

REPORT TO: HOUSING COMMITTEE – 20 MARCH 2006

REPORT ON: HOME ENERGY CONSERVATION ACT (HECA)
FOURTH PROGRESS REPORT 2003 - 2005

REPORT BY: DIRECTOR OF HOUSING

REPORT NO: 197-2006

1. PURPOSE OF REPORT

- 1.1. The purpose of this report is to seek Housing Committee approval of the attached Home Energy Conservation Act 1995 (HECA) Progress Report.
- 1.2. This will be submitted to the Scottish Executive by the deadline of 31 March 2006.

2. RECOMMENDATIONS

- 2.1. It is recommended that the Committee approves the 2006 HECA Progress Report notes that Dundee City Council is on track to achieve the Government objective of around 30% reduction in CO₂ emissions and energy use by 2010.

3. FINANCIAL IMPLICATIONS

- 3.1. Financial implications of any policies, strategies or programmes stated in the HECA Progress Report (*and the original HECA report*) will be detailed within specific Committee reports which will be brought forward over the life of the HECA.

4. LOCAL AGENDA 21 IMPLICATIONS

- 4.1. The strategy outlined within the HECA report forms a significant element of the Council's overall Agenda 21 strategy and will have a positive impact on several key themes within "Dundee 21".
 - a. **Key Theme 2** – Limiting pollution to levels at which natural systems can cope.
 - b. **Key Theme 5** – Access to good food, water, shelter and fuel at a reasonable cost.
 - c. **Key Theme 8** – Health is protected by creating safe, clean, pleasant environments and health services which emphasise prevention of illness as well as care for the sick.

5. EQUAL OPPORTUNITIES IMPLICATIONS

- 5.1. The strategy outlined in the HECA report aims to provide affordable warmth and energy advice for all and reduce dampness and condensation thereby improving the comfort and health of **all** Dundee's citizens and hence their quality of life.

6. SUMMARY

- 6.1. The Home Energy Conservation Act 1995, came into force in Scotland on 19 December 1996.
- 6.2. Under the Act all Local Authorities in Scotland became Energy Conservation Authorities (ECAs) and were required to prepare and publish reports identifying energy conservation measures considered practical, cost effective and likely to result in significant improvements in the energy efficiency of the residential accommodation in its area. The first report was submitted to the then Secretary of State for Scotland on 1 December 1997.
- 6.3. In addition to the original report, ECAs are required to publish periodic progress reports. The first Progress Report detailed the steps Dundee City Council had taken over the period 31 March 1997 – 1 April 1999, in making the improvements in energy efficiency and reductions in CO₂ emissions to which it committed itself in its original HECA report. The second report updates progress for the period 1 April 1999, to 31 March 2001. The 3rd Report covers the period 1 April 2001 to 31 March 2003. This is the fourth report, covering the period from 1 April 2003 to 31 March 2005.
- 6.4. By using the Scottish Executive spreadsheet energy savings and carbon dioxide emissions have been calculated. They show that over the two year period of the report a 12.5% reduction has been made in energy usage and a 11.11% reduction in CO₂ emissions. This is significantly higher than reported previously and is due to the installation of large numbers of efficient heating systems, significant installation of cavity wall insulation in the private sector and the fact that for this report as a one-off, savings could be claimed for all low-energy light bulbs provided in the Dundee City area since the beginning of HECA reporting.
- 6.5. Over the 8 year period since HECA started the cumulative decrease for energy use is 25.2% and 26.3% drop in CO₂ emissions has been achieved, indicating that Dundee City Council is roughly on track to achieve the Government objective of a 30% reduction in these items by around 2010.

7. CONSULTATIONS

- 7.1. All Chief Officers and the Dundee Federation of Tenants Associations have been consulted on the contents of this report.

8. BACKGROUND REPORTS

- Home Energy Conservation Act, 1995
- Dundee City Council HECA Report, 1997 – (Housing Committee – 17 November 1997).
- HECA 1st Progress Report, January 2000 (Housing Committee – 10 January 2000).
- Home Energy Conservation Act 1995, (HECA) second Progress Report 2001. (Housing Committee – 13 March 2001)
- HECA 3rd Progress Report, 2004 – (Housing Committee – 16 August 2004).

