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A review of the Energy Efficiency Commitment 2005-2008

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Target audience: Defra, energy suppliers, the energy efficiency industry and any other interested parties

Overview:

The Energy Efficiency Commitment 2005-2008 required certain gas and electricity suppliers to meet an energy saving target in domestic properties. At the end of the programme suppliers had delivered sufficient energy saving measures to meet, and exceed, the overall target.

Suppliers were required to meet at least half of their obligation with consumers on a low income, the Priority Group. Again, by the end of the programme, suppliers had complied with this requirement.

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Context

The Energy Efficiency Commitment 2005-2008 (EEC2) was the Government's main policy instrument for improving the energy efficiency of existing households, which has now been replaced by the CERT. It required certain gas and electricity suppliers to meet an energy saving target between 1 April 2005 and 31 March 2008. This was the second phase of the Energy Efficiency Commitment; that first ran from 2002-2005.

The EEC was primarily a carbon reduction target. It contributed to the Government's Climate Change Programme by reducing domestic carbon emissions. At least half of the target had to be met in relation to certain low-income consumers; therefore the EEC also contributed to the Government's Fuel Poverty Strategy.

The Department for Environment, Food, and Rural Affairs (Defra) set the overall target for the EEC. Ofgem was required to administer the programme. We determined the energy saving target for each supplier and monitored compliance.

This document sets out the suppliers' performance over EEC2, in achieving the target. It fulfils Ofgem's reporting duties to the Secretary of State for Environment, Food and Rural Affairs under the Energy Efficiency Obligations Order 2004.

Associated Documents

- The Electricity and Gas (Energy Efficiency Obligations) Order 2004, Statutory Instrument No. 3392 of 2004.
- Energy Efficiency Commitment, Illustrative mix of possible measures, Defra, February 2005.
- Energy Efficiency Commitment 2005-2008: Supplier Guidance, Ofgem, January 2007

Table of Contents

Summary

This report fulfils Ofgem's reporting duties to the Secretary of State for Environment, Food, and Rural Affairs under the Energy Efficiency Obligations Order 2004. In addition to reporting on the overall performance and each supplier's performance, as required, we have provided extra analysis that Defra might find helpful when it finalises the policy for the Supplier Obligation. This is expected to succeed the current energy efficiency programme, the CERT (Carbon Emissions Reduction Target), which runs until 2011.

The Energy Efficiency Commitment 2005-2008 (EEC2) required electricity and gas suppliers to achieve an energy savings target of 130 TWh in domestic households in Great Britain, between 1 April 2005 and 31 March 2008. At least 50 per cent of the target had to be met in relation to Priority Group consumers, defined as those in receipt of certain income-related benefits and tax credits. The overall target was set by Defra. Ofgem was required to administer the programme.

Eight suppliers were set a target under EEC2: British Gas, EDF Energy, npower, Opus Energy, Powergen, Scottish Power, Scottish & Southern Energy, and Telecom Plus. Suppliers were permitted to carry forward additional savings (in excess of their target) from EEC1 into EEC2. Suppliers met their targets by setting up schemes to promote and deliver energy efficient measures to domestic consumers.

Overall progress 2005-2008

At the end of EEC2 2005-2008 suppliers had met, and exceeded, the overall target – achieving 187 TWh of savings against the overall target of 130 TWh.

- By the end of EEC2 2005-2008 suppliers had achieved approximately 144 per cent of the overall target.
- Of this overall activity approximately 44 per cent was in the Priority Group. However, when looking at the amount of activity in the Priority Group as a percentage of the target this figure rises to 63 per cent.
- The Priority Group was targeted predominantly through the delivery of insulation measures. The range of measures delivered to the non-Priority Group is more diverse, but still dominated by insulation.
- Nearly 60 per cent[1] of the energy savings achieved under EEC2 2005-2008 came from the installation of insulation measures.

[1] Excluding EEC1 carry over

Each supplier's progress towards its EEC2 target

- The table below shows each supplier group's achieved savings as a percentage of their individual targets. It also shows the share of energy savings carried over to CERT, as a percentage of each supplier group's CERT target.

Supplier	Proportion of each supplier's target				
	Priority Group	Non-Priority Group	Total achieved	EEC2 Carryover (EEC2 target)	EEC2 Carryover (CERT target)
British Gas	62.0%	85.2%	147.2%	47.2%	28.9%
EDF Energy	63.2%	86.3%	149.5%	49.5%	23.4%
Npower	55.4%	66.6%	122.0%	20.3%	10.1%
Powergen	61.6%	66.4%	128.0%	28.0%	18.2%
Scottish and Southern Energy	67.8%	94.9%	162.8%	62.8%	30.9%
Scottish Power	74.7%	82.8%	157.5%	57.5%	30.6%
Telecom Plus	50.1%	50.0%	100.2%	0.0%	0.0%

Delivery of measures

Suppliers used a range of delivery routes to meet their targets, the most successful being working directly with consumers. They also promoted measures with social housing providers (SHPs), retailers, manufacturers and by linking with the Warm Front programme. Although the overwhelming majority of energy savings were achieved through insulation measures, the suppliers also promoted large numbers of lighting, appliance and heating measures.

Some suppliers looked to take advantage of the incentive for innovative action. This led to the promotion of some consumer electronic and microgeneration heating products. Almost all of this activity was targeted at the non-Priority Group.

1. Overall activity at the end of EEC2

Chapter summary

This chapter outlines the energy savings achieved across all suppliers during the three years of the second Energy Efficiency Commitment programme (EEC2). The overall results are presented, and then focus is given to the Priority Group obligation and to the main categories of measures promoted by the suppliers.

To provide context, the suppliers' progress in the first two years of the EEC2 (April 2005 to March 2007), which was outlined in the second EEC2 Annual Review, is briefly summarised.

All Figures included within this report are in relation to the overall target (unless it is otherwise stated).

Progress during the first two years (April 2005-March 2007)

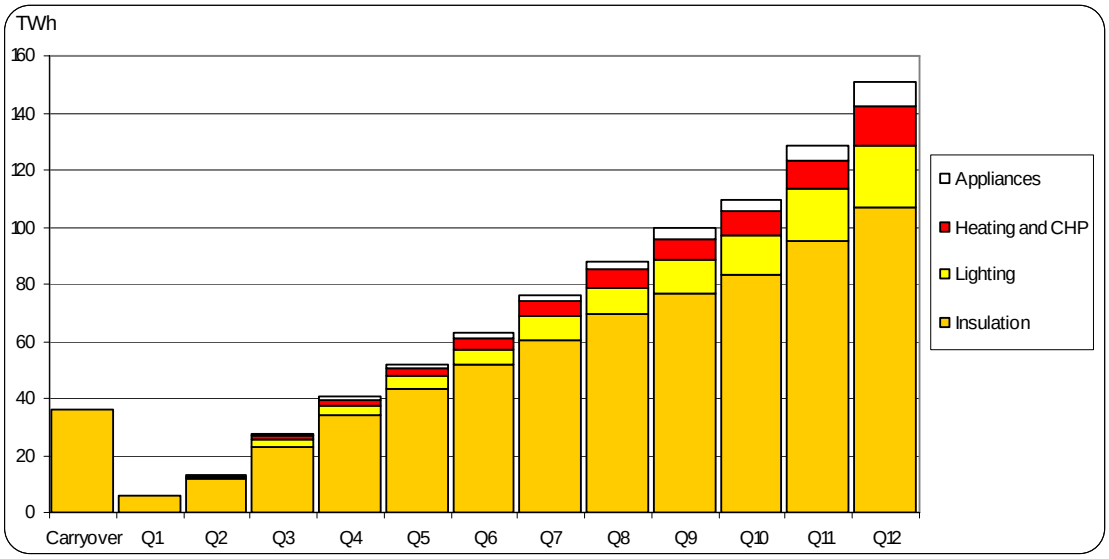
1.1. The overall EEC2 target was 130 TWh. By the end of the second year of the EEC2, suppliers had achieved 124 TWh of energy savings, representing 95 per cent of this target. Of these savings, 28 per cent were carried over from the EEC1 programme (36 TWh). Taking into account only the savings actually achieved between April 2005 and March 2007, i.e. excluding the EEC1 carryover, roughly 80 per cent of the achieved savings were from insulation measures, with 10 per cent from lighting measures and the remainder split between appliances and heating.

1.2. Of the savings achieved in the first two years (including EEC1 carry over), 45 per cent were achieved in the Priority Group and 55 per cent in the non-Priority Group. Excluding the carry over, these Figures are 42 and 58 per cent respectively.

Progress in the third year (April 2007 to March 2008)

1.3. By the end of the EEC2 programme, suppliers had exceeded their energy saving target with 187.3 TWh achieved against the 130 TWh target. This equates to 144 per cent of the overall target. Of this, nearly 63 TWh was achieved within the final year of the programme. The suppliers have over-achieved against the target by roughly 57 TWh of energy savings and this will be converted into tonnes of carbon dioxide and accredited against suppliers' obligations in the Carbon Emissions Reduction Target (CERT) programme.

Figure 1.1 – Energy savings achieved to the end of EEC2



1.4. Figure 1.1 shows the increase in savings achieved quarter on quarter, by measure type. The first schemes set up were large insulation schemes. More complex schemes involving different measures came later in the programme. As in EEC1, the supplier data shows no clear seasonal trend for the delivery of energy efficiency measures. One possible reason for this is that the suppliers were able to integrate with the Warm Front, Welsh HEES and Warm Deal programmes. This involved the suppliers funding measures delivered through these government programmes, allowing additional energy efficiency measures to be installed than the programmes alone would have provided. Suppliers also set up large programmes of work with social housing providers. In these cases the activity reflects the project partners' schedule of works as opposed to consumer demand, and so would be less affected by seasonality.

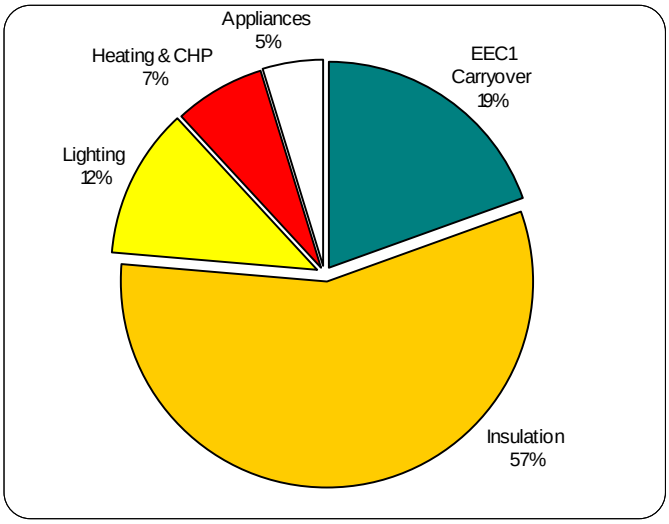
EEC1 Carry over

1.5. Suppliers were allowed to carry forward any savings in excess of their EEC1 target into EEC2. Just over 36 TWh were carried over from EEC1. The EEC1 carry over was nearly all comprised of insulation, as this was the most favourable measure for suppliers to carry over from EEC1.

Measures delivered

1.6. Supplier activity in the programme can be broken down into four broad categories of measure: lighting, insulation, heating and appliances. Figure 1.2 and the accompanying Table 1.1 provide a breakdown of how the energy savings are attributed to these four main measure types.

Figure 1.2 – Achieved savings by measure type



1.7. As shown in Figure 1.2, 19 per cent of the total EEC2 energy savings were carried over from EEC1. Insulation measures accounted for 57 per cent of the EEC2 energy savings and 12 per cent were from lighting measures. Appliance activity, although involving a large number of measures, only accounts for five per cent of the total savings because the energy saving per appliance is relatively small compared to insulation or heating. Heating measures accounted for the remaining 7 per cent of the savings. For a chart illustrating savings achieved during the 3 years of EEC2 i.e. without EEC1 carryover included, see Appendix 3. When the savings are considered excluding EEC1 carryover, there has been a considerably higher proportion of insulation activity and proportionally slightly less appliance and lighting activity in EEC2 than EEC1.

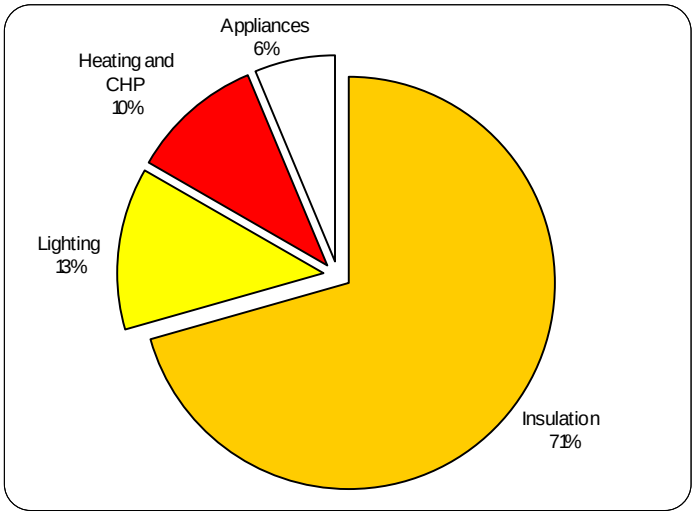
Table 1.1 – Achieved energy savings as a percentage of the target

Measure	EEC1 Carryover	EEC2		
		Year 1	Year 2	Year 3
Insulation	27.9%	26.3%	27.1%	28.6%
Lighting	0.0%	2.6%	4.7%	9.5%
Heating	0.0%	1.5%	3.2%	5.6%
Appliances	0.0%	1.0%	1.3%	4.7%

Measures proposed

1.8. Figure 1.3 shows the breakdown of savings from suppliers anticipated results taken from their submissions. This was the mix of savings expected to be achieved from different measures by the end of EEC2. Unsurprisingly nearly three quarters of the savings were predicted to be from insulation (71 per cent), with the rest comprised of lighting (13 per cent), heating and CHP (10 per cent) and the remaining smallest share from appliances. This is almost identical to the mix of savings that was actually achieved through the suppliers EEC2 schemes by the end of the programme (Appendix 3).

