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The Community Energy Saving Programme (CESP) 2009 - 2012, at 31 December 2011

Reference: 66/12

Publication date: May 2012

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Overview:

This document details progress on the Community Energy Saving Programme 2009-2012 (CESP) at 31 December 2011.

The CESP requires gas and electricity suppliers and electricity generators to deliver energy saving measures to domestic consumers in specified low income areas of Great Britain.

Ofgem has a legal requirement to report annually to the Secretary of State for Energy and Climate Change on the CESP programme.

At 31 December 2011 a total of 304 schemes had been submitted to Ofgem, of which 65 had received formal approval, with total estimated savings of 13.12 million (lifetime) tonnes CO_2. This represents 68% of the overall CESP target.

Actual installed measures reported at 31 December 2011 represent 15% (2.94 $MtCO_2$) of the overall CESP target.

Context

The Community Energy Saving Programme 2009-2012 (CESP) is a policy, set down in legislation, designed to improve domestic energy efficiency standards across Great Britain in given geographical areas.

The CESP obligation period runs from 1 October 2009 until 31 December 2012. It requires certain gas and electricity suppliers and certain electricity generators to meet a carbon emissions reduction obligation. The Department of Energy and Climate Change (DECC) is responsible for setting the overall CESP target and for designing the statutory programme through which this target is achieved. Ofgem is responsible for administering the programme, on behalf of the Authority.

The CESP requires that energy saving actions are delivered in geographical areas selected using the Income Domain of the Indices of Multiple Deprivation (IMD) in England, Scotland and Wales. In England the lowest 10% of areas ranked in IMD qualify; in Scotland and Wales the lowest 15% qualify. The CESP therefore contributes towards alleviating fuel poverty as well as mitigating climate change.

Ofgem is required annually to report to the Secretary of State for Energy and Climate Change on progress of the programme. This report fulfils that requirement and details the operation of the scheme to 31 December 2011.

Associated documents

- The Electricity and Gas (Community Energy Saving Programme) Order 2009 http://www.legislation.gov.uk/uksi/2009/1905/resources/made
- Explanatory Memorandum to the Electricity and Gas (Community Energy Saving Programme) Order 2009 http://www.legislation.gov.uk/uksi/2009/1905/memorandum/contents
- Community Energy Saving Programme Generator and Supplier Guidance http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=15&refer=Sustainability/Environment/EnergyEff/cesp
- Letter to Secretary of State reporting on the first quarter of Community Energy Saving Programme http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=23&refer=Sustainability/Environment/EnergyEff/cesp
- Community Energy Saving Programme 2009-2012 Annual Report for year ending 31 December 2010 http://www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/cesp/Documents1/110512%20CESP%20Annual%20Report%20v010.pdf
  Community Energy Saving Programme (CESP). Communities: Areas of Low Income http://www.official-documents.gov.uk/document/other/9780108508417/9780108508417.pdf

Contents

Executive Summary

The CESP requires certain gas and electricity suppliers and certain electricity generators to meet an obligation for reducing CO_2 emissions in domestic properties in Great Britain. This report fulfils the Authority's duty to report on progress under the programme to the Secretary of State for Energy and Climate Change under the Electricity and Gas (Community Energy Saving Programme) Order 2009 (as amended).

CESP is designed to drive a whole house, area-intensive approach to increasing the energy efficiency of the housing stock, building on local partnerships. It is focused on low income households, targeted through the lowest 10% of the Indices of Multiple Deprivation. The obligation runs to 31 December 2012.

CESP has proved complex to deliver, with slow early progress. However, significant advances have been made in the year to 31 December 2011 as set out below, though challenges remain.

To provide as complete a picture of activity as possible this report covers not only reported activity but also overall scheme numbers and composition, and prospective outcomes.

Overall CESP Progress at 31 December 2011

- Suppliers submit proposals ('schemes') to Ofgem for approval, outlining the measures (products and actions that improve energy efficiency) they intend to promote and the carbon savings they intend to achieve.
- At 31 December 2011 a total of 304 schemes had been submitted to Ofgem, 65 had received formal approval with a total estimated savings of 13.12 million (lifetime) tonnes CO_2. If all 304 schemes were completed this would represent 68% of the overall CESP target. However, as a result of the steps taken in 2011 on technical issues, the number of scheme approvals has increased to 140 as at the end of March 2012.
- The actual installed measures reported at 31 December 2011 represents only 15% (2.94 $MtCO_2$) of the overall CESP target.
- No trading of obligations, nor transfers of completed activity, have taken place in the year to 31 December 2011.

