efficiency of their properties. The Council therefore recognises that low-income households require financial support to provide them with the necessary improvements.

The cornerstone of a successful energy strategy is the achievement of desirable comfort standards at a cost affordable to both resident and landlord. The provision of affordable warmth is the driving force behind North Herts District Council's approach to its own stock.

The Council further recognises that even those householders on moderate incomes living in less energy efficient homes could have difficulty in heating them to an adequate level. The Council will, therefore, prioritise those properties with the poorest energy efficiency standards for any improvement work. In doing so, it is also acknowledged that, in general, such properties will provide the greatest scope for cost-effective energy efficient improvements, and will have the potential to make a significant contribution to the targets which the Council is required to achieve under the Home Energy Conservation Act.

It is also recognised that some households have other special needs relevant to the delivery of energy efficiency services. These needs arise as a result of old age, physical disability, the presence of young children, language and cultural difference and hearing and vision impairment. The Council will take these needs into account when delivering, or encouraging the delivery of, energy efficiency improvements. Indeed, the proposed development of an affordable warmth referral system within our Fuel Poverty Strategy should address this.

Elderly people, those with disabilities and families with young children often spend longer periods at home and require higher temperatures than the rest of the population. Such households, and those from ethnic minorities, may lack the confidence in dealing with companies making home improvements and the need for good customer care practices by insulation contractors and others is therefore acknowledged.

Particular consideration will be given to these more 'vulnerable' households when delivering advice, information, and promotional material and education services. The council will therefore ensure:

- ❖ Liaison with home helps, social services and voluntary organisations to ensure that the most vulnerable households are targeted for assistance that is appropriate to their needs; such partnerships are identified in our Fuel Poverty Strategy.
- ❖ Promotional material and information is provided in a way that is easily understood including, for example, those with impaired vision. Material can also be provided in the minority ethnic languages identified within our population.
- ❖ Liaison with organisations and individuals who care for elderly people, to ensure that they are aware of the energy efficiency service being provided by the Council. The Council is now looking to establish an affordable warmth referral system, to be used by anyone making home visits, who identifies someone they consider may require additional help with insulation, heating, energy saving initiatives and the grants to fund them. We are developing a simple referral form for this purpose.
- ❖ Effective communication with other departments in the Council, other statutory and voluntary bodies and community organisations, which cater for non-english speaking and other ethnic minority communities. This will ensure that these

agencies are aware of the energy efficiency services available, can reinforce the necessary messages and can help to ensure that the most vulnerable households in such communities are targeted for assistance and that the assistance provided is appropriate for their needs.

- ❖ Information is translated into appropriate languages and other necessary interpretation services are provided.

Information Campaign

Under the initiative of 'Better Government for Older People', the Council has improved the information available for elderly groups. Over the past few years, NHDC has held combined presentations, introducing health promotion and energy efficiency topics, particularly directed at the older members of our population. Although the days are also seen as excellent opportunities for speakers from other outside agencies, both voluntary and statutory, to increase health and financial awareness, the Council also takes the opportunity to promote energy efficiency measures, provide practical information, and give away energy efficient light bulbs.

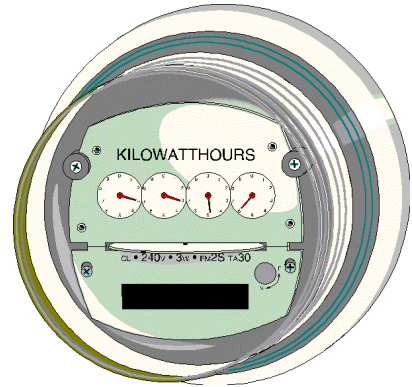
As part of a national government led programme aimed at improving access to services for elderly ethnic minority groups, under 'Better Government for Ethnic Elderly', a partnership with the Health Authority is planned to create a pilot scheme looking at innovative ways in which this important group can be better informed. It is hoped that information on a wide range of issues including energy conservation, availability of grants for energy measures etc. can be disseminated through facilitators who will have established contact with the target groups e.g. church leaders, members of the North Herts Minority Ethnic Forum etc.

IMPROVING ENERGY EFFICIENCY IN NEW BUILD

Improving Energy Efficiency in New Build

Whilst the council's responsibilities under HECA relate to properties built before 1 April 1996, an important part of the strategy will be to seek the highest possible standards of energy efficiency in newly built dwellings.

The Council has limited powers to ensure that a developer in the private sector uses the best available methods or materials in new dwellings. However, it can bring pressure on developers by evidence of good practice and showing possible benefits in terms of lower maintenance costs, improved comfort for tenants/purchasers etc. The authority does of course enforce Building Regulations, the SAP rating for these being around 80. Any new properties developed in conjunction with housing associations will be constructed to the latest Housing Corporation development standards of which efficiency matters are a high priority. SAP ratings of 85 are achieved in new build by housing associations within the district.