ELAINE ZWIRLEIN
DIRECTOR OF HOUSING
March 2006



DUNDEE CITY COUNCIL

ENERGY CONSERVATION AUTHORITY

Fourth report to the Scottish Executive

Showing progress made in the period
01.04.03 - 31.03.05

With regard to the Home Energy Conservation Act,
1995

Introduction

The following report describes the action taken by the Dundee Energy Conservation Authority (ECA) to improve the energy efficiency of all stock within its boundaries. It is produced in accordance with guidance issued by the Scottish Executive in 2005 and follows the format prescribed therein. It is organised in terms of the following headings:

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Part A Aims and Organisations

As stated in its 1997 HECA Report, it is the aim of Dundee City Council to improve the level of energy efficiency of the whole of the City's housing stock. It also aims to provide affordable warmth for its own tenants and to encourage and facilitate such actions as allow for affordable warmth in all other tenures. By these actions, Dundee City Council aims to improve the quality of life of all of its citizens through increasing comfort and health. The strategies employed in achieving these aims are expected to reduce CO₂ emissions by around 30% on the 1997 baseline level, in line with the guidelines set out by the UK Government and endorsed by the Holyrood administration.

Both the original report and subsequent Progress Reports have highlighted the fact that it is easier for the Council to influence the energy efficiency of its own stock due to its holding the budget for carrying out physical measures such as renewing heating systems, re-roofing etc. However, as the local Energy Conservation Authority it is also charged with encouraging action and, indeed, recording actions which increase energy efficiency in all other sectors. It is able to do so largely through the actions of the Dundee Energy Efficiency Advice Project (DEEAP) which, as will be shown, engages with all sectors, giving energy efficiency advice and sign-posting individuals and organisations to sources of funding for energy efficiency measures. Also, over the period covered by this Report, the Dundee Community Energy Partnership (DCEP) carried out work in the City and, although principally set up to tackle fuel poverty, this allowed for energy efficiency measures to be carried out for householders in all tenures.

Both DEEAP and DCEP demonstrate partnerships being used to tackle energy efficiency as will now be shown. When HECA first came into being in 1997, the staff resource devoted to it was approximately 50% of the time of a Housing Development Officer (based in IMU).

This was insufficient and meant that there was virtually no engagement with householders on an individual basis. Therefore, a regime was put in place through a combination of funding from the Council's Housing and Economic Development Departments and Social Inclusion Partnership (SIP) monies to employ an Energy Advisor. This was later extended through the Community Energy Efficiency Fund (out of Preferred Supplier Revenue) and Community Regeneration Funding (CRF). The advisor has been able to visit householders in their own homes giving advice on saving energy and keeping houses warm at an affordable cost.

This Advisor was employed by the local EEAC and worked alongside the EEAC staff with the Council buying the service in. It became apparent at an early stage that, in spite of limited marketing of the service, demand for the Advisor's services far outstripped what could be provided and so, after engagement with financial inclusion bodies operating in the City, it was decided to apply for additional staffing resources through Community Regeneration Funding. An initial and subsequent bids were successful to the extent that DEEAP now has a team of four Officers, one Senior Advisor and three Energy Advisors who, as well as giving energy efficiency advice, can also give welfare benefits advice and thus assist in the alleviation of fuel poverty. All through the period of this report, DEEAP was external to the Council although working with it to increase energy efficiency and reduce fuel poverty. (From April 2005 DEEAP became an integral part of Dundee City Council, within the Housing Department as part of the same team as the HECA Officer).

DCEP was conceived as a partnership too and saw Dundee City Council's HECA Officer (designate) seconded to it as manager. DCEP was a partnership between DCC, the Scottish Executive, TRANSCO, Scottish and Southern Energy PLC (replaced at a later date by Scottish Power) and the Claverhouse Group (local Warm Deal installer).

It was set up as a pilot project, ostensibly to tackle fuel poverty in Dundee in a systematic way by surveying every house in the City on a ward-by-ward basis in an attempt to identify the fuel poor and to draw down all available funding to assist householders out of fuel poverty.