Proposed Measures

- Of the 304 submitted schemes, all but 31 offer more than one measure. The average number of measures per scheme is 4.6 with a maximum of 12. The sum of all measures offered across the 304 schemes is 1,400.
- Of the 1,400 offered measures, 49% are insulation measures featuring in 78% of schemes. Heating measures (39% of offered measures) are included in 77% of schemes.

- The most prevalent measures are: heating controls (offered in 72% of schemes), external solid wall insulation (62%), replacement boiler (61%) and loft insulation (58%).

Regional Coverage

- Schemes have been submitted for all GB regions.
- More schemes have been submitted for the North West (64, or 21%) and Scotland (52, 17%) than for other regions, possibly reflecting the fact that these two regions contain high numbers of eligible Lower Super Output Areas (LSOAs).
- Estimated savings in London are considerably lower than might be anticipated from the number of eligible LSOAs in that region.

Issues

Whilst the rate of scheme submissions has continued to increase they are generally still subject to one or more resubmissions. For example, of the 304 CESP scheme applications 66 have been submitted more than once. Ofgem is seeing an increase in the re-submission rate as Obligated parties try as many measures as possible to meet their overall targets

Working with industry and Government, Ofgem has successfully resolved a number of technical and administrative issues holding up scheme approvals, including:

- Solid wall insulation starting U-values (a measure of heat loss in a building element) for all construction types;
- Solid wall certification routes;
- Criteria for hard-to-treat cavities;
- Treatment of mixed internal/external wall insulation and solid wall/cavity insulation;
- *De minimis* criteria for flat roof insulation, solar thermal, solar PV;
- Consequences for glazing arising from changes to Building Regulations;
- Avoidance of double counting between CERT and CESP;
- Applicability of gas warm air systems for boiler replacement claims;
- Treatment of district heating metering for individual property billing.

There is an ongoing list of additional technical issues that will be resolved during the closure of the programme.

Forward Look

- Reported savings at 31 December 2011, represent 15% of the overall CESP target. There are thus considerable challenges facing generators and suppliers in achieving their obligations by 31 December 2012 and for Ofgem in administering the final stages of the programme.

- Suppliers and generators have time to focus on finding new schemes and on ensuring that they deliver by the end of the programme. Ofgem will continue to work with obligated parties to, *inter alia*, ensure successful scheme approval,

process requests for trading and transfers, and facilitate timely and accurate reporting.

- Ofgem is putting in place mechanisms to manage programme closure and to determine, by 30 April 2013, whether suppliers and generators have achieved their obligations, with a final report being submitted to the Secretary of State by 1 May 2013.

- Should any obligated party fail to meet its CESP obligation Ofgem would consider enforcement action at the time. Ofgem has powers, which include imposing significant financial penalties of up to 10% of an obligated party's annual turnover, which it could impose following an investigation.

1. Introduction

1.1. The Electricity and Gas (Community Energy Saving Programme) Order 2009 ("the Order") was made on 20 July 2009, came into force on 1 September 2009 and has been subject to one amendment, on 21 December 2011.

1.2. The Order sets an obligation on certain electricity and gas suppliers and electricity generators to reduce carbon dioxide emissions by promoting a range of energy efficiency measures (qualifying actions) to domestic energy users. Appendix 1 sets out these measures.

1.3. The overall target for the Community Energy Saving Programme (CESP) is set at 19.25 million tonnes of lifetime carbon dioxide ($MtCO_2$). Of this, half (9.625 $MtCO_2$) is imposed upon obligated generators and the other half upon obligated suppliers. Obligated suppliers and generators must meet their obligations between 1 October 2009 and 31 December 2012. The parties obligated under the Order are set out in Appendix 2. Under the Order, obligations are imposed on individual licence holders rather than on the parent company of a group of licence holders. However for clarity and ease of reporting the analysis presented here is at aggregated group level. These groups are also set out in Appendix 2.

1.4. The CESP requires that energy saving actions are delivered in geographical areas selected using the Income Domain of the Indices of Multiple Deprivation (IMD) in England, Scotland and Wales. In England the lowest 10% of areas ranked in IMD qualify and in Scotland and Wales the lowest 15% qualify.