Figure 1.3 – Proposed energy savings by measure type

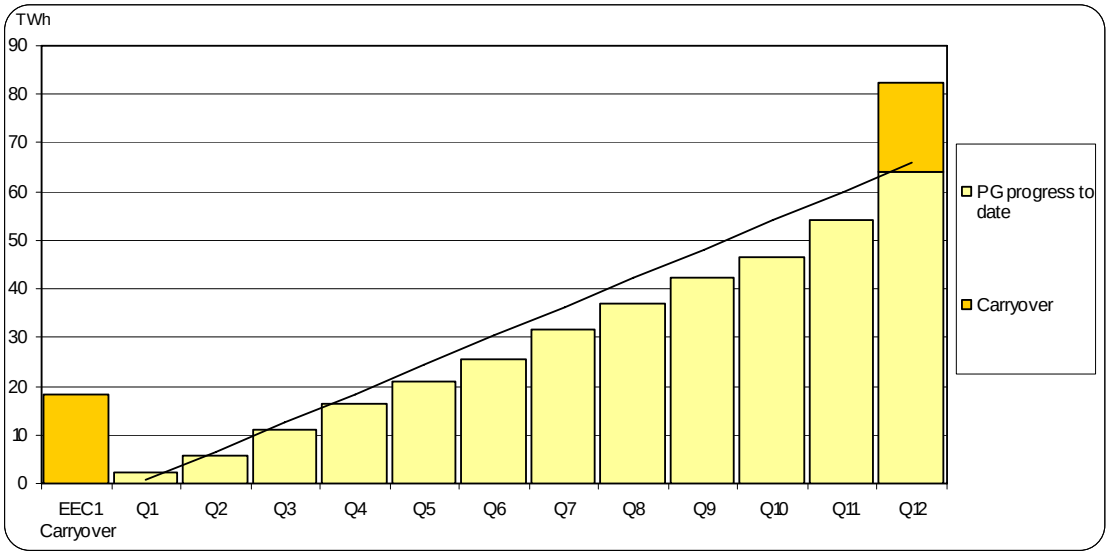


The Priority Group

1.9. By the end of the EEC2, each supplier was required to achieve at least 50 per cent of its target in relation to Priority Group consumers, that is, those in receipt of relevant benefits or tax credits. Aggregated across all suppliers this equated to 65 TWh of energy savings to be achieved in the Priority Group. Suppliers exceeded this obligation as 82 TWh resulted from measures promoted to Priority Group households, although some suppliers met this target with more of a margin than others. This is discussed in more depth in chapter 2.

1.10. Figure 1.4 illustrates the cumulative quarterly progress of suppliers against their Priority Group target. Progress was broadly even throughout most of the programme, with an increase in activity reported in quarters 11 and 12 as some suppliers ramped up their activity to ensure that they met their Priority Group obligations.

Figure 1.4 – Achieved energy savings in the Priority Group



1.11. Figure 1.5 shows the proportion of energy savings achieved during the course of the programme, for both the Priority and non-Priority Groups. Table 1.2 shows the savings from Figure 1.5 expressed as percentages. Together, these demonstrate that there are only some minor differences in the pattern of savings across the measure types between the Priority and non-Priority Groups. The carry over and insulation measures accounted for a slightly higher proportion of the Priority Group savings than non-Priority Group savings, while heating, lighting and appliances account for slighter larger percentages in the non Priority Group. This small percentage difference is magnified somewhat in terms of TWh saved as the total energy savings coming from the non-Priority Group is greater than the total from the Priority Group.

Figure 1.5 - Achieved energy savings by measure type and consumer type

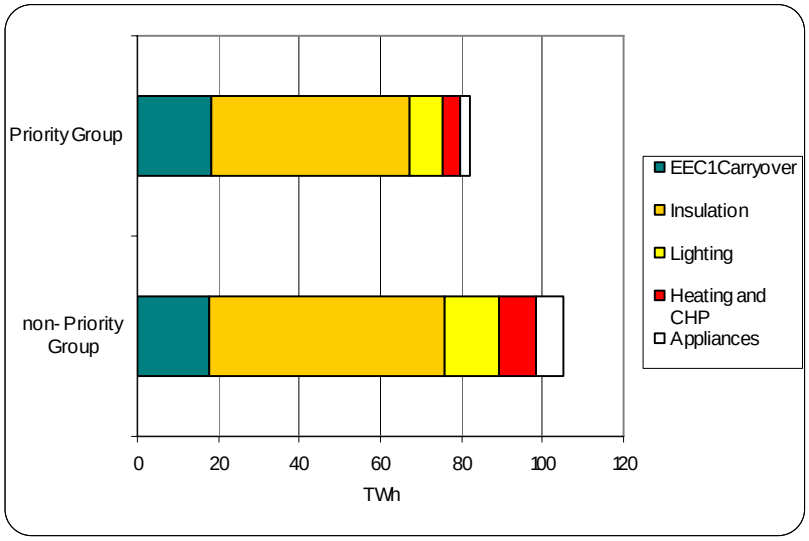


Table 1.2 - Energy savings as a percentage of savings achieved in the Priority Group or non-Priority Group

Measure	EEC1 Carryover	Insulation	Lighting	Heating and CHP	Appliances
non- Priority Group	17%	55%	13%	8%	7%
Priority Group	22%	60%	10%	5%	3%

The effect of uplifts for appliances and energy services

1.12. Incentives were provided to suppliers in the form of uplifted energy savings to provide energy services packages to consumers and also to promote innovative measures[2]. Both these types of activity received a 50 per cent increase in energy savings, although the activity eligible for the uplift was capped at 10 per cent of a supplier's target for each of these delivery routes.

[2] Innovative measures were measures not promoted under EEC1 that result in a significantly greater energy saving over any similar measures.

1.13. The aim of the EEC2 programme was to reduce carbon emissions from the domestic sector. The uplift in energy savings for energy services or innovation reduced the actual carbon and energy savings achieved via the programme. Figure 1.3 shows the total energy savings achieved towards the target (including uplift), the energy savings accredited as uplift and the energy savings actually realised from measures delivered via EEC2 (minus the uplift).

Table 1.3 – Energy savings to target and the effect of the uplifts

Energy savings to target (TWh)			
Total savings including uplift	Innovation Uplift	Energy Services Uplift	Total savings achieved minus Uplift
130.296	2.569	2.102	125.629

Taken together, the innovation and energy services uplifts account for 4.7 TWh of suppliers' savings towards the target, equating to 3.6 per cent of the target. This 'loss' of energy savings that would result from the application of the uplifts was taken into account within Defra's policy framework when the level of uplift and the cap on eligible activity was set. This was to achieve a balance between providing incentives for certain activity and the amount of savings 'lost' from the programme.

1.14. Only two suppliers took advantage of the incentive for Energy Services activity under EEC2. It appears that the energy services uplift has not encouraged suppliers to take up this type of scheme. None of this activity has been carried over in to CERT as there is no uplift for energy services under CERT.

1.15. Although a similar amount of innovation action to energy service action has been delivered in terms of savings, most of this relates to appliances which individually deliver small savings, so this amount of savings actually represents a significant level of activity. For example, during the course of the EEC2 programme the levels of sales of A rated appliances and larger sized IDTVs have increased considerably. This has been acknowledged by the Market Transformation Programme whose projected annual energy consumption by set top boxes in the UK was revised down from 12.1 TWh in 2005 to 4.7 TWh in 2007. This drop in predicted energy use can largely be attributed to the increased demand for IDTVs instead of separate set top boxes, and EEC2 has played its part in this market transformation.

1.16. Very little innovation action has been carried over into CERT as most suppliers did not want to use up their CERT Market Transformation allowance. Under EEC2, none of the suppliers reached the 10 per cent cap on innovation activity eligible for uplift.

2. Each supplier's activity during EEC 2005-2008

Chapter Summary

This chapter documents how each of the obligated suppliers achieved the EEC2 target. The information presented in this chapter is based on the suppliers' schemes and their quarterly statistics. For each obligated supplier, this chapter presents information on:
- the measure types each supplier proposed to deliver to meet its obligation
- the energy savings achieved by suppliers in each year of the obligation
- how each supplier met its share of the Priority Group obligation

This chapter fulfils Ofgem's reporting duties to the Secretary of State on each supplier's progress towards its energy efficiency obligation.

2.1. In January 2005, 8 energy suppliers were set an energy efficiency target according to the number of customers on their supply licences. A list of all obligated licensees is shown in Appendix 2. Each of the 8 suppliers was set its final target for the EEC2 obligation period in January 2007. The proposed and achieved savings discussed in this chapter have been compared with each supplier's final target.

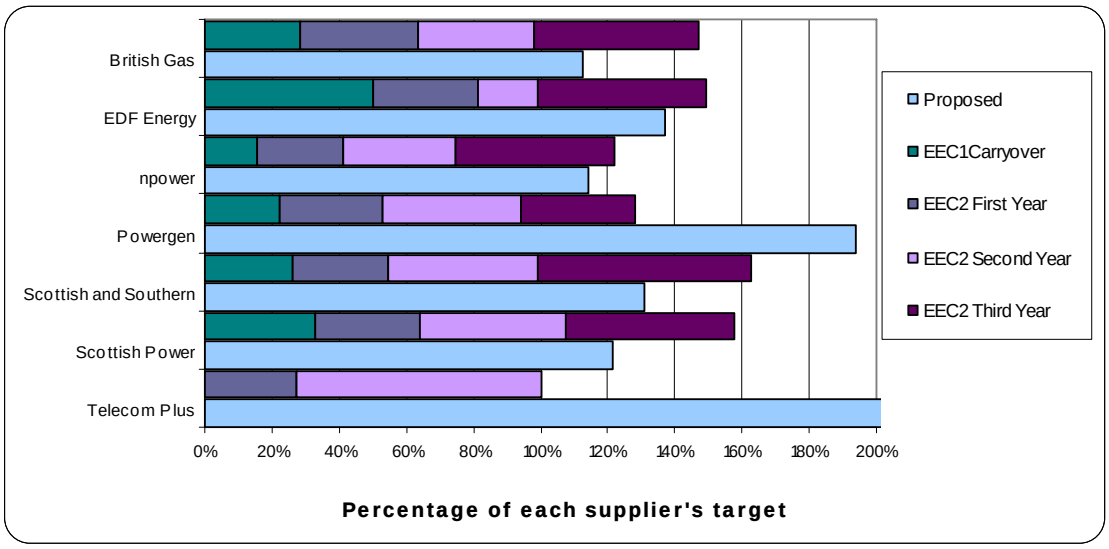
2.2. The obligated suppliers met their energy efficiency obligation by delivering improvements in domestic energy efficiency. Based on a set of guidelines, Ofgem assessed whether a supplier's proposed activity could be considered a qualifying action under the Order and whether this activity could count towards meeting a supplier's target. Ofgem didn't prescribe how the suppliers should meet the obligation; suppliers had complete flexibility in choosing which measures they promoted to consumers.

2.3. As part of its administrative duties, Ofgem also monitored suppliers' compliance with the obligation and determined energy savings in relation to the suppliers' completed actions. For each completed scheme, Ofgem determined whether it could be considered a qualifying action under the Order and quantified the level of energy savings that counted towards meeting a supplier's energy saving target.

2.4. To qualify under the EEC2 programme all measures had to be installed by 31 March 2008. For Ofgem to verify the energy savings from the completed actions, all completion reports were required to be submitted by 30 April 2008.

2.5. Figure 2.1 provides a summary of the proposed and achieved savings for each obligated supplier as a percentage of each supplier's target. The achieved energy savings for each supplier comprise of a proportion of energy savings carried over from EEC1 and the energy savings delivered in each year of the EEC2 obligation period.

Figure 2.1 - Each supplier's proposed and achieved energy savings as percentages of their individual targets



British Gas

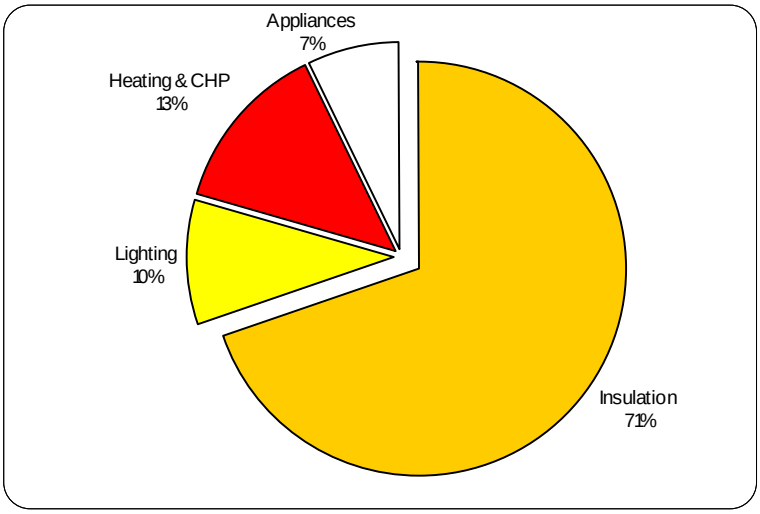
2.6. As shown in Figure 2.1, British Gas achieved 147 per cent of its energy saving target by the end of the EEC2 obligation period. Over a quarter of British Gas' target was met with the savings carried over from EEC1. A further 35 per cent of British Gas' target was delivered in each of the first two years of the programme. In the final year of the EEC2 obligation, British Gas accelerated its activity by delivering savings equating to half of its target.

Proposed activity

2.7. Throughout the EEC2 programme, British Gas submitted 23 scheme proposals for its EEC2 energy efficiency obligation. As shown in Figure 2.1, the total energy savings from these proposals equated to 112 per cent of British Gas' target. A full breakdown of energy savings from proposed measure types is shown in Figure 2.2.

2.8. British Gas proposed to achieve roughly three quarters of its target by delivering insulation measures. Nearly 23 per cent of energy savings were proposed to come from lighting and heating measures. Energy savings from appliances accounted for 6 per cent of British Gas' proposed activity.

Figure 2.2 - British Gas - proposed savings by measure type



Achieved savings

2.9. As shown in Figure 2.3, British Gas met nearly 40 per cent of its obligation by installing insulation measures. British Gas achieved these savings by installing similar amounts of loft insulation and cavity wall insulation measures. Energy savings from insulation were achieved through a number of delivery routes including energy services, partnering with social housing providers and installing measures in the owner occupier sector. A share of consumers in the owner occupier sector benefited from the insulation measures which British Gas installed in conjunction with Warm Front, Welsh HEES and Warm Deal. British Gas also promoted insulation measures through a retail partnership. As shown in Table 2.1, the greatest proportion of the achieved energy savings from insulation was delivered in the first and third year of the programme.

2.10. Energy savings from heating measures account for 15 per cent of British Gas' activity to target. This is by far the largest share of the achieved energy savings from heating measures for any of the suppliers and is a result of a successful partnership with boiler manufacturers. A large share of energy savings from heating was also delivered through British Gas' central heating programme and through work with social housing providers. The uptake of A-rated boilers through the manufacturer partnerships resulted in a threefold increase in the achieved energy savings from heating in the third year, in comparison with the activity in the first year of the obligation.

2.11. Lighting and appliances combined accounted for a fifth of British Gas' achieved savings to target. The proportion of energy savings from lighting achieved by British Gas represents the largest share of achieved savings to target from lighting for any of the suppliers. The high level of achieved savings from lighting is a result of British

Gas' retail partnerships and distribution of free CFLs. The savings from lighting significantly increased throughout the programme from nearly 2 per cent in the first year to over 8 per cent in the third year.