In practice, even those who were not fuel poor but needed measures such as cavity wall insulation, loft insulation etc. AND qualified for available grants were referred by DCEP to the relevant agencies with the result that energy efficiency was tackled on a comprehensive house-by-house basis.

In addition, householders who did NOT qualify for grants but were interested in insulation measures were put in touch with Scottish Power which could offer subsidised installation through its EEC Schemes.

DCEP was launched in July 2002 and completed work on 31 March 2005. However, as the vast bulk of its work co-incided with the period covered by this fourth HECA Progress Report then total results will be recorded here.

Recent feedback from Communities Scotland has highlighted that relationships and joint working with other sectors, particularly Housing Associations, could be strengthened and this is something which Dundee City Council has been very keen to do. This issue will be expanded upon in Part B on progress and again in Part D on Looking Forward.

In recent years the work of the HECA Officer (designate) has changed considerably to the extent that all work undertaken now relates directly or indirectly to HECA and so from August 2005 the post has been re-designated as HECA Officer. The Officer is also Lead Officer on the Fuel Poverty Strategy Working Group and represents the Housing Department on several Corporate Groups including Sustainability Policy Group, Sustainable Construction Policy Group, Energy Champions Group etc.. Over the years the post has become comprehensively concerned with energy and sustainability as they impact on housing.

Part B Progress To Date

In keeping with the approach adopted in the third HECA Progress Report, progress will be reported on a tenure basis with the cross-cutting results from DCEP and DEEAP reported as well.

1. Council Own Housing Stock

1.1. It should be noted that, since the original report, Council stock has changed in the following ways:

Demolitions (inc. 2,560 multi-storey flats)	3,866
Through Right to Buy sales	2,283
Through Stock Transfer	1,465
TOTAL LOST	7,614

1.2. All Council stock has double-glazing and whole-house central heating, mostly gas wet systems although there are also several hundred electric systems due to the Council's policy (now withdrawn) of offering tenants this option. The Council was able to greatly accelerate the Heating Programme due to the Scottish Executive Central Heating Initiative which was a great assistance and very welcome.

1.3. Over the period of this report, the main physical works carried out which could be expected to increase energy-efficiency were:

Central Heating Installation/Renewal

<u>2003/4</u>	'000s	<u>Average Cost</u>	<u>Total Cost</u>
Internal Budget	£649	£3,500	
Scottish Executive CHP	<u>£1,153</u>		
	<u>£1,802</u>		£6,307,000
 <u>2004/5</u>	 '000s		
Internal Budget	£1,089	£4,000	
Scottish Executive CHP	<u>£ 201</u>		
	<u>£1,290</u>		£5,160,000

i.e. approx £11.5m over two years on heating in 3,092 properties.

Roof Replacements

PROPERTY TYPES	2003/4	2004/5	TOTALS	COSTS
Cottages	135	150	285	£2,850,000
4-in-blocks	73	17	90	£2,070,000
Tenement Flats	<u>13</u>	<u>3</u>	<u>16</u>	<u>£ 416,000</u>
TOTALS	<u>221</u>	<u>170</u>	<u>391</u>	<u>£5,336,000</u>

i.e. £5.3m over 2 years on roofs for 391 householders (when roofs renewed, opportunity was taken to replace old partial insulation with 250mm quilt) – Warm Deal monies drawn down for insulation.

Insulated Render

Total number of dwellings assisted – 173 (119 tenants, 54 owners)

Total Cost - £1,730,000

Average cost per dwelling - £10,000

i.e. £1,730,000 over two years on replacing defective render at 173 properties with insulated render. Energy Efficiency Commitment from the utilities monies equivalent to the level given for Cavity Wall Insulation drawn down from Scottish Power to subsidise additional cost and to allow work to proceed at blocks of flats containing owner-occupiers.

- 1.4. EAGA reports that through Warm Deal expenditure on Cavity Wall Insulation (6), Loft Insulation (435), draught-proofing (1,613) and various associated measures over the period 1 April 2003 and 31 March 2005 in the Local Authority Sector in Dundee was £281,512.53.