1.5. Ofgem is required annually to provide to the Secretary of State a report setting out the progress made by each generator and supplier towards complying with their carbon emissions reduction obligations, towards the achievement of the combined supplier and generator obligations, and towards the achievement of the overall CESP target. This document fulfils that requirement with respect to the year ending 31 December 2011.

1.6. The CO_2 savings reported in this document are as supplied to Ofgem by the obligated parties. The CESP is structured to incentivise the obligated parties to supply particular measures (e.g. solid wall insulation), and to undertake as much activity as possible in every house and in a specific area. This is done through a number of uplifts and bonuses to individual measures CO_2 reduction scores. Both unadjusted (i.e. before application of bonuses and uplifts) and adjusted CO_2 savings are detailed in this document.

2. Overall Progress Towards CESP Obligation in the Second Year

Chapter Summary

This chapter outlines progress towards the overall CESP target. The information provided has been derived from details of all schemes submitted to Ofgem by 31 December 2011, including activity delivered under those schemes. Statistics relating to scheme numbers, scheme size, measures included, locality, estimated and achieved CO_2 savings are presented.

2.1. In its first annual report on the CESP (i.e. to 31 December 2010) Ofgem noted that although a significant number of schemes had been proposed, only 7 (5%) had, at that time, been approved. Furthermore, data on installations under both approved and pending schemes related to fewer than 4,000 dwellings.

2.2. Subsequently the situation has changed markedly. However, the number of approved schemes (at 31 December 2011) still represents fewer than 22% of those submitted. Consequently this report provides analysis of all proposed schemes, both approved and those for which approval is pending.

Overall Progress and Proposals

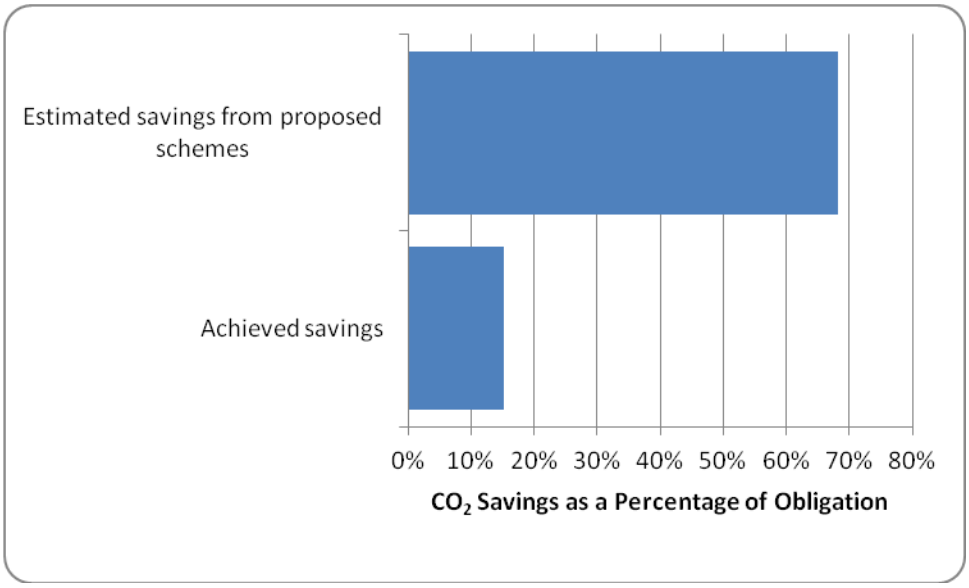
2.3. In total 304 schemes proposals have been submitted of which 65 have been approved.

2.4. The total CO_2 savings from reported installations, after allowing for uplifts, bonuses and other adjustments, is 2.94 $MtCO_2$, or 15% of the overall target of 19.25 $MtCO_2$. These savings relate to a total of 30,588 dwellings in which 58,931 individual measures have been installed, an average of 1.9 measures per dwelling. The unadjusted reported savings total 0.89 $MtCO_2$, an indication of the incentive provided by uplifts and bonuses.

2.5. Looking forward if all 304 schemes came to fruition and were approved the total savings would amount to 13.12 $MtCO_2$, or 68% of the overall target.

2.6. The majority of schemes include insulation (237, 78%) and heating (234, 77%) measures. There are 78 offering microgeneration measures and 34 include district heating. Only 7 schemes incorporate a home energy advice package.

Figure 2.1 Estimated and achieved adjusted CO_2 savings at 31 December 2011



2.7. The most prevalent measure is heating controls[1] which features in 72% of schemes. External solid wall insulation is contained in 62% of schemes, replacement boiler in 61% and loft insulation in 58%.