Figure 2.3 - British Gas – achieved energy savings by measure type and carryover

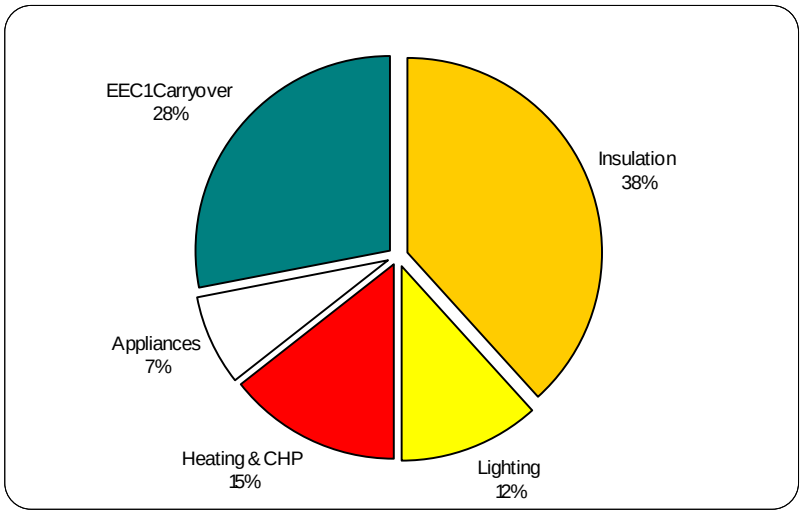


Table 2.1 - British Gas - achieved energy savings as a percentage of its target

Measure	EEC1 Carryover	EEC2 Year 1	EEC2 Year 2	EEC2 Year 3	EEC2 Carryover
Insulation	28.1%	28.8%	21.5%	26.0%	(38.1%)
Lighting	0.0%	1.8%	5.2%	8.4%	(3.5%)
Heating	0.0%	3.6%	6.7%	9.7%	(5.6%)
Appliances	0.0%	1.0%	1.3%	5.0%	(0.1%)
Total	28.2%	35.2%	34.7%	49.2%	(47.2%)

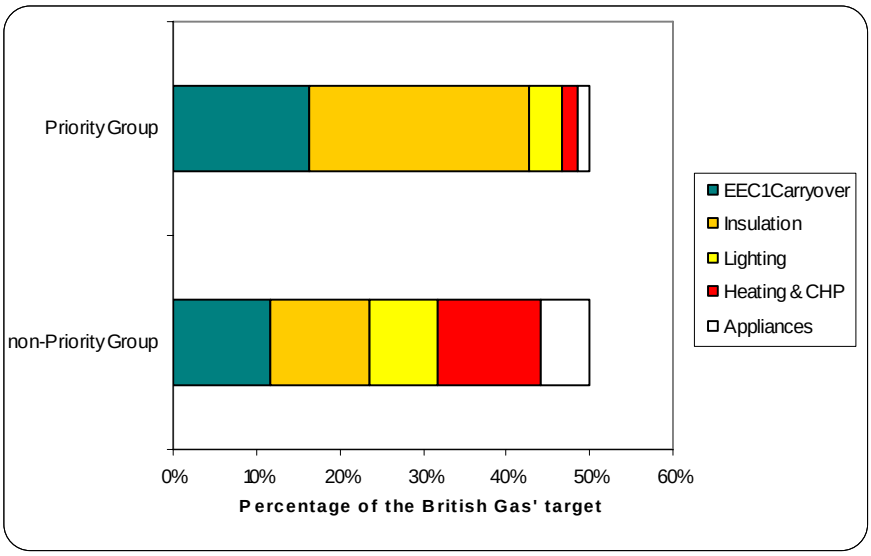
2.12. The promotion of white and brown goods delivered 7 per cent of British Gas' activity. As a result of the successful promotion of brown goods through British Gas' manufacturer and retail partnerships, the proportion of achieved energy savings from appliances increased from 1 per cent in the first and second year to 5 per cent in the final year of EEC2.

Targeting the Priority Group

2.13. As shown in Figure 2.4, British Gas achieved over a quarter of its Priority Group target from delivering insulation measures. Energy savings from lighting, heating and appliances delivered to the Priority Group accounted for 7 per cent of British Gas' target.

2.14. The achieved energy savings delivered to the non-Priority Group were distributed between the four measure types. A quarter of the target was met through non-Priority heating and insulation. Non-Priority lighting and appliances contributed to 14 per cent of British Gas' target.

Figure 2.4 – British Gas - achieved energy savings by consumer type as a percentage of its target



EDF Energy

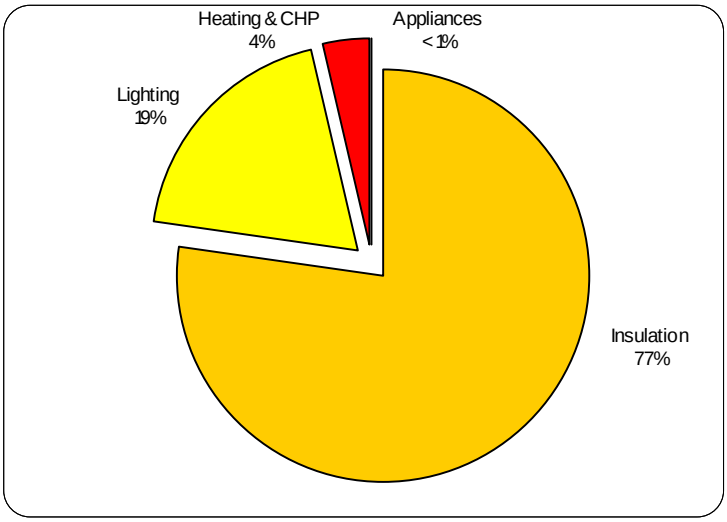
2.15. EDF Energy achieved 149 per cent of its energy saving target by the end of the obligation period. As shown in Figure 2.1, a significant proportion of EDF Energy's target was met with the savings achieved in EEC1. A further 50 per cent of EDF Energy's target was delivered in the first two years of the programme. In the final year of EEC2, EDF Energy delivered energy savings which equated to 50 per cent of its target.

Proposed activity

2.16. Ofgem approved 21 of EDF Energy's proposals throughout the EEC2 obligation period. Throughout the programme, EDF Energy proposed to achieve just under 140 per cent of its target predominantly by carrying out insulation work and promoting lighting measures.

2.17. Figure 2.5 shows that lighting accounted for nearly a fifth of EDF Energy's proposed energy savings. Energy savings from heating and appliances comprised a small share of the proposed savings.

Figure 2.5 - EDF Energy – proposed savings by measure type



Achieved savings

2.18. As shown in Figure 2.6, 40 per cent of EDF Energy's achieved energy savings were delivered through insulation during EEC2. EDF Energy achieved these savings by installing loft insulation and cavity wall insulation in the owner occupier sector and by partnering with social housing providers to deliver other insulation measures. The level of activity varied throughout the programme. Energy savings from insulation were predominantly delivered in the first and third years of the programme.

2.19. By the end of the EEC2 programme, 10 per cent of the achieved energy savings had been met through lighting. Table 2.2 shows a significant increase in the proportion of the achieved energy savings from lighting in the final year of the programme in comparison with the previous years. This was a result of a successful partnership with leading retailers.

2.20. A very small proportion of the achieved energy savings were met though heating and appliances. Energy savings from heating were achieved through partnerships with social housing providers in the first and third year of the programme.

Figure 2.6 - EDF Energy - achieved energy savings by measure type and carryover

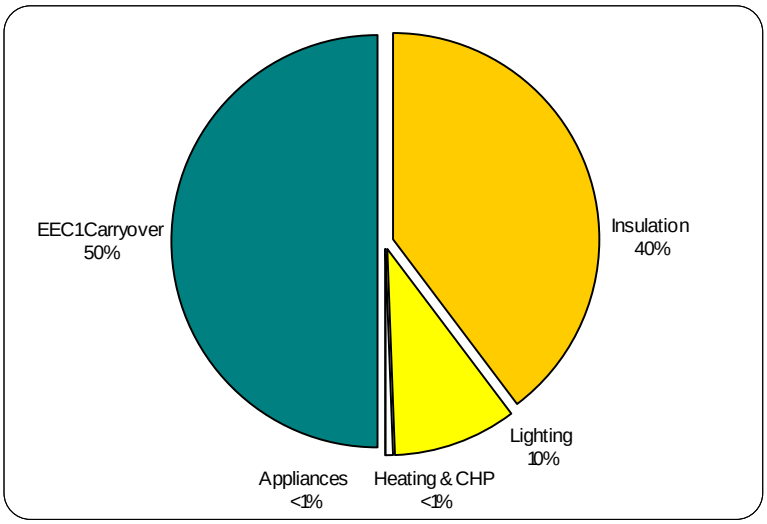


Table 2.2 - EDF Energy - achieved energy savings as a percentage of its target

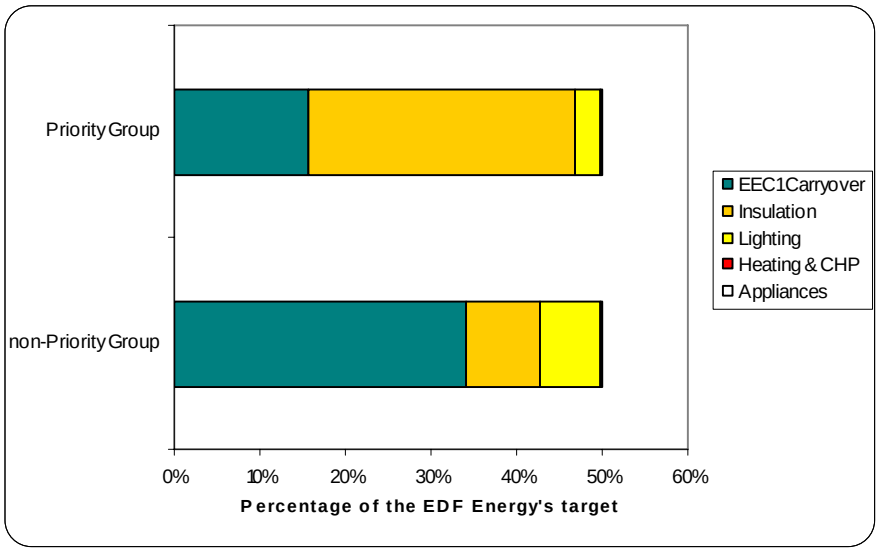
Measure	EEC1 Carryover	EEC2 Year 1	EEC2 Year 2	EEC2 Year 3	EEC2 Carryover
Insulation	50.0%	30.5%	17.3%	34.1%	(42.1%)
Lighting	0.0%	0.9%	0.3%	15.9%	(7.4%)
Heating & CHP	0.0%	0.1%	0.0%	0.3%	(0.0%)
Appliances	0.0%	0.0%	0.0%	0.1%	(0.0%)
Total	50.0%	31.5%	17.7%	50.4%	(49.5%)

Targeting the Priority Group

2.21. As shown in Figure 2.7, the large amount of energy savings carried over from EEC1 made a significant contribution to EDF Energy's target. A third of EDF Energy's target was met through Priority Group insulation and lighting.

2.22. Over 7 per cent of the target was met though non-Priority Group heating. Lighting contributed to another 7 per cent of the non-Priority Group share of EDF Energy's target.

Figure 2.7 - EDF Energy – achieved energy savings by consumer type as a percentage of its target



npower

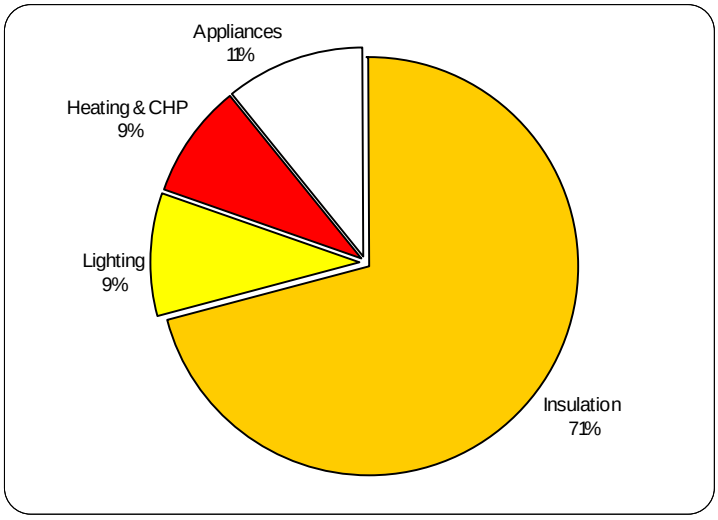
2.23. As shown in Figure 2.1, npower achieved 122 per cent of its energy saving target by the end of the obligation period. More than 15 per cent of npower's target was met with the savings carried over from EEC1. Nearly 60 per cent of npower's target was achieved in the first and second years of EEC2. In the final year of the obligation, npower significantly increased its level of activity and delivered half of its target.

Proposed activity

2.24. Throughout the EEC2 programme, npower had 27 proposals approved by Ofgem. The total energy savings from these proposals equated to just over 114 per cent of npower's target.

2.25. npower proposed to deliver nearly three quarters of its energy savings from insulation measures. The remainder was proposed to be met by broadly equal shares of heating, lighting and appliance energy savings. A full breakdown of the proposed energy savings is shown in Figure 2.8.

Figure 2.8 - npower – proposed savings by measure type



Achieved savings

2.26. As shown in Figure 2.9, over 60 per cent of npower's delivered energy savings came from insulation measures installed throughout the course of the programme. Table 2.3 shows that the level of activity steadily increased during each year of the obligation period. The energy savings from insulation were achieved by installing more loft insulation than cavity wall insulation measures through a combination of energy services, social housing and owner occupier schemes. A share of energy savings from insulation also came from npower's retail partnership.

2.27. Lighting and heating measures accounted for 13 per cent of the achieved energy savings. Energy savings from lighting were delivered mainly through npower's retail partnership and to a lesser extent through the distribution of free CFLs. The share of energy savings from lighting increased threefold from nearly 2 per cent in the second year to almost 6 per cent, in the final year of EEC2. A small proportion of the achieved energy savings were met through the delivery of a range of heating measures installed in social and private housing. This occurred predominantly in the final year of EEC2.

2.28. Over 9 per cent of the npower's achieved energy savings resulted from the promotion of appliances. These savings were achieved through a retail partnership. The level of savings from appliances grew between the first and second year of the obligation. During the course of EEC2, npower also bought a small share of energy savings from another supplier.

