



**Benefits from the Warm Deal in Scotland 2000/2001:
A Report by the Scottish Executive**

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A REPORT BY THE SCOTTISH EXECUTIVE**

2000/2001



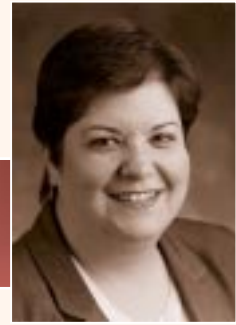
SCOTTISH EXECUTIVE

Making it work together

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Minister's Foreword



This is the second annual report from the Scottish Executive setting out the benefits flowing from government-funded home energy efficiency in Scotland.

Last year 49,215 low-income households had their homes insulated, resulting in an annual average saving on fuel bills of £95 for owner-occupiers and £62 for local authority tenants. These households are also now warmer and more comfortable. Condensation damp will have been reduced and so the threat to health from cold and damp homes has been lessened.

In the two years from April 1999 96,300 homes have been insulated and emissions of CO² cut by 77,000 tonnes, a valuable contribution to the Executive's commitment to reduce climate-changing emissions. In each of the last two years 400 long-term unemployed young people, taking part in the New Deal, have received quality work experience and training through installing home insulation measures.

In 1999 the Executive's *Programme for Government* pledged that over the four years of this Administration we would improve 100,000 houses suffering from dampness and condensation. In the current financial year, 2001/2002, a further 27,740 houses have been insulated and so the target has been

achieved. This is in large measure due to the commitment of local authorities and the Eaga Partnership to make progress in tackling fuel poverty and I thank them.

We are also building on the success of the Warm Deal. The new Central Heating Programme covers households in local authority and housing association homes, and pensioner households in the private sector, who lack central heating. They will receive free central heating, insulation, energy efficiency advice and a check of entitlement to state benefit. Those who benefit will have warmer homes, which are cheaper to run. Condensation damp will be eradicated or reduced and so will cold-related illnesses. Fuel poverty will be significantly reduced.

There will be annual reports on the Warm Deal and the Central Heating Programme and I am confident that they will continue to show real progress in improving the living conditions of some of Scotland's most vulnerable citizens.

A handwritten signature in black ink, appearing to read 'JMBaillie', written in a cursive style.

Jackie Baillie MSP
Minister for Social Justice

Benefits from the Warm Deal in Scotland 2000/2001:

This is the second annual report on the benefits of schemes to improve home energy efficiency in Scotland, funded by the Scottish Executive. This report is about the Warm Deal in 2000/2001. The Warm Deal improves home energy efficiency for low-income families and

pensioners and tackles one of the three main causes of fuel poverty: poor insulation (the other two causes are low income and the price of fuel). It also improves comfort, lowers the incidence of cold-related illnesses and reduces climate-changing emissions of CO₂.

The Warm Deal in 2000/2001 resulted in:

49,215 dwellings being improved;

increases in average energy rating on the NHER scale ranging from 1.0 amongst owner-occupiers to 0.9 for tenants of local authorities;

potential savings in average annual fuel bills of £95 for owner-occupiers and £62 for local authority tenants;

annual emissions of CO₂ cut by 42,000 tonnes;

400 New Deal places created for the long-term unemployed.

Energy Efficiency Schemes

The Warm Deal

1.0 The Warm Deal is in two parts. The largest part is administered on the Scottish Executive's behalf by a company called Eaga Partnership Ltd and covers all sectors of the stock. Local authorities administer the other part for works to their own stock.

Warm Deal (as administered by Eaga)

1.1 This part of the Warm Deal was introduced on 1 July 1999. Households are eligible providing they are in receipt of one or more state benefits. Households can have any combination of works from the following package, up to a maximum of £500:

- cavity wall insulation;
- loft insulation;
- hot and cold tank insulation;
- pipe insulation;
- draughtproofing; and
- energy advice and up to 4 energy-efficient lightbulbs.

A smaller grant is available for pensioner households not on benefit. The scheme covers all sectors of the stock and provides places for New Deal trainees. £8.7 million was spent on grants in 2000/2001.

Warm Deal (as administered by local authorities)

1.2 This part of the scheme is run by local authorities for their own stock. It allows them to install the range of measures described in paragraph 1.1. The programme is funded by cash grant from the Scottish Executive and £3.02 million was spent on grants in 2000/2001.

1.3 A number of authorities supplemented the cash grant with funding from other sources such as the Housing Revenue Account; useable receipts and rent surpluses; EC Social Funding; Partnership with the power companies under the Energy Efficiency Commitment; and HECAAction awards from the Energy Saving Trust.