The Council also promotes and distributes the Environment Conscious Design Guide produced on behalf of all local authorities in the county by the Hertfordshire Environmental Forum. The aim of the guide is to inform planning applicants/householders about energy efficiency measures together with environmentally less damaging construction materials and design methods.

Proposed West of A1 (M) Development

The Hertfordshire Structure Plan Review 1991-2011, adopted in April 1998 proposes a new development to the West of Stevenage. The plan requires the Green Belt to be rolled back to permit a possible total of 10,000 dwellings in the long term. In the short term, it is anticipated that 3,600 dwellings will be completed before 2011, with an additional phase taking the total number of dwellings to 5,000 by 2014. Two thirds of the potential site falls within the North Hertfordshire boundaries and one third within the Stevenage boundaries.

A fundamental aim of the Structure Plan is to achieve social, economic and environmental sustainability. For a development of this scale, the efficient use of energy will play a vital role in contributing to the sustainability aims of the Structure Plan. In the event that the development should go ahead, North Herts, Stevenage Borough and Hertfordshire County Council have been working towards achieving these sustainability aims by jointly producing and adopting the 'Masterplanning Principles'. This document outlines principles that should be met or bettered for the West of the A1 (M) development and sets out sustainability appraisal criteria against which planning applications can be judged.

In relation to energy conservation, the Masterplanning Principles require the development to make efficient use of energy resources and provide opportunities to minimise energy consumption. The document outlines ways this can be achieved such as giving priority to pedestrians and cyclists over the car, requiring a quality public transport network and a mix of uses that are easily accessible for those living in the new community. In addition, the developers are required to demonstrate that methods of maximising efficient energy use in the development have been fully explored.

The design and layout of the development will also contribute to the conservation of energy, such as the proximity of dwellings to community facilities, the orientation of buildings and increasing densities. These factors will be assessed when the planning applications are submitted.

Policies to encourage energy conservation and to reduce the environmental impact of the development are also being considered for inclusion in a review of the Local Plan. These will favour the use of environmentally friendly forms of energy supply, especially renewable sources, the use of low energy appliances, and recycled local building materials wherever possible.

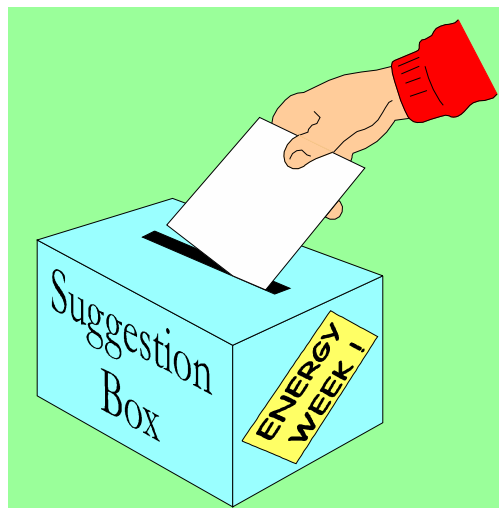
MONITORING AND COLLECTION OF FURTHER DATA

It is intended that reports on progress made with the implementation of the identified energy efficiency measures will be included in the Housing Strategy and the Housing Investment Programme submissions in future years. This process will provide for monitoring of progress by councillors and continuing consultation with the wide range of bodies involved in the council's Housing Strategy consultation process.

Questionnaires relating to the initiative are probably the most effective way of measuring success. Examples include attendees of energy efficiency training sessions giving feedback; district wide survey; questionnaires sent to respondents of the Energy Efficiency Discount Scheme and following up on energy efficiency questionnaires.

The data gathering exercise undertaken in the preparation of this strategy has shown that a great deal of energy information about individual properties is available from a range of sources. It is the intention, as a longer-term objective, to combine this information into one database. The process of mapping the actual construction, age, SAP rating etc of housing association properties onto our GIS Database will commence shortly and it is hoped that the authority's own stock will also be included at a later date. This process should then provide an easily accessible means of identifying target areas for energy efficiency works and relevant budget allocations. It is also working towards the principles of E-Government, targeted for completion by 2005.

The Authority has recently appointed a property consultant to undertake a stock condition survey on a percentage of its housing stock. Surveys are now well underway and are due to be completed by the end of September 2001. The survey process will assess the existing condition of individual properties, the level of insulation (including the provision of individual SAP ratings) for each property and the work required to bring each home up to minimum housing standards.



Appendix 1: LA21/ECONOMIC DEVELOPMENT OFFICER WORKING GROUP

In December 2000, the district council established an LA21 Officer Working Group. The purpose of the group is to raise awareness and understanding of environmental and economic sustainability issues amongst officers of North Herts District Council and to actively include environmental issues arising from the Community Strategy into the service and financial planning process for each directorate.