2.8. Figure 2.2 illustrates how unadjusted savings are split between measure types with 49% of savings attributable to insulation and 31% to heating.

2.9. Both estimated and achieved CO_2 savings from individual schemes vary markedly, depending upon the number of dwellings treated and the range of measures offered.

2.10. Estimated savings per scheme range from a minimum of 0.2 $ktCO_2$ to a maximum of 401 $ktCO_2$. Figure 2.3 shows that over half the schemes have estimated savings in the range 0-25 $ktCO_2$ and 88% of schemes fall into the range 0-100 $ktCO_2$. This is a continuation of the trend noted in the first annual report and suggests that the number of schemes required in order to achieve the overall target is likely to be of the order of 450.

[1] It should be noted that heating controls are only eligible if installed with a new heating system

Figure 2.2 Unadjusted CO_2 savings ($ktCO_2$) for each measure type

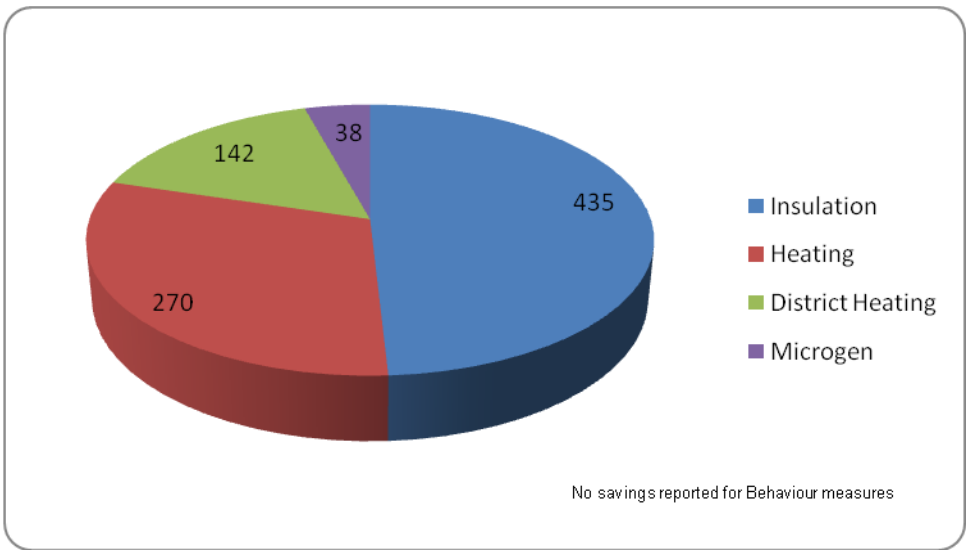
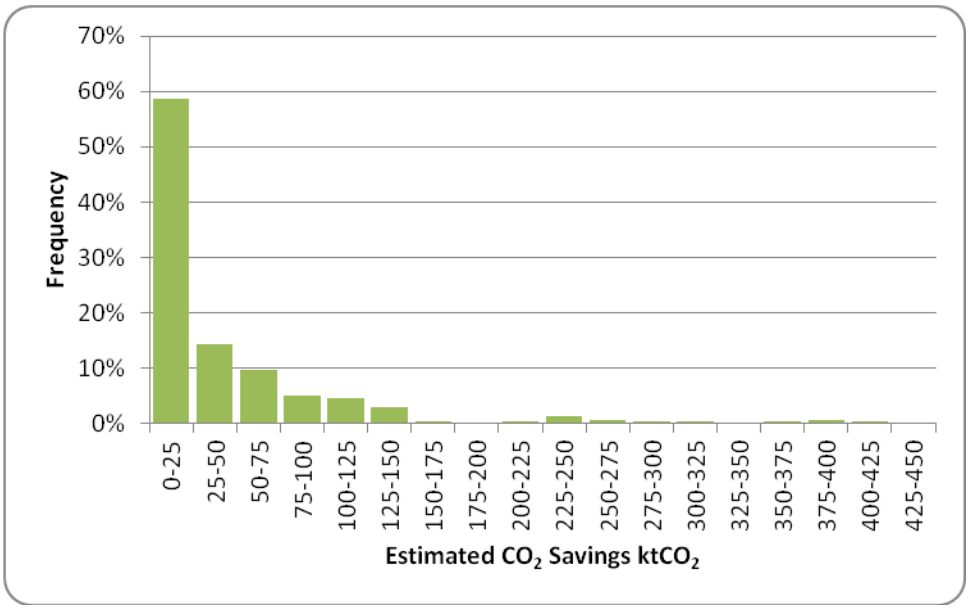