Figure 2.9 - npower – achieved energy savings by measure type and carryover

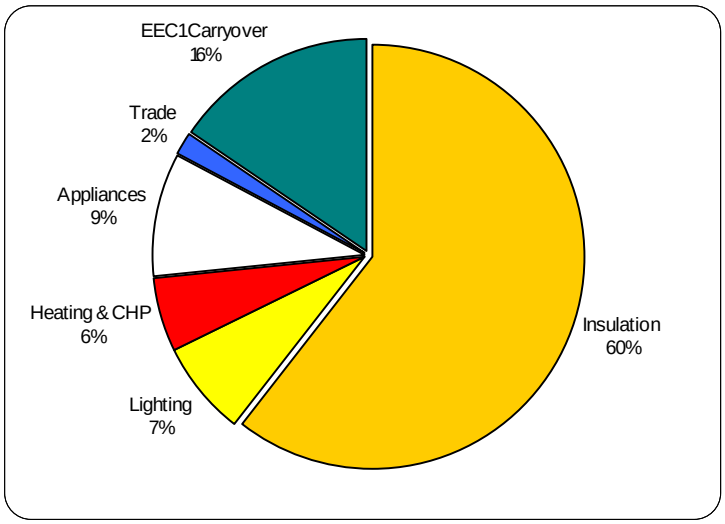


Table 2.3 - npower - achieved energy savings as a percentage of its target

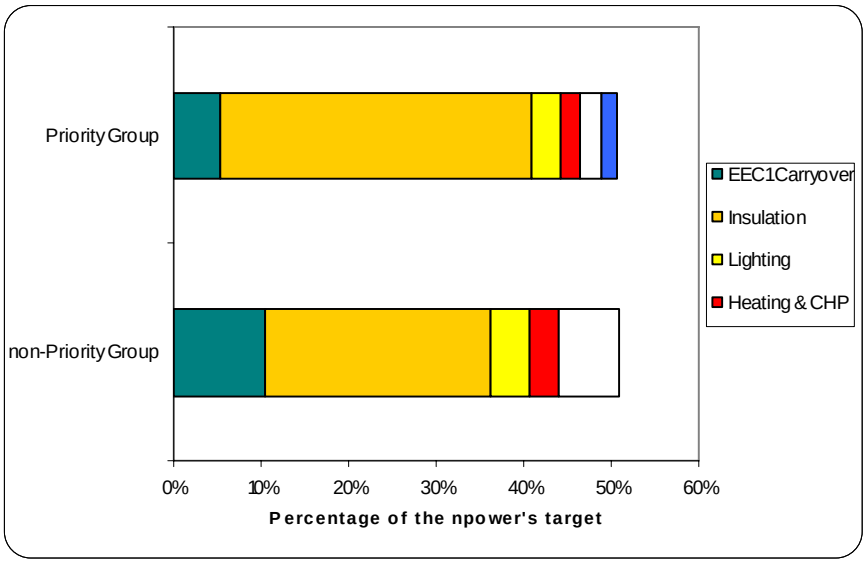
Measure	EEC1 Carryover	EEC2 Year 1	EEC2 Year 2	EEC2 Year 3	CERT carryover
Insulation	15.7%	21.6%	26.3%	30.3%	(16.7%)
Lighting	0.0%	0.2%	1.7%	5.7%	(0.0%)
Heating	0.0%	1.0%	2.2%	6.0%	(3.6%)
Appliances	0.1%	2.5%	3.4%	3.6%	(0.0%)
Trade	0.0%	0.0%	0.0%	1.8%	(0.0%)
Total	15.8%	25.4%	33.6%	47.3%	(20.3%)

Targeting the Priority Group

2.29. As shown in Figure 2.10, 7 per cent of npower's Priority Group target was met through the delivery of lighting, heating and appliances. Over 35 per cent of the target was met through the promotion of Priority Group insulation. To increase its level of energy savings in the Priority Group, npower purchased Priority Group savings from another supplier. The traded savings contributed to nearly 2 per cent of npower's target.

2.30. Lighting, heating and appliances were predominantly delivered to the non-Priority Group consumers. The achieved savings from these measures accounted for 15 per cent of npower's non-Priority Group target. The largest share of energy savings delivered to the non-Priority Group came from the installation of insulation measures.

Figure 2.10 - npower – achieved energy savings by consumer type as a percentage of its target



Opus Energy

2.31. In December 2005, Opus Energy transferred its customers to Telecom Plus. As Opus Energy retained its supply licence, it was still required to meet its EEC2 target. In October 2007, Opus Energy traded its entire target with Telecom Plus in order to comply with the obligation. Telecom Plus complied with its increased obligation by the end of the EEC2 period.

Powergen

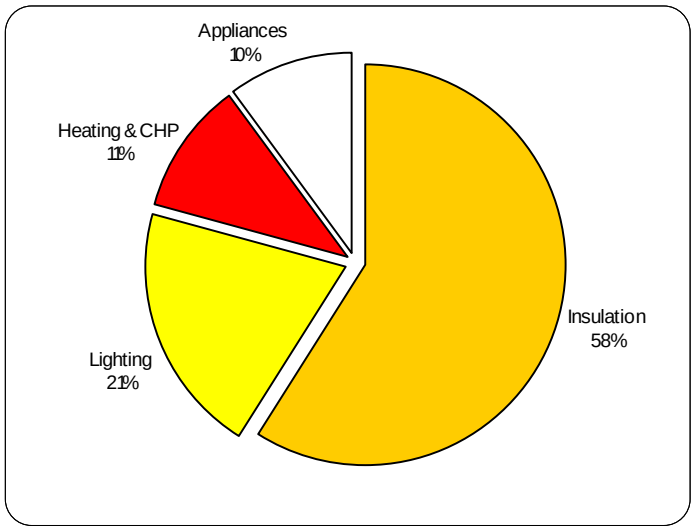
2.32. Powergen achieved 128 per cent of its energy saving target by the end of the obligation period. Just under a quarter of Powergen's target was met with the savings carried over from EEC1. As shown in Figure 2.1, the delivery of energy savings was spread evenly over the three years of the programme, with Powergen achieving broadly a third of its target in each year of EEC2.

Proposed activity

2.33. Ofgem approved 17 of Powergen's scheme proposals throughout the course of EEC2. Powergen anticipated achieving nearly 200 per cent of its target by delivering a range of energy efficiency measures.

2.34. As shown in Figure 2.11, Powergen planned to achieve roughly 20 per cent of its target with heating and appliance measures, with a further 20 per cent through promoting lighting measures. The remainder was planned to be delivered from installing insulation measures.

Figure 2.11 - Powergen – proposed savings by measure type



Achieved savings

2.35. Powergen delivered 61 per cent of its energy savings from insulation measures. As shown in Table 2.4, half of these savings were achieved in the second year of the programme. To achieve these savings Powergen delivered more cavity wall insulation than loft insulation measures. Energy savings from insulation resulted from successful partnerships with social housing providers, targeting the owner occupier sector, and from Warm Front activity.

2.36. As shown in Figure 2.12, energy savings from lighting and appliances accounted for nearly 15 per cent of Powergen's activity. To deliver these savings Powergen formed a partnership with a number of leading retailers. A large volume of free lighting measures were also promoted through local community programmes. The share of energy savings from lighting and appliances increased in the final year of the programme.

2.37. A small share of energy savings were delivered through the promotion of heating measures. These savings were delivered through social housing activity and to a lesser extent through manufacturer partnerships and targeting of the owner occupier sector. Nearly 1 per cent of the target was met through savings traded with another supplier.

Figure 2.12 - Powergen – achieved energy savings by measure type and carryover

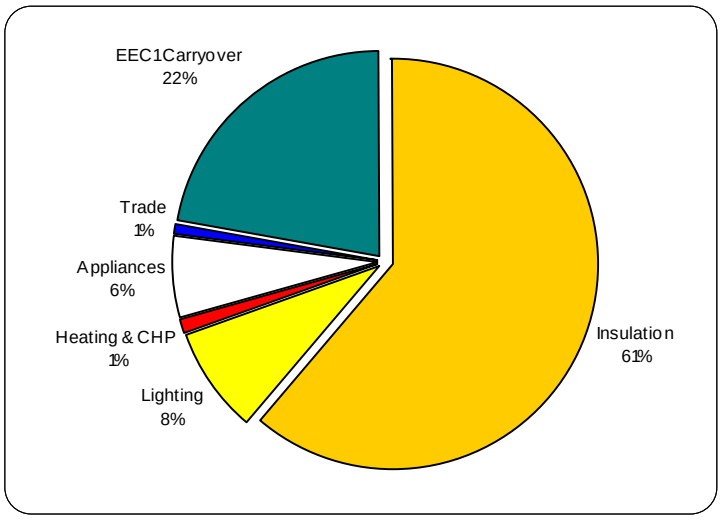


Table 2.4 - Powergen - achieved energy savings as a percentage of its target

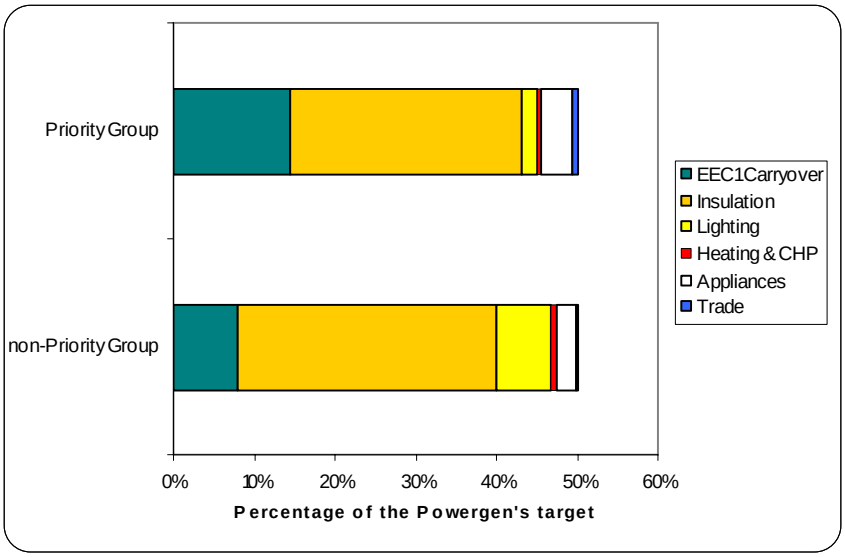
Measure	EEC1 Carryover	EEC2 Year 1	EEC2 Year 2	EEC2 Year 3	EEC2 Carryover
Insulation	22.2%	19.9%	28.4%	13.7%	(1.0%)
Lighting	0.0%	9.1%	11.6%	13.5%	(25.8%)
Heating	0.0%	0.1%	1.2%	1.1%	(1.2%)
Appliances	0.1%	1.4%	0.0%	5.0%	(0.0%)
Trade	0.0%	0.0%	0.0%	0.7%	(0.0%)
Total	22.3%	30.5%	41.2%	34.1%	(28.0%)

Targeting the Priority Group

2.38. As shown in Figure 2.13, similar amounts of energy savings from insulation measures were delivered to both Groups. Energy savings from lighting, appliances and heating measures and the trade delivered to the Priority Group accounted for 6 per cent of Powergen's target.

2.39. Nearly 7 per cent of the target was met through non-Priority Group lighting. Non-Priority appliances and trade contributed to another 3 per cent of Powergen's target.

Figure 2.13 - Powergen – achieved energy savings by consumer type as a percentage of its target



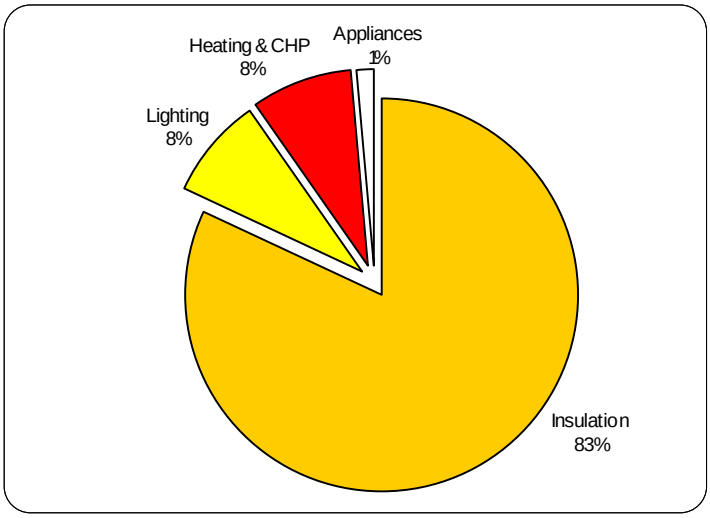
Scottish and Southern Energy

2.40. As shown in Figure 2.1, Scottish and Southern Energy achieved 163 per cent of its energy saving target by the end of the obligation period. More than a quarter of Scottish and Southern Energy's target was met with the savings from EEC1 carryover and a further quarter was delivered in the first year. Scottish and Southern Energy's activity accelerated in the second and third year of EEC2; this activity accounted for over 100 per cent of Scottish and Southern Energy's target.

Proposed activity

2.41. Scottish and Southern Energy proposed to deliver over 80 per cent of its savings from insulation measures. As shown in Figure 2.14, a further 16 per cent was proposed to be delivered from lighting and heating measures. Appliances accounted for the small remainder of the proposed savings.

Figure 2.14 - Scottish and Southern Energy – proposed savings by measure type



Achieved savings

2.42. Scottish and Southern Energy delivered half of its energy savings from insulation measures. To achieve these savings a similar amount of loft insulation and cavity wall insulation were installed. Energy savings from insulation were achieved as a result of a combination of social housing activity and targeting of the owner occupier sector including through Warm Front. As shown in Table 2.5, Scottish and Southern Energy's insulation activity was at its highest level in the second year of the EEC2 programme.

2.43. Figure 2.15 shows that nearly 15 per cent of achieved energy savings resulted from the promotion of appliances. This is the highest proportion of delivered energy savings from appliances for any of the suppliers, and was the result of a successful promotion of brown goods through Scottish and Southern Energy's manufacturer partnerships. The level of energy savings achieved through appliance measures increased significantly in the final year of the programme.

2.44. Over 9 per cent of energy savings were delivered through lighting and heating measures. Scottish and Southern Energy's delivery of these measures increased in the final year of the programme. The increase in the achieved energy savings from lighting from less than 1 per cent in the first and second year of the programme to 11 per cent in the final year of EEC2 was a result of a successful promotion of free CFLs.