The Results

2.0 This section summarises the delivery of the Warm Deal by Eaga and by the local authorities. The results for the Eaga part of the Warm Deal were calculated differently to those for the part of the Warm Deal run by local authorities. Paragraphs 3.0 – 3.2 of this report describe how those calculations differ.

Improvements by tenure

2.1 Table 1 (page 10) shows the number of dwellings improved by tenure. Under the Warm Deal (Eaga), a total of 26,555 dwellings were improved, 30% of which were local authority stock and 43% of which were housing association stock. The remainder were in the private sector. Under the Warm Deal (Local Authorities), a further 22,600 council dwellings were improved. Overall, 62% of the total number of dwellings improved (49,215) belonged to local authorities.

Types of Improvement

2.2 Table 2 (page 11) shows that under the Warm Deal (Eaga) cavity wall insulation and other measures were installed in 4,889 (18%) of dwellings and 13,963 (53%) had loft insulation. A further 2,126 (8%) had both cavity wall and loft insulation installed. The remaining 5,577 (21%) received other measures such as draughtproofing and energy-efficient lightbulbs.

2.3 Under the Warm Deal (Local Authorities) it was estimated that 2,753 (12%) of dwellings had cavity wall and loft insulation, a further 7,849 (35%) had loft insulation and 5,140 (23%) received cavity wall insulation. The remaining 6,918 (31%) of dwellings were given other measures including draughtproofing, energy advice and low-energy lightbulbs.

Effect of Improvements

2.4 Table 3 (page 12) shows the effect the improvements had in terms of improvements in energy rating (NHER & SAP), reductions in emissions of CO₂, and potential savings on annual fuel bills.

2.5 Under the Warm Deal (Eaga), there was an increase in average NHER of 0.8 from 4.9 to 5.6 and average savings were £59 from an annual running cost of £567. The average reduction in CO₂ emissions per dwelling was 0.7 tonnes, giving a total saving of 18,500 tonnes per year. Under the Warm Deal (Local Authorities) there was an increase in average NHER of 0.9 to 5.2 and average savings were £74 from a bill of £660. The reduction in CO₂ emissions was an average of 1.0 tonne per dwelling.

2.6 There are some marked differences between tenures. For example, the increase in NHER is 1.0 for owner-occupiers; 0.9 for the local authority stock and only 0.5 in the housing association sector. However, this should be seen in the context of the NHER levels before works were carried out. For example, the average starting NHER level for the housing association stock was higher by 0.8 units than that for the owner occupied stock. These are reflected in the average savings in fuel bills of £95 in the owner occupied sector, £62 for the local authority stock and £36 for housing associations.

How savings are taken

2.7 The Warm Deal is aimed at low-income households. Households might take the savings described in Table 3 and spend less on their heating. They may also decide to reinvest the savings to provide more energy at the same cost as before. Or they may do a bit of both. Previous

research has shown that households typically take about 50% of the savings on fuel bills as savings on heating with the other 50% being reinvested to provide more warmth.

Savings in Context

2.8 A number of factors determine the potential for improving home insulation, hence the scope for savings. For example, in many non-traditional house types and in solid wall properties, such as most tenements, it is not possible to install cavity wall insulation. Works to flats, such as cavity wall and loft insulation, can normally only proceed with the agreement of all occupiers. Householders may also decline to have all the measures installed.

2.9 Another factor is energy efficiency works under previous programmes. Over the last 20 years local authorities and housing associations have been working to improve the energy efficiency of their stock using their own resources or funds made available under such government schemes as the Home Insulation Scheme, the Home Energy Efficiency Scheme and the New Energy Efficiency Deal. For example, between 1991 and 1999 264,000 houses in Scotland were improved under the Home Energy Efficiency Scheme. The schemes concerned also benefited the private sector. They allowed only one main measure per house and so there remained scope for further measures. In many cases the Warm Deal is now providing those measures. The Warm Deal may therefore be seen as the last stage in a process of progressive insulation. This is borne out by figures from Eaga who report that in 80% of cases no further Warm Deal measures can be installed. In such circumstances the savings from the Warm Deal will represent only part of the gains from government-funded schemes, but the effect of the various elements cannot be quantified separately.

Number of New Deal places

2.10 Both parts of the Warm Deal require that places are made available for the long-term unemployed through the Government's New Deal programme, enabling them to gain work experience and training. A place under the New Deal normally lasts six months. The Warm Deal provided 400 six-month places which were consistently filled.

Delivery costs and savings

2.11 Under the Warm Deal as administered by Eaga the average grant was £329 and the average annual saving in fuel bills, across all households receiving grant from Eaga, is around £60. The amount of grant is therefore matched by savings in 5.5 years.