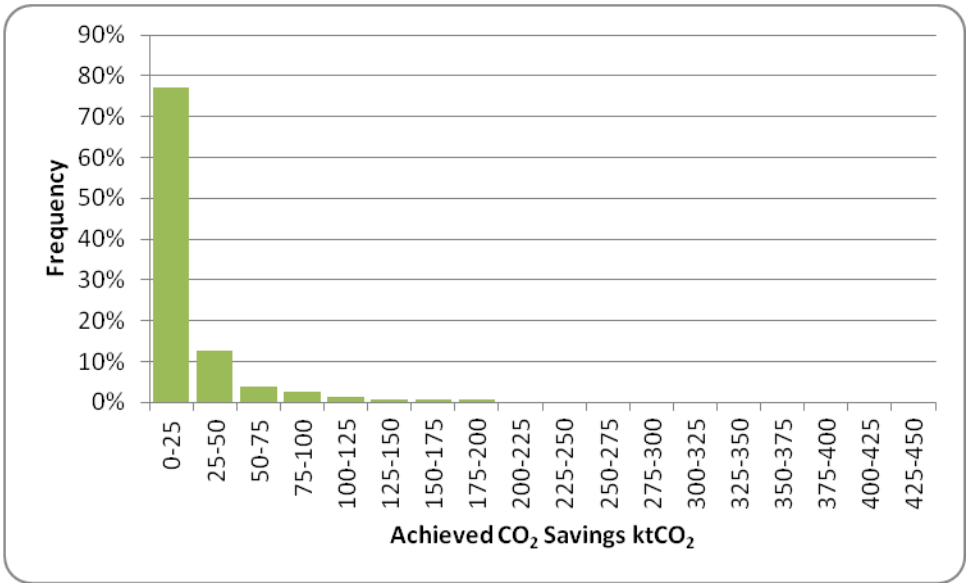
Figure 2.3 Distribution of scheme estimated CO_2 savings



2.11. Unsurprisingly, as shown in figure 2.4, reported adjusted savings are at the lower end of the scale with 90% being in the range 0-50 $ktCO_2$. Just two schemes have reported savings over 150 $ktCO_2$.

2.12. All schemes but one (offered to private householders only) are in partnership with a social housing provider or local authority. Of these 106 (35%) are also offered to private householders.

Figure 2.4 Distribution of scheme reported CO_2 savings (adjusted to include bonuses)



Generator Progress and Proposals

2.13. Generators have proposed 33 schemes (figure 2.5) with estimated CO_2 savings of 0.44 $MtCO_2$. Reported adjusted savings from 13 schemes (i.e. after uplift and bonuses) amount to 0.1 $MtCO_2$. These represent 7% and 2%, respectively, of the generator obligation, as amended by trading. However, none of the vertically integrated companies has proposed a scheme under a generator licence. If the obligations of these companies are excluded then these percentages rise to 22% and 5%. Figure 2.6 illustrates how estimated and reported CO_2 savings relate to the aggregated obligations of the 5 generator-only groups.

2.14. It is noteworthy that the estimated savings from schemes proposed by GDF exceed the group's obligations by almost 100%, although the group has yet to report any achieved savings from those schemes. During 2011 GDF and IPM announced a merger under which a number of GDF assets would transfer to IPM. Notwithstanding this change this report analyses the groups based on their pre-merger composition.