Figure 2.15 - Scottish and Southern Energy – achieved energy savings by measure type and carryover

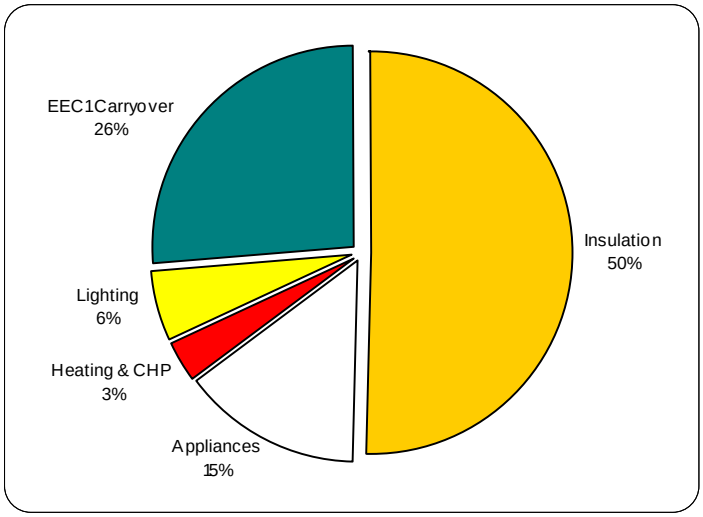


Table 2.5 - Scottish and Southern Energy - achieved energy savings as a percentage of its target

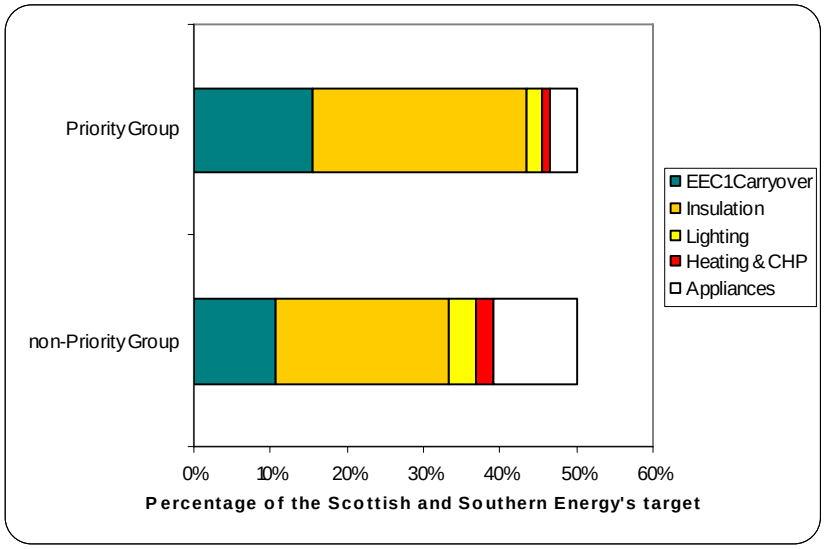
Measure	EEC1 Carryover	EEC2 Year 1	EEC2 Year 2	EEC2 Year 3	EEC2 Carryover
Insulation	26.4%	27.4%	41.1%	33.8%	(51.9%)
Lighting	0.0%	0.6%	0.6%	11.1%	(6.7%)
Heating	0.0%	0.0%	0.3%	7.1%	(4.2%)
Appliances	0.0%	0.1%	2.8%	11.6%	(0.0%)
Total	26.4%	28.0%	44.8%	63.6%	(62.8%)

Targeting the Priority Group

2.45. As shown in Figure 2.16, Scottish and Southern Energy targeted both Priority and non-Priority Group consumers to deliver insulation measures. A similar amount of savings from insulation, which accounts for a quarter of the Priority and non-Priority target, was delivered to both Groups. Over 6 per cent of the achieved savings in the Priority Group came from lighting, heating and appliances.

2.46. The majority of savings from appliances were delivered to non-Priority Group consumers. Over 5 per cent of Scottish and Southern Energy's target was met with non-Priority heating and lighting.

Figure 2.16 - Scottish and Southern Energy – achieved energy savings by consumer type as a percentage of its target



Scottish Power

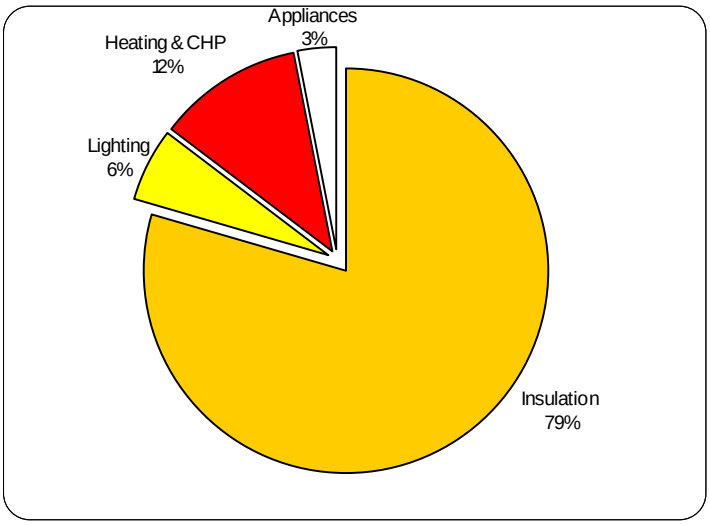
2.47. As shown in Figure 2.1, Scottish Power achieved 157 per cent of its energy saving target by the end of the obligation period. A third of Scottish Power's target was met with the savings carried over from EEC1. Throughout the EEC2 programme, Scottish Power steadily increased its activity towards meeting the target by achieving 31 per cent, 44 per cent and 50 per cent of its target in the each year of the obligation.

Proposed activity

2.48. Throughout the course of EEC2 Scottish Power had 10 scheme proposals approved by Ofgem. Scottish Power proposed to achieve 121 per cent of its target predominantly by carrying out insulation.

2.49. As shown in Figure 2.17, Scottish Power anticipated achieving just over a fifth of its energy savings from delivering heating, lighting and appliances.

Figure 2.17 - Scottish Power – proposed savings by measure type



Achieved savings

2.50. As shown in Figure 2.18, Scottish Power achieved over 60 per cent of its energy saving target by delivering insulation measures throughout the three year programme. To achieve these savings Scottish Power installed more cavity wall insulation than loft insulation through its social housing activity and through the direct targeting of the owner occupier sector, including through Warm Deal. A small share of the savings came from promoting insulation measures through a retailer.

2.51. Over 3 per cent of delivered savings came through promoting heating and appliances. As shown in Table 2.6, Scottish Power's appliance activity took place in the first and second year of the programme. Energy savings from heating were delivered through Scottish Power's work with social housing providers and the targeting of private householders. The majority of the heating work was delivered in the second year of EEC2 and decreased by 50 per cent in the final year of the programme.

Figure 2.18 - Scottish Power – achieved energy savings by measure type and carryover

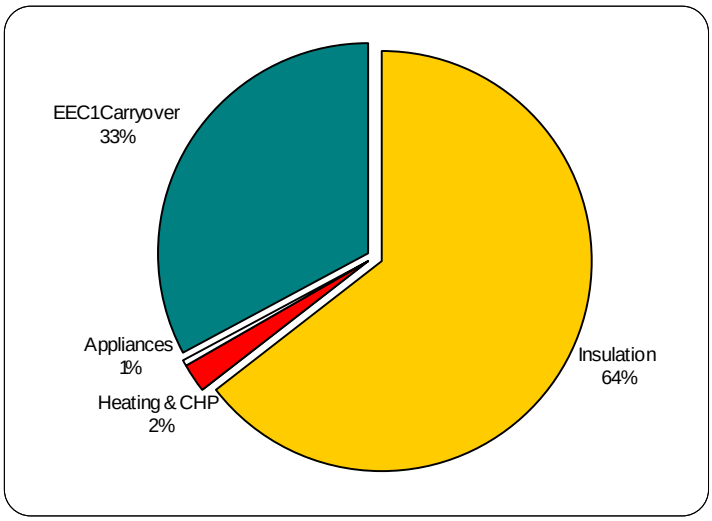


Table 2.6 - Scottish Power - achieved energy savings as a percentage of its target

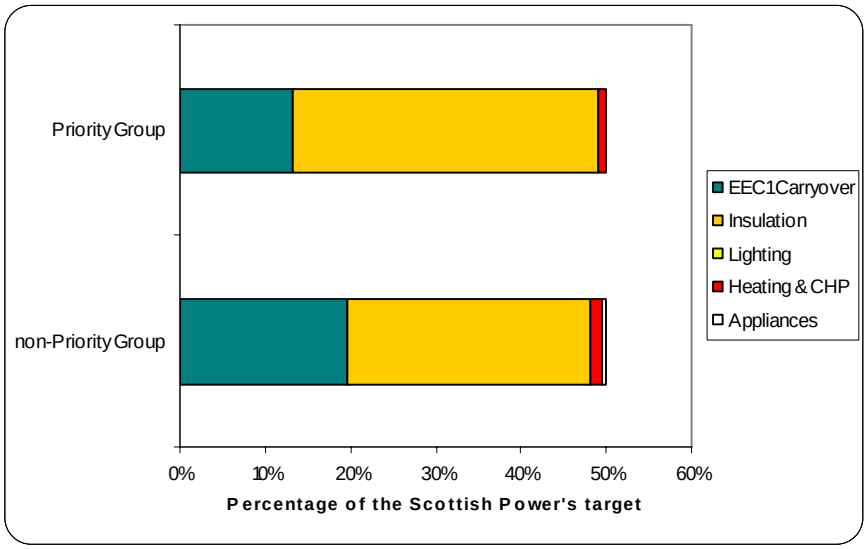
Measure	EEC1 Carryover	EEC2 Year 1	EEC2 Year 2	EEC2 Year 3	EEC2 Carryover
Insulation	32.6%	28.2%	35.3%	44.7%	(41.7%)
Lighting	0.0%	2.7%	5.5%	3.7%	(11.9%)
Heating	0.1%	0.0%	2.7%	1.4%	(1.7%)
Appliances	0.0%	0.4%	0.2%	0.0%	(0.0%)
Total	32.7%	31.4%	43.6%	49.8%	(55.3%)

Targeting the Priority Group

2.52. As shown in Figure 2.19, Scottish Power achieved roughly a third of its target by delivering insulation measures in each of the Groups.

2.53. Nearly 3 per cent of the Scottish Power target was met with appliances and heating. Both Priority and non-Priority Group consumers equally benefited from a small proportion of energy savings from heating. Appliances accounted for less than 1 per cent of the energy savings delivered to the non-Priority Group consumers.

Figure 2.19 - Scottish Power – achieved energy savings by consumer type as a percentage of its target



Telecom Plus

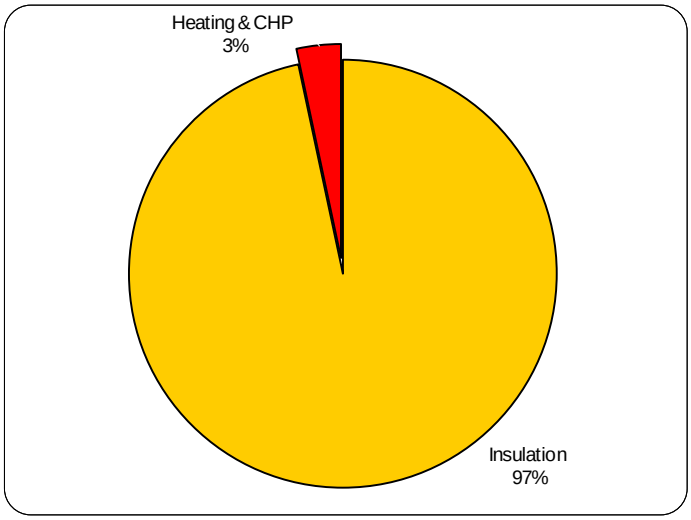
2.54. Telecom Plus didn't carryover any energy savings from EEC1. As shown in Figure 2.1, Telecom Plus met its target by the end of the second year of EEC2. This included meeting Opus Energy's obligation.

Proposed activity

2.55. By the end of EEC2 Telecom Plus had 3 scheme proposals approved by Ofgem. Telecom Plus proposed to achieve over 3 times its target by delivering predominantly insulation measures.

2.56. As shown in Figure 2.20, Telecom Plus anticipated delivering almost all of the energy savings from insulation measures. The remainder was proposed to be delivered from heating.

Figure 2.20 - Telecom Plus – proposed savings by measure type



Achieved savings

2.57. As shown in Figure 2.21, almost all of Telecom Plus' achieved energy savings came from installing insulation measures. To achieve these savings Telecom Plus installed more cavity wall insulation than loft insulation. Telecom Plus successfully targeted the owner occupier sector to deliver these measures. A small share of the savings were met through Telecom Plus' social housing activity. As shown in Table 2.7, the energy savings from insulation were delivered in the first and second year of the programme.

2.58. A small amount of the achieved energy savings resulted from installation of heating measures in the private sector. Table 2.7 shows that the majority of the savings from heating were delivered in the second year of EEC2.

Figure 2.21 - Telecom Plus – achieved energy savings by measure type

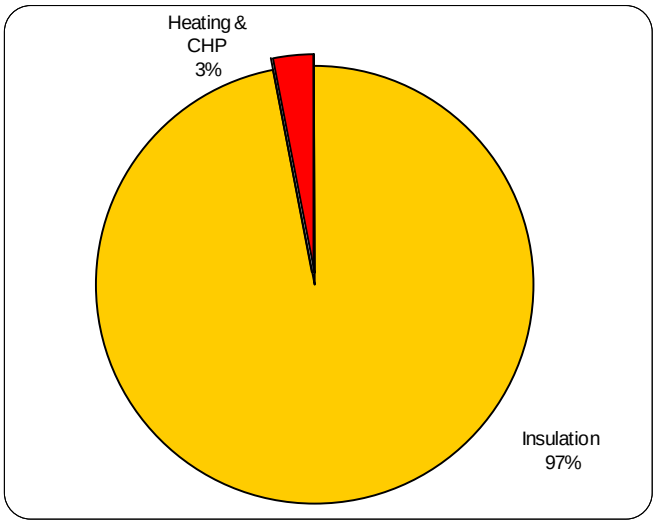


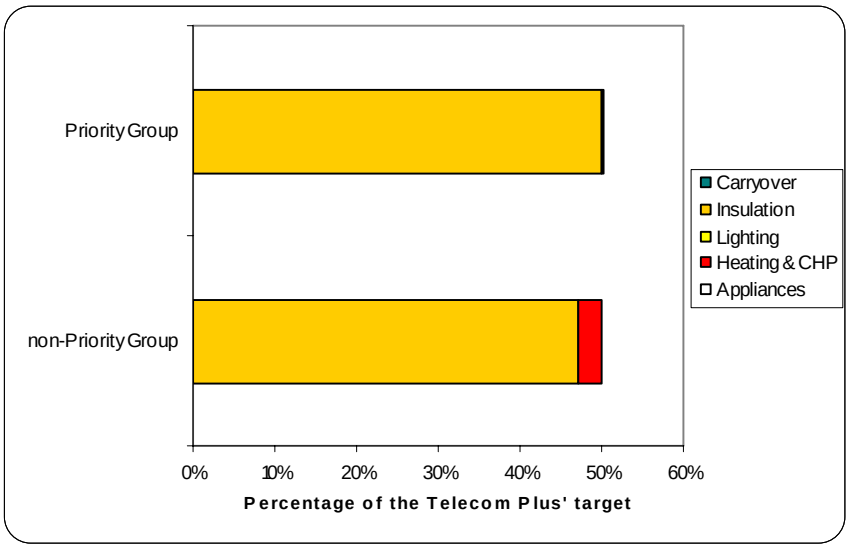
Table 2.7 - Telecom Plus - achieved energy savings as a percentage of its target

Measure	EEC2 Year 1	EEC2 Year 2	EEC2 Year 3
Insulation	27.4%	51.9%	17.8%
Lighting	0.0%	0.0%	0.0%
Heating	0.0%	2.7%	0.3%
Appliances	0.0%	0.0%	0.0%
Total	27.4%	54.6%	18.1%

Targeting the Priority Group

2.59. As shown in Figure 2.22, Telecom Plus met its Priority Group obligation with savings from insulation. Almost all the achieved energy savings from heating were delivered to the non-Priority Group consumers.