2. Owner Occupied Sector

- 2.1. The only grants awarded over the two year period by the Council's Private Sector Grants Unit for works which could be described as relating to energy efficiency were through the Care and Repair Scheme and were as follows:

2003/4 –	Full heating replacement	7
	Replacement Boilers	9
2004/5 –	Full heating replacement	15

In addition and in conjunction with DCEP, the PSGU identified 13 additional pensioners who, for a variety of reasons, did not qualify for the Scottish Executive CHP although they needed their heating replaced/extended. This was funded through monies made available through a Warm Deal Pilot Scheme. At an average cost of £2,500 per installation this represents 44 x £2,500 = £110,000.

- 2.2. A significant benefit during the period of this report was the private sector initiative funded by Scottish Executive to install central heating for the over 60s.

65 pensioner households were referred through DCEP and had central heating installed through this. At an average cost of £2,500 this is expenditure of £162,500.

- 2.3. EAGA reports that expenditure through Warm Deal on CWI (31), Loft Insulation (382), Draught-proofing (529) and various associated measures over the period 1 April 2003 – 31 March 2005 in the owner occupied sector in the Dundee area was £177,269.56.
- 2.4. Through a partnership between Scottish Power and the Claverhouse Group, cavity wall insulation was installed in 200 private properties identified by DCEP using EEC monies.

3. Housing Association Sector

- 3.1. In the period 1997 – present, Dundee City Council has transferred 1,465 properties to local HAs through stock transfer. Communities Scotland has advised that there have been 1,296 HA completions in the same period.

- 3.2. Over the period of this report, fledgling relationships were formed with local Housing Associations. They were invited into the Council and were introduced to the services of DEEAP to allow them to see the types of advice and grants available to assist them in increasing the energy efficiency of their own stock. It is expected that these relationships

will flourish over coming years. Indeed, DEEAP staff regularly carry out home visits to Housing Association tenants and give assistance to individual HA Housing Officers when requested to do so.

However, it has still proved difficult for the HECA Officer to obtain information from all Housing Associations on the current energy performance of their stock or the measures they have carried out in the 2-year period of the HECA Progress Report (although it has to be said that, in some cases, information has been readily passed over). A recent restructure of Dundee City Council Housing Department which has brought together Improvements & Maintenance Unit (where HECA Officer is located) and Housing Renewal (which works closely with HAs on regeneration issues) into an integrated Housing Investment Unit may in future facilitate the kind of close working with HAs which will better allow transfer of information. There is a Housing Association Forum which meets on a regular basis where these issues can be raised.

In the meantime, it is hoped that the kind of information on HA energy performance which LAs have found difficult to obtain may be reported directly by the HAs to Communities Scotland and can perhaps, at a later stage, be appended to the HECA Reports to give a more complete picture of activity within the ECA.

- 3.3. EAGA reports that expenditure through Warm Deal on CWI (26), Loft Insulation (86), Draught-proofing (238) and various associated measures over the period 1 April 2003 – 31 March 2005 in the Housing Association sector in the Dundee area was £53,282.51.

4. **Private Rented Stock**

- 4.1. This sector has proved to be the most difficult sector to reach with the energy efficiency message largely not getting across, as it is sometimes difficult to identify and locate landlords and also because tenants here do not have the same incentive to invest in their properties as do private owners. However, as Dundee is one of the authorities piloting a Landlord Accreditation Scheme, it is hoped that this avenue will be used in future as a means of keeping landlords abreast of energy efficiency issues, advising them of available grants and encouraging them to take up these grants to improve the energy efficiency of their properties.
- 4.2. Notwithstanding the above, DEEAP Officers regularly engage with private tenants, giving them advice on the best use of their heating, cutting fuel costs etc.. This sector was also integral to the work carried out by DCEP.
- 4.3. EAGA reports that expenditure through Warm Deal on CWI (3), Loft Insulation (80), Draught-proofing (239) and various associated measures over the period 1 April 2003 – 31 March 2005 in the private rented sector in the Dundee area was £50,174.51.

5. **Summary of DEEAP Results for 1 April 2003 – 31 March 2005**

Over the two year period, DEEAP has dealt with 8,364 cases. Staff have carried out 2,225 home visits and distributed 5,395 energy advice packs containing information relating to individual households. 44 community energy sessions have been given and DEEAP staff have been in attendance at public events such as the Dundee Spring Flower Show and Energy Efficiency Week.