Figure 2.5 Schemes proposed by generators

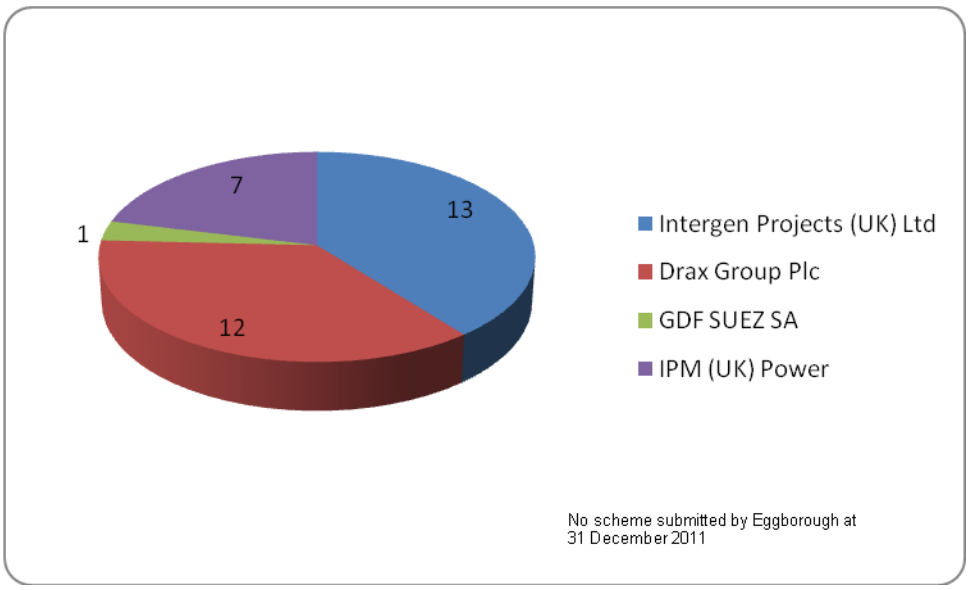
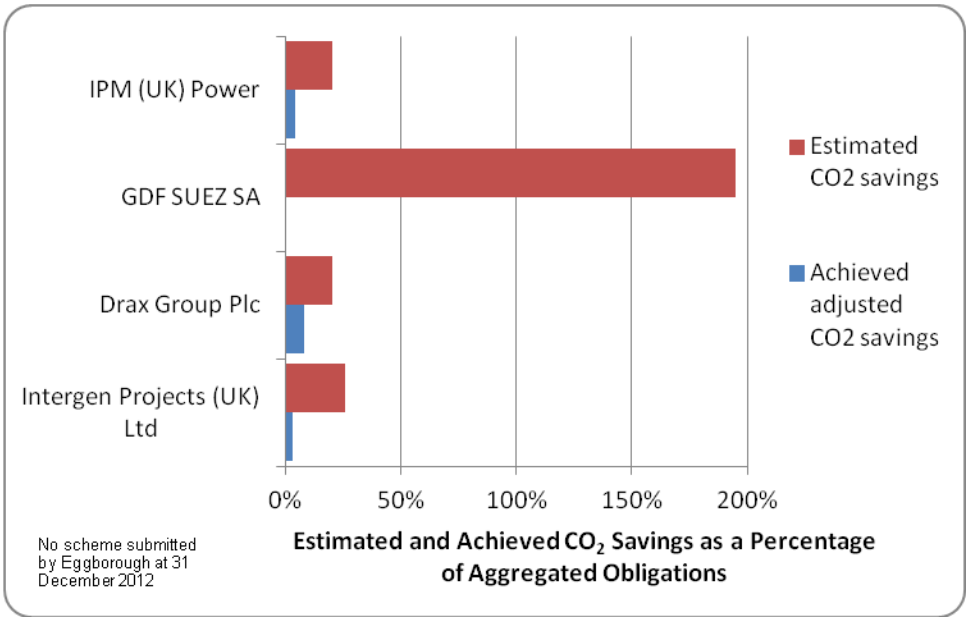


Figure 2.6 Estimated and achieved CO_2 savings by generators as a percentage of their amended aggregated obligations



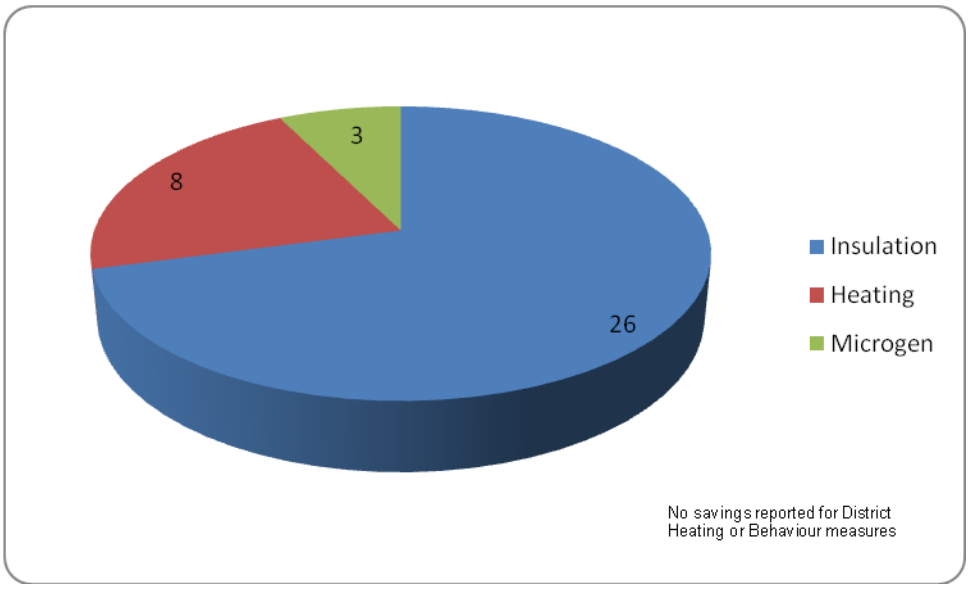
2.15. Following the divestment of Eggborough Power Ltd from EdF Energy, Eggborough became independently responsible for its CESP obligation. At 31