Figure 2.22 - Telecom Plus – achieved energy savings by consumers as a percentage of its target



3. Measures delivered during EEC 2005 - 2008

Chapter summary

This chapter provides information on the types and number of measures that have been delivered in EEC2 and how they have been promoted and delivered to consumers. The information presented includes the measures carried over from EEC1 and those achieved in EEC2.

3.1. Suppliers used a range of delivery mechanisms to reach their target, but offering measures direct to consumers has been the main delivery route for achieving energy savings in EEC2. Other delivery routes have included partnering with organisations such as SHPs and charities, partnering with retailers and manufacturers and linking in with the government's Warm Front programme. Suppliers were not limited to assisting their own customers but were able to target any domestic customer in Great Britain.

3.2. Table 3.1 details the total number of measures installed, split between Priority Group and non-Priority Group, and the energy savings attributed throughout EEC2. Appendix 1 details the number of measures installed and their energy savings in EEC2 excluding EEC1 carryover.

Table 3.1 - The number of measures installed and their energy savings

Measure	Number of measures installed		Energy savings (GWh)
	Priority Group	non-Priority Group	
Cavity wall insulation	860,821	900,008	76,654
Loft insulation (top up)	787,572	509,685	19,086
Loft insulation (virgin)	297,281	193,489	31,005
DIY loft insulation (m^2)	3,179,218	28,803,719	9,073
Solid wall insulation	29,550	11,769	2,209
Draught stripping	18,713	11,586	70
Hot water tank jackets	78,848	153,006	507
Radiator panels (m^2)	42,521	19,639	8
Other insulation (m^2)	4,706	1,455,653	230
CFLs	38,406,550	63,469,473	21,911
Other lighting	287,070	85,945	8
Energy efficiency cold and wet appliances	1,767,898	6,578,089	3,130
Standby savers	723,752	2,190,052	1,993
TVs	2,591,637	6,858,545	3,471
Other appliances	79,922	2,065,088	486
All boilers	366,905	1,715,907	7,837
Heating controls installed with replacement boilers	28,205	80,366	135
Heating controls	755,132	1,481,280	210
Fuel switching	47,639	30,371	4,462
Innovative heating	491	2,421	483
CHP*/Communal heating	2,597	7,170	1,135
Other heating	2,485	197,301	66

*Number of properties served by the heating system.

Insulation

Numbers of measures

3.3. Insulation measures dominated supplier activity throughout the programme and accounts for three quarters of the total savings achieved. Loft insulation was the most popular insulation measure installed, with over 1,750,000 households benefiting from a professional installation. Almost 500,000 households that received loft insulation had no previous loft insulation and the remaining properties received loft insulation top-up. DIY loft insulation was a popular delivery route for suppliers, with almost 32 million square metres of loft insulation sold through retailers. DIY and professional installations of loft insulation contributed roughly one third of the total energy savings achieved.

3.4. Cavity wall insulation was the second most popular insulation measure installed after loft insulation. It was generally promoted alongside loft insulation with more than 1,700,000 households benefiting, which led to roughly 40 per cent of the total

energy savings. These savings were greater than that of loft insulation, but resulted from fewer installations as the energy saving per installation was greater.

3.5. Other insulation measures, which includes draught proofing, radiator panels and hot water tank jackets, were also delivered by suppliers. The majority of these measures were delivered in a broader programme of insulation work, as they are not cost effective to deliver alone and lead to a much smaller energy saving. Internal and external solid wall insulation was installed in over 40,000 households, almost entirely in the social housing sector. The 'other insulation' category includes the promotion of window glazing and loft insulation boards. Window glazing, an innovative measure, was delivered in partnership with a manufacturer and all installations were within the non-Priority Group.

Delivery routes

3.6. The larger share of the energy savings achieved through insulation measures at the end of EEC2 was in the non-Priority Group. These measures were promoted directly to consumers either by the suppliers themselves or by their projects partners, including SHPs and retailers. Table 3.2 shows the split of energy savings achieved through insulation in the Priority and the non-Priority Group at the end of EEC2.

Table 3.2 - The contribution from installed insulation at the end of EEC2 to the total of achieved energy savings

	Priority Group	non-Priority Group
Contribution to total EEC2 savings achieved at the end of EEC2	36.1 per cent	39.3 per cent

3.7. Insulation measures for Priority Group households were promoted in a number of ways, but predominantly through working direct with consumers, forming partnerships with SHPs and working with the Warm Front programme.

3.8. Activity carried out with the SHPs was popular with the suppliers as it allowed them to target large number of Priority Group households and to lever in additional funding. When working with the Warm Front programme, the suppliers fully funded the insulation measures being supported, allowing the Government's grant to focus on heating measures.

Lighting

Numbers of measures

3.9. The share of energy savings achieved through lighting measures at the end of EEC2 was almost 12 per cent, equating to just over 100 million CFLs and luminaires and over 370,000 other lighting measures, which includes energy efficient halogens. CFL schemes are relatively straightforward to set up and deliver and all but one

supplier had lighting schemes. A total of 30 lighting schemes had been delivered at the end of EEC2, with almost 60 per cent of the lamps delivered in the non-Priority Group. Table 3.3 shows the split of energy savings achieved through lighting in the Priority and the non-Priority Group at the end of EEC2.

3.10. CFLs were given out for free to both Priority and non-Priority Group households. When delivering CFLs for free, suppliers were required to cross check their records to ensure that consumers did not receive more than four CFLs during EEC2. These limits were put in place to ensure that consumers did not take more CFLs that they required and to ensure the measures led to an improvement in energy efficiency.

Table 3.3 - The contribution from lighting installed at the end of EEC2 to the total of achieved energy savings

	Priority Group	non-Priority Group
Contribution to total EEC2 savings achieved at the end of EEC2	4.4 per cent	7.5 per cent

Delivery routes

3.11. Throughout the programme, the main delivery routes for CFLs were promoting them for free and through retailers, including supermarkets, DIY outlets and other high street chains. The majority of the recipients of the lamps sold through retailers were in the non-Priority Group. Retailers were required to provide electronic point of sale (EPoS) data at the end of suppliers' schemes to confirm the number of measures sold to consumers.

3.12. The lamps which were provided to consumers for free were distributed through a number of different project partners including the Warm Front managing agent, SHPs, charities and local agencies. When lamps were distributed for free by project partners, suppliers were required to complete a declaration confirming whether consumers received two or four CFLs. If two CFLs were distributed for free, names and addresses were not required to be collected, however, suppliers had to collect names and addresses if four CFLs were distributed.

Heating

3.13. Heating measures contributed almost 8 per cent of the total energy savings achieved in EEC2, with roughly 2 million A-rated boilers being installed. Suppliers were accredited with the energy savings from installing A-rated boilers over the minimum legal requirement under the Building Regulations (a B rated boiler in most cases).

3.14. Heating controls installed on their own accounted for nearly half of heating measures installed, but only a small fraction of the energy savings achieved. Fuel switching was conducted in over 78,000 households. This generally involved

subsidising the replacement of an electric, oil or coal fired heating system to a gas-fired system.

3.15. Suppliers also promoted a range of innovative heating measures. This included the installation of over 1,500 ground source heat pumps and almost 1,200 solar water heating measures. Nine CHP/communal heating schemes were set up, benefiting over 7,000 domestic properties, with the majority in the non-Priority Group. One supplier set up a number of schemes which installed more than 20 communal heating controls, across both Priority Group and non-Priority Group households. Measures in 'other heating' in Table 3.1 refers to installation of over 195,000 central heating pumps and over 3,000 high efficiency hot water cylinders.

Table 3.4 - The contribution from heating installed at the end of EEC2 to the total of achieved energy savings

	Priority Group	non-Priority Group
Contribution to total EEC2 savings achieved at the end of EEC2	2.8 per cent	5.0 per cent

Delivery routes

3.16. From 1 April 2005 the Building Regulations required that almost all replacement boilers were SEDBUK[3] B rated. This change encouraged a number of suppliers to work with major boiler manufacturers to transform the market and encourage only the production of A-rated boilers. The majority of the boilers delivered in EEC2 were promoted through this route. The remainder of the boiler replacement activity was through partnerships with SHPs and supporting installers.

3.17. A number of suppliers promoted the installation of ground source heat pumps and solar water heating measures in EEC2 through partnerships with SHPs, installations in new build properties and activity direct to consumers. The level of this microgeneration activity was very low in comparison to the main insulation and heating measures delivered, but it has increased significantly over what was delivered in EEC1.

3.18. A range of suppliers promoted fuel switching measures during EEC2. These measures have been promoted through a number of mechanisms, including with installers, direct to consumers and working with SHPs.

3.19. Suppliers have also set up schemes to improve the efficiency of communal heating systems. Some suppliers have formed partnerships for the installation of

[3] Seasonal Efficiency Database of Boilers in the United Kingdom

CHP units. Other schemes have been targeted at improving the efficiency of how these systems are controlled.

Appliances

3.20. Energy savings achieved through appliances made up 5 per cent of the total energy savings at the end of EEC2. This low share reflects the low energy saving that was achieved per measure. Integrated Digital Televisions (IDTVs) achieved the largest proportion of energy savings out of all the appliances promoted in EEC2, accounting for 38 per cent of appliance savings. Suppliers worked with manufacturers and retailers of IDTVs. The sale of IDTVs grew considerably over 2005 - 2007, with the market share for LCD IDTVs increasing from roughly 5 per cent in April 2005 to 65 per cent in September 2007.

3.21. Suppliers delivered over 8 million cold and wet appliances (fridges, freezers, fridge freezers, dishwashers and washing machines) during EEC2, accounting for 34 per cent of all energy savings from appliance measures delivered during EEC2. These measures were all A, A+ and A++ rated under the European Energy Labelling Scheme.

3.22. Suppliers also set up schemes to deliver stand-by savers (consumer electronics) in partnership with manufacturers, retailers and in one case a supplier partnered with local authorities. One such example of a stand-by saver is the 'intelligent mains panel', a plug system that reduces the stand-by consumption from computer peripherals when the computer is itself in stand-by mode.

Table 3.5 - The contribution from appliances installed at the end of EEC2 to the total of achieved energy savings

	Priority Group	non-Priority Group
Contribution to total EEC2 savings achieved at the end of EEC2	1.4 per cent	3.5 per cent

Delivery routes

3.23. The main delivery route for energy efficient appliances has been through the national retailers. The monitoring of these consumers shows that the majority were in the non-Priority Group.

3.24. Some suppliers set up schemes to promote a number of different energy efficient consumer electronics products, these have been categorised as 'other appliances' in Table 3.1. One supplier worked with a manufacturer to promote 42,000 eco kettles to domestic consumers via a network of retailers. In addition, free eco kettles were distributed to both Priority Group and non-Priority Group recipients through partnerships with SHPs. Another supplier ran a scheme, working

in partnership with retailers, to incentivise consumers to buy energy efficient imaging equipment.

Innovative Action

3.25. The EEC2 Order provided an incentive for the suppliers to promote innovative action by increasing the energy saving accredited to these measures by 50 per cent. The incentive was capped to 10 per cent of each supplier's target. Throughout EEC2, Ofgem approved a range of measures as innovative. Suppliers delivered innovative appliance, heating and insulation measures in order to gain the incentive.

3.26. Suppliers delivered a range of appliance measures eligible for the innovative uplift. Out of over 22 million appliances delivered to the end of EEC2, 64 per cent were claimed under innovative action. These included A+ and A++ cold appliances, standby savers, TVs and other appliances such as eco kettles, imaging equipment, digital television recorders and set top boxes. The most popular innovation measures delivered were TVs and standby savers, accounting for the majority of innovation uplift. Suppliers claimed innovation uplift on heating measures primarily for ground source heat pumps, solar water heating, air source heat pumps and CHP measures. These measures equated to 9 per cent of over 4.7 million heating measures. Window glazing was the main measure in insulation where innovation was claimed, with over 1.4 million m^2 installed.

3.27. All but one supplier chose to promote innovation action and no supplier reached the cap of their 10 per cent innovation target. Suppliers concentrated most of their activity on delivering standard insulation measures which were not innovative.

Energy service action

3.28. Suppliers were incentivised to deliver measures as part of an energy service scheme. As with innovative action the measures promoted through this delivery route were attributed with a 50 per cent increase to the energy savings.

3.29. Only two suppliers set up and delivered energy service scheme in EEC2. Insulation and lighting were the only measures delivered as part of energy service packages.

4. Monitoring the outcomes of the EEC2 2005-2008

Chapter summary

This chapter details the results of the customer satisfaction monitoring and quality monitoring conducted by suppliers and provides a summary of the findings of the audits which were carried out on a sample of schemes. The energy savings from the programme are also presented split by the different fuel types.

Monitoring the schemes

4.1. The EEC2 Supplier Guidance specified that a proportion of recipients from all schemes must be monitored for customer satisfaction, to ensure satisfaction with the measures and service provided. Certain measures, CFLs and DIY loft insulation, were also subject to utilisation monitoring. Utilisation monitoring was used to help track whether, and how, consumers were using the measures. The results of the CFL and DIY loft insulation utilisation monitoring are set out below.

4.2. Where insulation and heating measures were installed, quality monitoring was required to be carried out on at least 5 per cent of the properties. This was to ensure that the installations were all operating properly and therefore the expected savings from the measures would result. The suppliers had to show that any problems identified were rectified before the scheme was completed, and the failure rate was required to be below 25 per cent of those monitored. In a few isolated cases, the failure rate was found to be higher than this. In these instances, the supplier was required to carry out further monitoring to check that the issues were not more widespread and to ensure that their contractors improved their performance.

4.3. For professionally installed heating and installation measures, the technical monitoring was required to be conducted in an independent manner. All the monitoring results were submitted to Ofgem with the supplier's completion reports for scrutiny before approval of the final scheme notification.

Utilisation Monitoring - CFLs

4.4. The suppliers were required to carry out utilisation monitoring, including specific questions, on a sample of recipients of direct (free or mail order) CFLs to determine whether they had installed or planned to utilise these bulbs. The results show that from the six direct CFL schemes, 79 per cent of consumers had installed at least some of their CFLs at the time of survey and 59 per cent of householders were storing at least some of their CFLs for use when other bulbs failed. The results indicate that only 6 per cent of the direct CFLs distributed would not be used.

4.5. Over 70 per cent of respondents were already using CFLs. Almost all of these had up to 5 already fitted. This is an increase from the EEC1 period where monitoring showed 50 per cent were already using CFLs and most had between 1 and 3 already installed.

4.6. The utilisation monitoring results were not used to modify the savings accredited for these schemes but will inform future policy development. Under the CERT programme suppliers are required to provide a freepost address for consumers to return any unwanted CFLs.

Utilisation Monitoring - DIY insulation

4.7. Four supplier schemes were set up to promote DIY loft insulation. Of those using the insulation in their loft space, 75 per cent were using it to top up existing insulation and 17 per cent had no loft insulation beforehand. Of those who had not yet installed their insulation at the time of the survey, 86 per cent said they intended to use it.