In order to achieve this aim the group has established the following objectives;

- To provide a cohesive approach to tackle cross-cutting environmental issues and to provide co-ordinated responses.
- Identify existing contributions of directorates in promoting and encouraging environmental and economic sustainability.
- To promote and maintain co-operation and joint action both within and between directorates.
- Focus on environmental and economic sustainability when developing new and existing services.
- Encourage examples across the council of good practice in promoting and encouraging environmental and economic sustainability.
- Identify the need for officer training and/or development and devise and implement appropriate training to meet those needs.
- Manage expectations constructively through practical planning and good communication.
- Keep members, directors, the senior management team and all staff informed about activities aimed at improving environmental and economic sustainability.

In pursuit of these objectives officers are committed to:

- Working together to offer a co-ordinated response to all environmental and economic sustainability issues brought to the attention of the group.
- Identifying gaps and inequalities in service delivery and provision.
- Making representations, where appropriate to local or national organisations on environmental and economic sustainability issues.
- Developing good practice guidelines.

The group is hoping to establish regular meetings to discuss information and progress reports on environmental and economic sustainability issues and activities and to discuss service delivery, disseminate information on current service delivery and proposed service work and programmes.

Depending upon activities and agreed actions sub-groups may be established.

Appendix 2: **GLOSSARY**

Affordable Warmth

The provision of general household heating at a cost which tenants can reasonably afford to pay and landlords can afford to provide.

Carbon Dioxide (CO₂) Emissions

Carbon dioxide (CO₂) is produced whenever fossil fuels such as coal, oil and gas are burned for energy. It is a major contributor to the greenhouse effect and global warming. The Government is committed to reducing UK CO₂ emissions to their 1990 levels by the year 2005. Each kWh of energy we use produces carbon dioxide as a by-product of the extraction, processing, delivery and combustion of the fuel. CO₂ emissions per unit of fuel depend on fuel source, electricity generating mix and other assumptions. Current values in kg CO₂ per kWh of delivered fuel are 0.21 for gas, 0.29 for oil, and 0.72 for electricity. The amount of CO₂ depends on the power generation mix and is decreasing with improving power station efficiencies and input fuel mixes.

Fuel Poverty

The definition of a household living in fuel poverty is one where in excess of 10% of disposable income must be spent in order to maintain the living rooms of a home at 21°C and all other rooms at 18°C.

Gigajoule (Gj)

A joule is a unit of energy or work, equal to one watt used for one second. A gigajoule is 10,000 million joules.

Global Warming

Certain gases (for example water vapour, carbon dioxide, methane, and nitrous oxide) form an insulating blanket around the earth. The blanket allows the sun's rays through, but prevents some of the heat radiated back from the earth escaping. This heat retention can be likened to the role of glass in a greenhouse. If the proportion of gases becomes unbalanced by extra CO₂ production this can lead to a net increase in temperature called global warming. By the year 2010, if global warming continues (a predicted 3-5 degrees centigrade increase in temperature) with a consequential rise in sea levels, it will result in habitat changes – damage to wildlife and low-lying islands. Rainfall patterns will also be affected, with some areas getting wetter and others becoming deserts.

Home Energy Efficiency Scheme (HEES)

This is a DETR grant scheme, which is available to those on lower incomes and benefits to keep their homes warmer and more comfortable to live in. The HEES grant can cover most of the costs of draught proofing doors and windows – including insulating the hot tank, loft areas and cold water tanks and pipes. A new HEES scheme was introduced from June 2000, increasing the energy efficient measure available to the claimants.

Home Energy Management Matrix

A computer tool used to identify the major components of an energy efficiency strategy and progress within them. It is widely used by Local Authorities, DETR and other social housing landlords.

Kilowatt Hour (kWh)

This is the standard unit of electrical energy, the basis of the cost of energy that appears on our electricity bills. It is normally referred to as a 'unit'. A kilowatt-hour equals a thousand watts used continually for a period of one hour. It can be made up of any combination of kilowatts and hours.

Standard Assessment Procedure (SAP)

The SAP is the government's standard system for home energy rating and was incorporated into Building Regulations from July 1995. Developed by the Building Research Establishment and based on a domestic energy model, it provides a simple means of reliably estimating the energy performance of dwellings. SAP ratings are expressed on a scale of either 1-10 or 1-100, depending on the analysis system used – either one used can be converted simply by division/multiplication by 10 - the higher the number the more energy efficient the home.

Appendix 3: **BIBLIOGRAPHY**

Good Practice Briefing Feb. 1997 - Implementing HECA

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Three Rivers District Council Energy Conservation Report 1996

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NHDC Energy Conservation Report Sept 1997

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The UK Fuel Poverty Strategy draft 2000 (DETR)

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