Due to the nature of its funding, DEEAP must spend a high proportion of time (around 67%) in Community Regeneration Areas where there is to be found a high proportion of fuel poor householders across all tenures. In future reports, breakdown of tenures receiving the DEEAP service will be recorded.

6. DCEP

As DCEP was a one-off project with a finite lifespan its inclusion in this report will similarly be a one-off. Overall results in terms of progress with regard to energy efficiency improvements will be recorded here. A fuller description of its activities in relation to the fuel poor will be recorded in the section of this report dealing with fuel poverty and individual circumstances.

Jobs referred by DCEP to relevant agency and work actually carried out:

Scottish Executive CHP	65
Warm Deal	782
"Warm Deal" jobs funded through EEC	92
CFLs distributed (4 per household)	60,000

Part C Personal Circumstances/Fuel Poverty

Through the Housing (Scotland) Act 2001 there is the requirement on Local Authorities to prepare Fuel Poverty Strategies and to ensure that, as far as is reasonably practicable, no-one in the area is living in fuel poverty in 2016.

The preparation of Dundee's Fuel Poverty Strategy: Affordable Warmth for All was done during the period covered by this fourth HECA Progress Report. Much can be made of the fact that fuel poverty aims sometimes act in opposition to energy efficiency aims e.g. where installation of whole house central heating replaces two bar fires in tenanted properties and results in more energy being used. However, it is the view of this authority that strategies to tackle energy efficiency and fuel poverty CAN and MUST run in parallel and, indeed, it is in making properties as well built, well insulated and energy efficient as possible that the fuel poverty problem can be tackled. Unfortunately, particularly within the local authority sector, the option of new build is no longer economically practical and so it is very difficult, without incurring excessive expenditure for over-cladding for example or the extreme disruption of dry-lining to make any great impact on the efficiency of the building envelope. Vast swathes of the stock in Dundee, across all sectors, have already benefited from available grants for loft and cavity wall insulation (every single household was made aware by DCEP of grant availability and the advantages of insulating) so there is often little else which can be done in terms of physical measures with the monies available.

This is where fuel poverty measures diverge from purely energy efficiency measures in that the former now gets involved in issues relating to household income and the cost of fuel. Indeed activities around reducing outlays on fuel and increasing household income were central to the operation of DCEP and the ongoing activities of the DEEAP team.

DCEP initiated a programme of integrated energy and welfare benefits advice. What this meant in practice was that, when a DEEAP advisor visited a householder referred to them by DCEP, as well as making recommendations about the use of fuel within the home, reducing boiler thermostats, closing curtains at dusk etc., they could also check the householder's benefit income to ensure they were receiving all of the income to which they were entitled. As under-claiming of benefits runs into millions of pounds across the UK every year then substantial numbers of householders have, through the actions of DEEAP Advisors, found their weekly incomes increasing. This means that someone who has been paying £10 a week on fuel out of an income of £70 say (10/70 or 14.3% fuel poor) might find themselves paying £10 out of an increased income of £105 and is now 10/105 or 9.5% fuel poor, i.e. is technically taken out of fuel poverty.

The combined efforts of DCEP and DEEAP had some spectacular successes in this regard with an additional annual £290,370 in benefits realised and, indeed, in one recent case, a pensioner couple have been awarded a backdated payment of £20,000 in unclaimed benefits.

Notwithstanding the comments made at the beginning of this section about the difficulties of removing households from fuel poverty by using the grants available for physical measures, it CAN be done in cases of marginal fuel poverty as shown.

Removals from fuel poverty by method:

Warm Deal measures	45
"Warm Deal" measures funded through EEC	37
Central Heating	55
Income Maximisation	36

NB

Although this shows a total of 173 people removed from Fuel Poverty by the efforts of DCEP/DEEAP, others who had physical insulation measures carried out to their homes, although perhaps not removed from fuel poverty in the technical sense, will have had their homes made more energy efficient and thus saved money on fuel.

The estimated totals were:

£2,586,248 per annum reduction in fuel costs.
21,282 tonnes per annum reduction in CO₂ emissions.