4.8. Some insulation was used in areas other than domestic lofts. A small percentage of respondents, just over 1 per cent, said that they intended to use their insulation to insulate business premises. Roughly 10 per cent of respondents said that the insulation was installed in a new extension to their house, in which case the installation was required under the Building Regulations and was therefore not additional.

4.9. To account for the fact that not all insulation is installed in domestic lofts, and that some installations are for the purpose of meeting the Building Regulations, Defra included an adjustment factor in their EEC2 target setting model. The utilisation monitoring results were not used to modify the savings accredited for these schemes. These monitoring results will inform future policy development.

Utilisation Monitoring - Consumer electronics

4.10. Utilisation monitoring was also carried out on some consumer electronics schemes where savings depend on consumers adjusting factory settings. There have not been many of these types of measures delivered yet, but initial monitoring results suggest that only about 8 per cent have disabled the energy saving functions.

Numbers of measures

4.11. Monitoring results show that each household that benefited from professionally installed insulation measures (installed under EEC2) received on average 1.3 measures.

Auditing

4.12. The supplier activity was audited to ensure that their schemes were being delivered in line with the EEC2 legislation and the Ofgem Supplier Guidance. An independent auditor, the Building Research Establishment (BRE), was appointed to undertake this work. In the first and third years, the audits were carried out on a sample of supplier schemes. In the second year, audits were carried out on the main delivery partners and managing agents involved in the suppliers' EEC2 activity. This was to ensure that their systems and processes were adequate to enable the suppliers working with them to comply with the requirements for delivering their schemes.

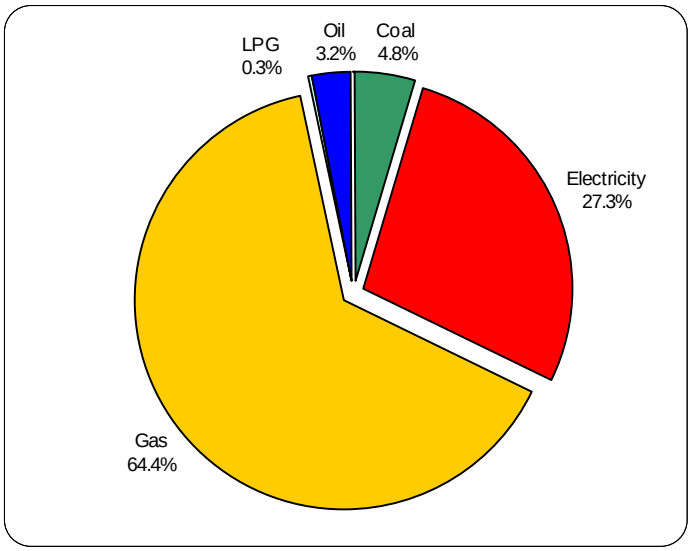
4.13. Overall, the results of the audits were very positive. Very few failures were reported over the course of the three years and these were all immediately rectified. They included a manufacturer claiming for a small amount of ineligible measures and a supplier's claim for a Priority Group percentage which was inconsistent with some of their declarations. These claims were revised immediately and further checks carried out to ensure that the full extent of the problem that had been discovered was rectified.

4.14. The BRE also provided some recommendations for added value. These were mainly focused around ensuring that agreements and procedures were properly formalised in all cases and that suppliers carry out spot checks on their technical monitoring agents, to ensure this work is being carried out to the required standard. After the second round of audits it was recommended by BRE that Ofgem divide technical monitoring failures into major and minor failures, as a large proportion of failures were actually for minor 'best practice' issues that would have little impact on the savings delivered. This suggestion was adopted and we changed the technical monitoring requirement for the third year of EEC2. For the final year of EEC2, only major failures were required to be monitored and rectified, with an expectation that minor failures would be minimised.

Fuels saved

4.15. The use of fuel standardisation factors in setting the overall EEC2 target, based on the carbon content of the fuels, gave the suppliers an incentive to target the consumers' homes that use the more carbon intensive fuels. For instance, the cost of insulating an electrically-heated home is broadly similar to that of insulating a gas-heated home. However, the energy savings accredited to the electrically-heated property are almost twice as large. Figure 4.1 shows the breakdown of savings by fuel type.

Figure 4.1: Chart showing the proportion of overall savings which have been saved in each of the 5 fuel types



4.16. Just under two thirds of the savings, 64 per cent, have been achieved in gas. These were achieved mainly through the installation of insulation and condensing boilers. Of the total energy savings, 27 per cent have come from electricity, mainly through installing insulation in electrically heated properties, CFLs, and efficient appliances.

4.17. This breakdown is different from EEC1 where a smaller proportion of savings came from gas, 44 per cent, and a higher proportion from electricity at 49 per cent. Measures installed in homes heated by coal, oil and LPG provide a small contribution. Houses heated by coal will have benefited from fuel switching as well as insulation measures. The potential for benefits in homes heated by LPG is limited and LPG savings account for less than 0.5 per cent of the total energy saved.

5. The transition from the EEC 2005-2008 to the CERT 2008-2011

This chapter assesses the activity the suppliers have carried out in excess of what was required under EEC 2005-2008 and that has been carried forward and approved as carried over savings under CERT.

5.1. The EEC 2005-2008 required each obligated supplier to meet an energy saving target in domestic premises. During the second half of EEC2 suppliers knew that their targets would increase under the CERT and that they would be able to carry over any excess energy savings. This influenced the level of supplier activity and allowed them to design long-term strategies. This chapter discusses the amount and type of activity the suppliers carried over and the implications this has for the CERT 2008-2011.

Background

5.2. The level of supplier energy efficiency activity over the three years of EEC2 was not only influenced by the obligation put on them for this period, but also by the Government's announcements on how it intended to develop energy efficiency policy. In May 2007 the Energy White Paper[4] highlighted energy efficiency as a key part of the Government's climate change strategy. In it the Government committed to placing an energy efficiency obligation on suppliers beyond the CERT 2008-2011, to 2020.

5.3. The certainty that measures from EEC2 could be carried over into CERT encouraged the suppliers to maintain high levels of activity throughout the duration of EEC2. This has allowed a smooth transition from EEC2 to CERT, given the step change in the level of the target between the two programmes.

Factors that influenced supplier carry over activity

5.4. Table 5.1 provides detail on the number of measures which counted towards the EEC 2005-2008, together with the number of measures carried over into CERT. Insulation and lighting remained the primary methods by which suppliers met their obligations. Cold and wet energy efficient appliances, consumer electronics, and heating measures also played an important role.

[4] Meeting the Energy Challenge. A White paper on Energy. May 2007

5.5. At the end of EEC2 suppliers had to decide which of the measures they had installed would count towards meeting their EEC2 target and which they wished to be carried over into CERT. Changes in the way measures are evaluated between EEC2 and CERT has meant that it was more beneficial to carry over certain measure types.

Table 5.1 - Measures that were counted towards EEC 2005-2008, measures carried over and overall measures installed between 2005 and 2008

Measure	EEC 2005-2008	Carryover	Total
Cavity wall insulation	1,460,063	300,766	1,760,829
Loft insulation (top up)	699,180	598,077	1,297,257
Loft insulation (virgin)	351,379	139,391	490,770
DIY loft insulation (m^2)	4,532,582	27,450,355	31,982,937
Solid wall insulation	8,049	33,270	41,319
Draught stripping	10,590	19,709	30,299
Hot water tank jackets	83,129	148,725	231,854
Radiator panels (m^2)	62,160	0	62,160
Other insulation (m^2)	1,460,359	0	1,460,359
CFLs	51,145,228	50,730,795	101,876,023
Other lighting	366,890	6,125	373,015
Energy efficiency cold and wet appliances	8,290,980	55,007	8,345,987
Standby savers	2,913,804	0	2,913,804
TVs	9,450,182	0	9,450,182
Other appliances	2,145,010	0	2,145,010
All boilers	2,082,812	0	2,082,812
Heating controls installed with replacement boilers	108,571	0	108,571
Heating controls	2,063,918	172,494	2,236,412
Fuel switching	1,403	76,607	78,010
Innovative heating	2,532	380	2,912
CHP/Communal heating	9,767	0	9,767
Other heating	3,356	196,430	199,786

5.6. A significant number of loft insulation measures were carried over into CERT, in particular suppliers carried over 85 per cent of all DIY measures. Nearly half the loft insulation top-ups were carried over, together with 28 per cent of virgin loft insulation measures. There are a number of factors that have influenced this. The lifetime of loft insulation was extended under CERT from 30 to 40 years. In addition, U-values were modified; this increased the savings for DIY loft insulation and for top-ups under CERT, and decreased, by a small amount, the savings from virgin lofts. These changes led to suppliers choosing to carry over a high percentage of DIY loft insulation installations, and a moderately high percentage of top-ups.

5.7. Savings associated with hot water tank jackets also increased under CERT and this is reflected in the number of measures carried over (64 per cent). Changes to the way that draughtproofing savings were calculated also led to higher savings for

some installations under CERT and this is again reflected in the high proportion of draughtproofing measures carried over (65 per cent).

5.8. Fuel switching benefited from an extended lifetime under CERT, increasing from 15 to 20 years. The data shows that suppliers carried over 98 per cent of their fuel switching measures. Solid wall insulation was included in the definition of Market Transformation under CERT, meaning that it is entitled to a 50 per cent uplift in savings. This additional benefit incentivised suppliers to carry over solid wall insulation measures. The data shows that 80 per cent of all solid wall insulation measures were carried over from EEC2 into CERT.

5.9. "Other heating" measures, such as energy efficient circulation pumps for heating systems, also showed a very high carry over rate (98 per cent). There is no explicit reason why these measures were carried over, other than suppliers deciding that it was more beneficial to carry forward these measures, relative to other measures accredited under EEC2.

5.10. More than 100,000,000 CFLs were promoted under EEC2. Of these roughly half were carried over into CERT. Some types of CFL became ineligible under CERT. Suppliers used these CFLs in meeting their EEC2 targets, and will have decided on whether to carry over any eligible CFL measures into CERT.

Activity counting towards the target

5.11. Changes to the way measures are accredited under CERT meant that, for some measures, suppliers chose not to carry any over but to count them towards their EEC2 target instead.

5.12. No TV measures were carried over from EEC2 into CERT. The reason for this is that larger integrated digital TVs (22" and over) were excluded under CERT. This was because throughout the EEC2 programme the market for IDTVs was transformed and the energy savings for larger IDTVs are no longer additional. The suppliers, therefore, decided to count all their TV savings towards their EEC2 targets.

5.13. Similarly, the market for boilers was transformed in EEC2 and suppliers are no longer able to get credit for replacing B-rated boilers with A-rated boilers under CERT. As no credit could be ascribed to the suppliers for standard boiler replacements the suppliers were unable to carry over any savings associated with these boilers into CERT. It is worth noting, that whilst boiler savings were not carried over, the additional lifetime associated with fuel switching measures meant that they were. Savings are given separately for boilers and for fuel switching.

Activity that has been carried over overall

5.14. Overall, suppliers carried over measures that they deemed most beneficial to them and their CERT target. Changes to the way that savings were calculated for certain measures and the changes to the legislation (e.g. 50 per cent uplift for Market Transformation) heavily influenced the suppliers' decisions. The carry-over of insulation measures particularly demonstrates this, where a high share of the loft insulation was carried over whereas only a small percentage of cavity wall insulation measures were carried over.

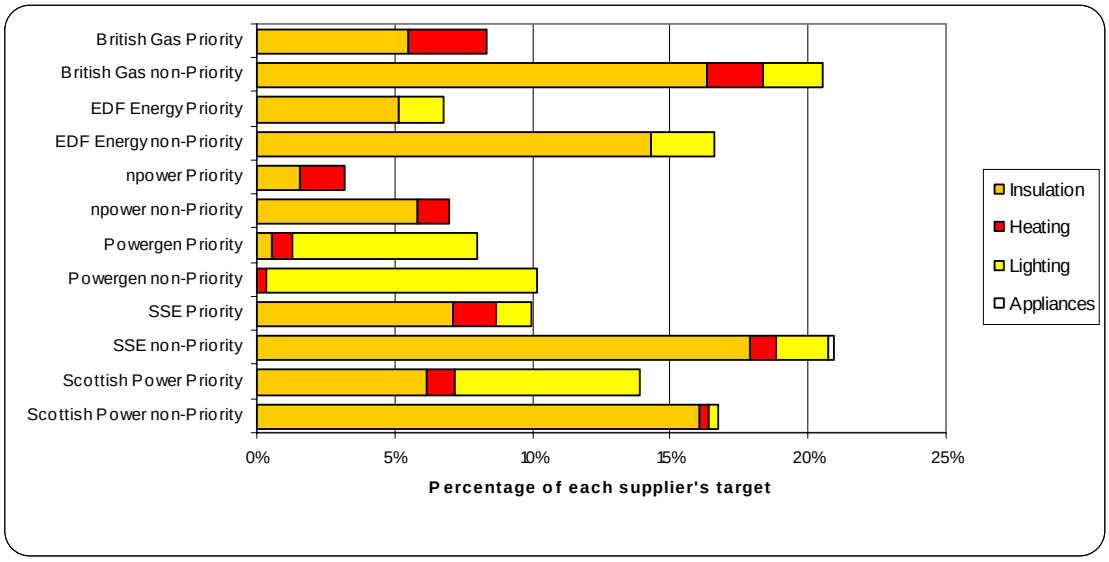
5.15. Some suppliers' carry-over choices will have been constrained in meeting not only their overall target, but in particular their Priority Group target. It is for this reason that, for example, some fuel switching measures may have been left to count towards the EEC2 target, rather than them all being carried over into CERT (where the saving associated with this measure increased due to an extended lifetime).

Implications for the CERT 2008-2011

5.16. The size of the target from EEC2 to the CERT roughly doubled. Suppliers were aware of this and were also aware that excess measures from EEC2 could be carried over into CERT. This provided certainty to the suppliers and allowed them to maintain high levels of activity throughout the course of the EEC 2005-2008 period, even after they had met their EEC2 target.

5.17. The carry-over of measures from EEC2 to CERT has also eased the transition to a higher level of activity. Figure 5.1 shows the energy savings carried over, by supplier, as a percentage of each supplier's CERT target. Although the level of activity the suppliers will actually have to achieve in the period 2008-2011 is less than what the overall target is (because of the carry-over), it is important to note that this does not undermine the contribution the CERT will make towards the Government's climate change objectives, assuming suppliers comply with their obligations. The overall target is 154 million lifetime tonnes of carbon dioxide, the energy efficiency activity that the suppliers carried over means that this target will have been achieved over a longer period of time.

Figure 5.1 - Energy savings carried from EEC2 to CERT by supplier as a percentage of each supplier's CERT target



6. Emerging Issues

This Chapter discusses issues emerging from the EEC 2005-2008 programme.