2.12 The same calculation cannot be provided for the Warm Deal as administered by local authorities, however, because many authorities added to the grant they received from the Executive. The amounts added are unknown and so unit costs cannot be assessed.

Cumulative benefits

1 April 1999 – 31 March 2001

2.13 In 1999/2000 47,085 homes across the stock were insulated and annual emissions of CO₂ were cut by 35,000 tonnes. When added to the figures for 2000/2001 (see page 1) a total of 96,300 homes were insulated between 1 April 1999 and 31 March 2001 and CO₂ emissions were reduced by a total of 77,000 tonnes. The Warm Deal therefore makes a valuable contribution to the Scottish Climate Change Programme commitment to reduce greenhouse gas emissions.

Methodology

THE WARM DEAL (Eaga)

3.0 Data were supplied by Eaga for their part of the Warm Deal. The Installers who carry out the works provide Eaga with the following information for each dwelling:

- tenure;
- dwelling characteristics (eg construction type, age of property, existing insulation and heating systems);
- the Warm Deal measures installed.

This information allows the calculation of the energy rating of the dwelling (NHER and SAP), carbon dioxide emissions and annual running costs using the Autoevaluator software 3.4.

THE WARM DEAL (Local Authorities)

3.1 Information received from local authorities was restricted to basic data on the number of dwellings improved and a summary of the measures applied. There was no description of works to individual dwellings. Assessments were therefore made using a methodology based on the extent to which the local authority stock lacks the measures described in paragraph 1.1. Assumptions were also made about the extent to which the measures could be installed throughout the stock.

3.2 A model of the likely impact of works was generated using information from the 1996 Scottish House Condition Survey which provided the baseline in unimproved local authority stock and the likely need for the major dwelling improvements included in this scheme (such as loft insulation and cavity wall insulation) within the stock. This analysis used the same version of the software that was used for the Eaga part of the Warm Deal.

Acknowledgements

Thanks to Eaga and to Scottish Homes for their assistance in producing this report.

TABLE 1: Dwellings Improved by Tenure
WARM DEAL (Eaga)

Tenure	Number of dwellings	% of total
Owner occupied	6,222	23
Private rented	840	3
Local authority	7,968	30
Housing association	11,424	43
Other*	101	0.5
Total	26,555	100

* This category includes tied dwellings and cottars' homes.

WARM DEAL (local authorities)

Tenure	Number of dwellings	% of total
Local authority tenants	22,660	100

TABLE 2: Energy Efficiency by Type of Improvement

WARM DEAL (Eaga)

Works	Number of dwellings	% of total
Cavity fill and other measures	4,889	18
Loft insulation and other measures	13,963	53
Cavity fill, loft insulation and other measures	2,126	8
Other measures	5,577	21
Total	26,555	100

WARM DEAL (local authorities)

Works	Number of dwellings	% of total
Cavity fill and other measures	5,140	23
Loft insulation and other measures	7,849	35
Cavity fill, loft insulation and other measures	2,753	12
Other measures	6,918	31
Total	22,660	100

TABLE 3: Average Improvements/Savings

WARM DEAL

(Eaga)

Tenure	Original SAP	New SAP	SAP Increase	Original NHER	New NHER	NHER Increase	Original Annual Running Cost	New Annual Running Cost	Saving (£)	Original CO ₂ (Tonnes)	New CO ₂ (Tonnes)	CO ₂ Saving (Tonnes)
All stock	47	52	5	4.9	5.6	0.8	567	508	59	6.0	5.3	0.7
Owner occupied	44	52	8	4.4	5.5	1.0	684	589	95	7.4	6.2	1.2
Private rented	29	35	6	2.9	3.6	0.7	758	666	92	8.7	7.5	1.2
Local authority	47	53	6	4.9	5.8	0.9	546	484	62	5.7	5.0	0.7
Housing association	50	53	3	5.2	5.7	0.5	505	469	36	5.2	4.8	0.4

WARM DEAL

(Local authorities)

Tenure	Original SAP	New SAP	SAP Increase	Original NHER	New NHER	NHER Increase	Original Annual Running Cost	New Annual Running Cost	Saving (£)	Original CO ₂ (Tonnes)	New CO ₂ (Tonnes)	CO ₂ Saving (Tonnes)
Local authority	44	52	8	4.3	5.2	0.9	660	586	74	7.5	6.5	1.0

Further copies of this report can be obtained from:

Betty Douglas
Housing Division 3
Scottish Executive
Victoria Quay
EDINBURGH EH6 6QQ

Telephone: 0131 244 5571
Fax: 0131 244 5596
e:mail: Betty.Douglas@scotland.gsi.gov.uk

Designed and produced on behalf of the Scottish Executive by Astron B22665 11/01