DCEP came to an end on 31 March 2005 but, through DEEAP, the process of offering a full fuel poverty service which includes energy advice, assistance with seeking grants for insulation and a welfare benefits check continues.

Part D Looking Forward

Throughout this report, comment has been made about possible future actions and these will now be grouped and reiterated here.

1. **Internal Restructuring and Role of HECA Officer within Dundee City Council**

It was noted earlier that there is now a full time HECA Officer for the Dundee ECA located within the Housing Investment Unit. This unit works in conjunction with local Housing Associations in terms of regeneration of areas and directly influences the number, size and type of new properties built by Housing Associations in Dundee. It is hoped that the HECA Officer can capitalise on the existing links between colleagues and Housing Association staff to obtain the kind of information needed to inform the HECA report with regard to HAs.

A further significant change which has occurred recently (May 2005) but too late to influence the current HECA Progress Report is the incorporation of DEEAP into the Housing Department of Dundee City Council. This has effectively created an integrated domestic energy team within the Housing Department. This can only make the task of influencing energy efficiency in the non-Council sector that much easier.

Both the HECA Officer and the members of the DEEAP Team stay in contact with all of the utilities operating in Dundee including Scottish and Southern Energy, Scottish Power and Scottish Gas to keep abreast of the various deals on offer to assist householders to receive subsidy through the various EEC Schemes to carry out energy efficiency measures to their homes.

2. Landlord Accreditation Scheme

Dundee is currently piloting a Landlord Accreditation Scheme. This voluntary scheme is aimed at improving standards in the private rented sector in Dundee. Landlords and letting agents who join the scheme and abide by the standards are “accredited”.

The scheme offers a systematic way of identifying such landlords thus placing them in a better position to attract tenants than those who are not accredited. The advantage from a HECA perspective is that there is now a way of identifying the private landlords operating in the City and this provides a means of engaging with them and advising them of and encouraging them to take up available grants for energy efficiency measures.

3. Use of Renewables

It is foreseen that with energy efficiency and fuel poverty targets to be achieved by Councils and in an environment of steeply rising fuel prices and concerns about security of supply Councils, including Dundee will become more involved in the installation of micro-renewables. Although outwith the reporting period of this report, Dundee City Council has begun the process of installing such technologies with the incorporation of solar panels for space and water heating into the Council’s Re-roofing Programme. It is likely that the next few years will see the extension of programmes of renewable installations such as solar heating, ground and air-source heat pumps, micro wind generation etc..

Part E Summaries

Actual improvements in Energy Use/Emissions

Using the spreadsheets issued by the Scottish Executive, the following outputs have been calculated:

Reporting Period	Energy Use in Giga Joules Per Year	CO ₂ Emissions in Kilotonnes Per Year
Original HECA Report	7,872,667	574
1997 - 1999	7,446,109	531
1999 - 2001	7,123,222	511.4
2001-2003	6,836,941	486.8
2003-2005	5,888,647	423

This shows a 12.5% decrease in energy use over the two year period of this report and a 11.11% reduction in CO₂ emissions. The cumulative decreases are 25.2% and 26.3% respectively. This is over an 8 year period and would indicate that Dundee City Council is roughly on line to achieve the Government objective of a 30% reduction by around 2010.

It should be noted that, for this report as a one-off all low energy light bulbs installed in housing stock in Dundee from the beginning of HECA reporting (i.e. going back to 1997) were incorporated. 70,000 light bulbs were distributed over this period to 17,500 households (4 each).

When incorporated into the spreadsheet provided, these light bulbs accounted for savings of 8,568 GJ and 3.68 tonnes of CO₂.

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Summary – 1 April 2003 – 31 March 2005

% Energy Efficiency Improvement:	12.5%
% Reduction in CO ₂ Emissions:	11.11%
Reduction in CO ₂ Emissions:	63,790 tonnes
Cost of Works:	Approx. £20,000,000
Number of Dwellings to Benefit:	4,639
Number of Jobs Created**	13
Average Savings in KWhs	3,753
Average Savings in Annual Fuel Bills*	£109

* Discretionary items

** 3 additional members of staff in DEEAP
10 temporary posts at DCEP