Supplier Compliance

6.1. All the obligated supply companies complied with their obligation to achieve their energy savings target, including at least 50 per cent of their target in the Priority Group. Throughout the course of the programme suppliers accelerated their levels of energy efficiency activity such that by the end of the programme the suppliers had achieved around 187 TWh of energy savings, 57 TWh more than the overall target set by Defra. The overwhelming majority of the excess energy savings have been carried forward into CERT.

6.2. During the course of EEC2 one supply company which had had over 50,000 customers (the obligation threshold), and therefore had been given a target, fell below this level. As the target was spread over the 3-year period of EEC2 the supplier concerned decided to trade its obligation with another supplier. No obligated companies went into administration during the EEC2 period and the overall EEC2 target was met as each supply company met their obligation. All the suppliers complied with their Priority Group targets.

Achieving the target

6.3. Of the overall activity nearly 60 per cent was achieved in insulation[5] – around the same as in EEC1. Over 10 per cent was achieved in lighting, with heating and appliances making up the remainder (together with the measures carried over from EEC1). Throughout the course of EEC2 suppliers tried a number of different approaches to deliver energy efficiency measures to consumers. However, the majority of the delivery mechanisms involved ‘market push’ as opposed to ‘consumer pull’ or involved partnering with project partners where measures were delivered for free. So while EEC2 reached its objective of making the consumption of energy in domestic properties more efficient it would appear that consumers tended not to consider their energy demand and their effect on the environment. However, increasing energy prices and a more general increased awareness of environmental issues amongst consumers has meant that some signs of 'consumer pull' are beginning to be seen.

[5] Excluding EEC1 carry over

6.4. The structure of the CERT, in terms of the way that it encourages suppliers to promote energy efficiency measures, has seen little change from the EEC2 programme. However, the inclusion of behavioural measures may help further to address consumers' apathy towards energy demand and their effect on the environment, although overall the trend of 'market push', described above, is expected to continue.

Targeting the Priority Group

6.5. The obligated suppliers were successful in reaching at least 50 per cent of their energy saving target in the Priority Group. This was achieved through a number of different delivery routes. Insulation made up the majority of the savings for the Priority Group and suppliers achieved this through direct contact with consumers, through social housing providers, and through working with the Government's and Devolved Administration's fuel poverty programmes (such as Warm Front). Suppliers were required to demonstrate additionality when working with fuel poverty programmes, such as Warm Front, and the trend was to install insulation measures in homes where Warm Front (and equivalents) were installing Central Heating. This delivery route allowed suppliers to find and insulate many properties where the occupants fell within the Priority Group.

6.6. In the Illustrative Mix for the CERT 2008-2011 Defra estimated that suppliers could insulate 3 million cavity walls in the programme, with 1¼ million of these falling within the Priority Group. It is therefore highly likely that the suppliers will continue to use the delivery routes described above to reach the low income Priority Group in CERT. It is also worth noting that whilst the overall savings target has roughly doubled for CERT the Priority Group target has decreased from over 50 per cent to over 40 per cent, and the Priority Group definition has been changed to include those over 70. This has increased the size of the Priority Group for suppliers to target.

Changes in accreditation of measures

6.7. Chapter 5 explored some of the changes to the accreditation of measures and how suppliers had responded, particularly in how the changes affected suppliers' carry-over. Changes were made because of the better information that is now available on the way different measures are used by consumers. For example, the saving attributed to cavity wall insulation has been reduced by 50 per cent, which includes a 15 per cent reduction due to a 'comfort taking factor' where occupants tend to increase the temperature of their dwelling once it has been insulated. Also throughout the duration of EEC2 minimum legal and market average standards changed. This has led to changes in the way that savings are attributed to certain measures e.g. over 70 per cent of all fridges in the UK are now 'A' rated, and as such savings are now only given for fridges with an 'A+' or 'A++' rating.

6.8. These changes to the accreditation of certain measures will have affected their cost-effectiveness. However, insulation is still likely to be one of the most cost-

effective measures for suppliers to install and as such we expect to see an increased demand on the insulation industry during CERT. The introduction of behavioural measures and the 'demonstration action' routes into the CERT will allow suppliers to explore alternative measures and delivery routes. Whilst insulation and lighting are still likely to be the predominant method by which suppliers comply with their obligation, the increased target and opportunity to diversify should mean that an even broader range of measures and initiatives are promoted under CERT.

Carry over to CERT 2008-2011

6.9. The energy savings that the supply companies have carried over from the EEC2 to the CERT are considerable. This resulted from the clear signal from Government that it intended to increase the scale of the programme in the future and that the suppliers would be able to carry forward any excess activity. However, the amount of energy savings carried forward does have implications for the amount of activity the suppliers will have to carry out in order to comply with their CERT targets. On completion of their EEC2 activity suppliers had already achieved roughly 25 per cent of their CERT targets. This means that for the period 2008-2011 suppliers will have to achieve savings of around 115 million lifetime tonnes of carbon dioxide.

6.10. The suppliers were mindful of the changes to legislation and to the changes to the accreditation of measures when considering what measures to carry-over. As discussed in Chapter 5 measures where savings were increased under the CERT programme (through extended lifetimes, or better measure by measure savings) tended to be carried over so that suppliers could extract maximum benefit. Those measures that received lower savings under CERT (such as cold and wet appliances) were used to meet the EEC2 target.

Other issues

6.11. This report details the energy efficiency activity that suppliers engaged in under the EEC2 programme. Almost all the cavity wall insulation and professionally installed loft insulation activity in Great Britain is installed through the EEC/CERT programmes (in some cases via the Government and Devolved Administrations' fuel poverty schemes).

6.12. The CERT 2008-2011 programme represents a significant challenge to the suppliers. In addition to the main insulation, lighting, appliances, and heating schemes that the suppliers will promote, the programme allows for behavioural measures to be included. This creates its own challenges for the suppliers and Ofgem going forwards, particularly around the lifetime or persistence of these behavioural measures. We will continue to work closely with the industry on this. The CERT programme also introduced 'demonstration action' as a qualifying action under the scheme. This allows suppliers to test or trial new technologies, that are reasonably expected to save carbon, with the certainty that they will get some CERT credit (based on the level of investment by the supplier). The purpose of 'demonstration' is to encourage innovation, and with the challenging level of the CERT it is expected

that suppliers will make full use of this as they strive to find more diverse ways of meeting their targets.

6.13. The move to expand the Priority Group to include the over 70s has also provided suppliers with access to a, somewhat, untapped market. In the first few months of the CERT programme, evidence suggests that suppliers are concentrating their efforts at the over 70s. This will help them ensure compliance with their Priority Group targets from what was, until this change, a diminishing number of people who were becoming increasingly difficult to find.

6.14. This is the final report for the EEC 2005-2008. Ofgem will continue to publish an annual report on the CERT each August. Over the coming year Ofgem will work with the suppliers on setting up their schemes for the CERT and ensure that they can demonstrate compliance with the legislation and will continue to carry out audits of their activity. Ofgem will also continue to use its experience in administering the EEC/CERT to help inform the Government on the development of future energy efficiency policy and to use our experience to inform the way we continue to administer the CERT. Ofgem remains committed to working closely with Defra on the Supplier Obligation, which is due to replace the CERT in 2011.

Appendices

Index

Appendix 1 - Number of measures installed and their energy savings in EEC2 (excluding EEC1 carryover)

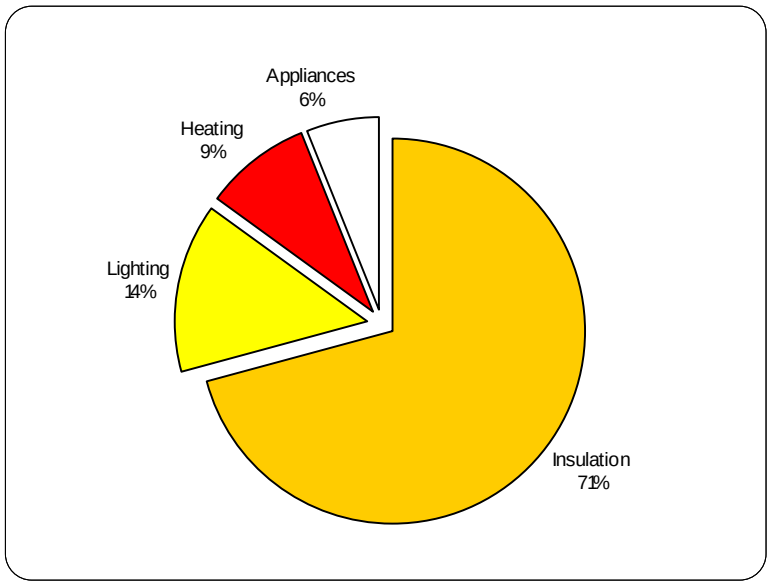
Measure	Number of measures installed		Energy savings (GWh)
	Priority Group	non-Priority Group	
Cavity wall insulation	658,815	677,560	58,687
Loft insulation (top up)	558,597	383,685	14,412
Loft insulation (virgin)	181,056	134,469	19,882
DIY loft insulation (m^2)	3,179,218	26,035,298	8,305
Solid wall insulation	26,379	8,899	1,816
Draught stripping	15,817	7,602	50
Hot water tank jackets	65,743	93,217	341
Radiator panels (m^2)	41,404	16,465	8
Other insulation (m^2)	4,706	1,455,653	230
CFLs	38,406,550	63,469,473	21,911
Other lighting	287,070	85,945	8
Energy efficiency cold and wet appliances	1,767,125	6,574,236	3,126
Standby savers	723,752	2,190,052	1,993
TVs	2,591,637	6,808,594	3,452
Other appliances	71,776	2,041,672	474
All boilers	366,905	1,715,907	7,837
Heating controls installed with replacement boilers	28,205	80,366	135
Heating controls	755,132	1,481,280	210
Fuel switching	47,639	30,371	4,462
Innovative heating	466	2,406	478
CHP*/Communal heating	1,894	4,960	1,084
Other heating	2,485	197,301	66

*Number of properties served by the heating system

Appendix 2 – Suppliers Licences

Supplier Group	Licence	Fuel
British Gas	British Gas Trading Ltd	Electricity
	British Gas Trading Ltd	Gas
EDF Energy	London Energy Plc	Gas
	London Energy Plc	Electricity
	Seeboard Energy Ltd	Gas
	Seeboard Energy Ltd	Electricity
Npower	npower Commercial Gas Ltd	Gas
	npower Direct Ltd	Electricity
	npower Direct Ltd	Gas
	npower Gas Ltd	Gas
	npower Ltd	Electricity
	npower Northern Ltd	Gas
	npower Northern Supply Ltd	Electricity
	npower Yorkshire Supply Ltd	Electricity
	YE Gas Ltd	Gas
	Gas Plus Supply Ltd	Gas
	Electricity Plus Supply Ltd	Electricity
Opus Energy	Opus Energy Ltd	Electricity
Powergen	Powergen Retail Ltd	Gas
	Powergen Retail Ltd	Electricity
Scottish and Southern Energy	Southern Electric Gas Ltd	Gas
	SSE Energy Supply Ltd	Electricity
Scottish Power	Scottish Power Energy Retail Ltd	Gas
	Scottish Power Energy Retail Ltd	Electricity
Telecom Plus	Telecom Plus Plc	Gas

Appendix 3 – Mix of Savings Achieved without EEC1 Carryover



Appendix 4 – The Authority's Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority ("the Authority"), the regulator of the gas and electricity industries in Great Britain. This Appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority's powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.[6]

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly[7].

1.4. The Authority's principal objective when carrying out certain of its functions under each of the Gas Act and the Electricity Act is to protect the interests of consumers, present and future, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes, and the generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors.

1.5. The Authority must when carrying out those functions have regard to:

- The need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- The need to secure that all reasonable demands for electricity are met;
- The need to secure that licence holders are able to finance the activities which are the subject of obligations on them[8]; and
- The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.[9]

[6] entitled "Gas Supply" and "Electricity Supply" respectively.
[7] However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.
[8] under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions.
[9] The Authority may have regard to other descriptions of consumers.

1.6. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

- Promote efficiency and economy on the part of those licensed[10] under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
- Protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity;
- Contribute to the achievement of sustainable development; and
- Secure a diverse and viable long-term energy supply.

1.7. In carrying out the functions referred to, the Authority must also have regard, to:

- The effect on the environment of activities connected with the conveyance of gas through pipes or with the generation, transmission, distribution or supply of electricity;
- The principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- Certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.8. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation[11] and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

[10] or persons authorised by exemptions to carry on any activity.
[11] Council Regulation (EC) 1/2003

Appendix 5 - Glossary

A

Accreditation

The determination of the energy savings attributable to measures under the EEC.

B

BERR

Department for Business, Enterprise, and Regulatory Reform

BREDEM

Building Research Establishment Domestic Energy Model.

C

CERT

Carbon Emissions Reduction Target.

CFLs

Compact Flourescent Lamps (energy efficient light bulbs).

CHP

Combined Heat and Power.

D

dCHP

Domesitc Combined Heat and Power.

Defra

Department for Environment, Food and Rural Affairs.

DIY

Do-it-yourself.

DTI

Department of Trade and Industry.

E

EEC1

Energy Efficiency Commitment, 1 April 2002 - 31 March 2005.

EEC2

Energy Efficiency Commitment, 1 April 2005 - 31 March 2008.

EST

Energy Saving Trust.

F

Fuel-standardised energy savings

Energy savings that have been adjusted according to the carbon concentration of each fuel. These co-efficients are set out in the EEC Order and are as follows: coal 0.557, electricity 0.801, gas 0.353, LPG 0.398, and oil 0.464.

G

GWh

Giga watt hour (1 million kilo watt hours).

H

HEES

Home Energy Efficiency Scheme.

HRE

The Heat Replacement Effect.

L

Lifetime discounted

The projected energy savings for measures (as set out in Defra's target setting model) were discounted over the lifetime of the measure by the standard Treasure rate of 3.5 per cent per year.

LPG

Liquid petroleum gas.

M

MtC

Million tonnes of carbon.

O

The Order

The Electricity and Gas (Energy Efficiency Obligations) Order 2004 Statutory Instrument number 3392.

P

Priority Group

Defined in the EEC Order as those households receiving one of the following benefits: council tax benefit, housing benefit; income support; an income-based jobseeker's allowance, an attendance allowance, a disability living allowance, a war disablement pension together with a mobility supplement or a payment under constant attendance allowance; industrial injuries disablement benefit where it includes constant attendance allowance and state pension credit. Child tax credit and working tax credit are included where the household's relevant income is less than £14,600.

S

SEDBUK

Seasonal efficiency database of boilers in the UK.

SHP

Social Housing Provider, a Local Authority or a Registered Social Landlord.

Supplier activity

Energy efficiency work undertaken by suppliers to meet the energy efficiency targets.

T

Target setting model

Defra's assumptions and the calculations used in setting the overall EEC target, as set out on their website:
www.defra.gov.uk.

TWh

Tera watt hours (1,000 GWh).