December 2011 Eggborough had not submitted any schemes to Ofgem. However, submissions have been received since that date.

2.16. Across all the independent generators the reported savings relate to 1,890 individual measures being installed in 1,212 dwellings, an average of 1.6 measures per dwelling.

2.17. Unadjusted savings amount to 37 $ktCO_2$ and arise mainly from insulation and heating measures as shown in figure 2.7.

Figure 2.7 Unadjusted CO_2 savings ($ktCO_2$) achieved by generators



Supplier Progress and Proposals

2.18. Suppliers have proposed 271 schemes (figure 2.8). Estimated savings amount to 12.68 $MtCO_2$ with reported savings standing at 2.84 $MtCO_2$. These represent 99% and 22% of the supplier obligation adjusted for trades. However, as noted above, the vertically integrated companies have submitted all their schemes under supply licences. The implication for these companies as a whole is considered in the next section. Figure 2.9 shows the estimated and achieved adjusted savings as a percentage of the aggregated adjusted supplier obligations.

2.19. In total, suppliers have reported 57,041 individual measures being installed in 29,376 dwellings, an average of 1.9 measures per dwelling.

2.20. Unadjusted CO_2 savings amount to 0.85 $MtCO_2$ of which 48% is attributable to insulation measures, 31% to heating measures and 17% to district heating measures as illustrated in figure 2.10.

Figure 2.8 Schemes proposed by suppliers

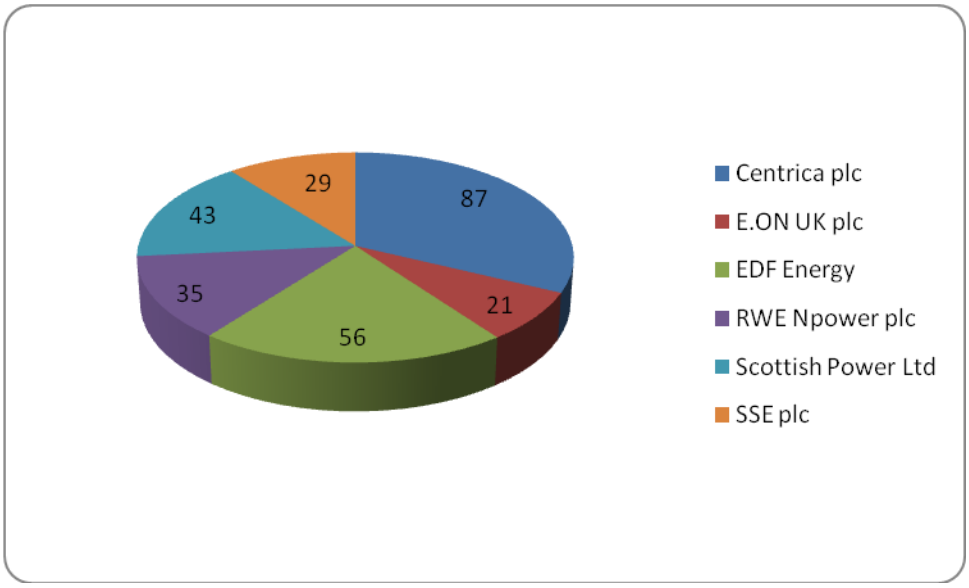


Figure 2.9 Estimated and achieved adjusted CO_2 savings as a percentage of each supplier's amended aggregated obligations

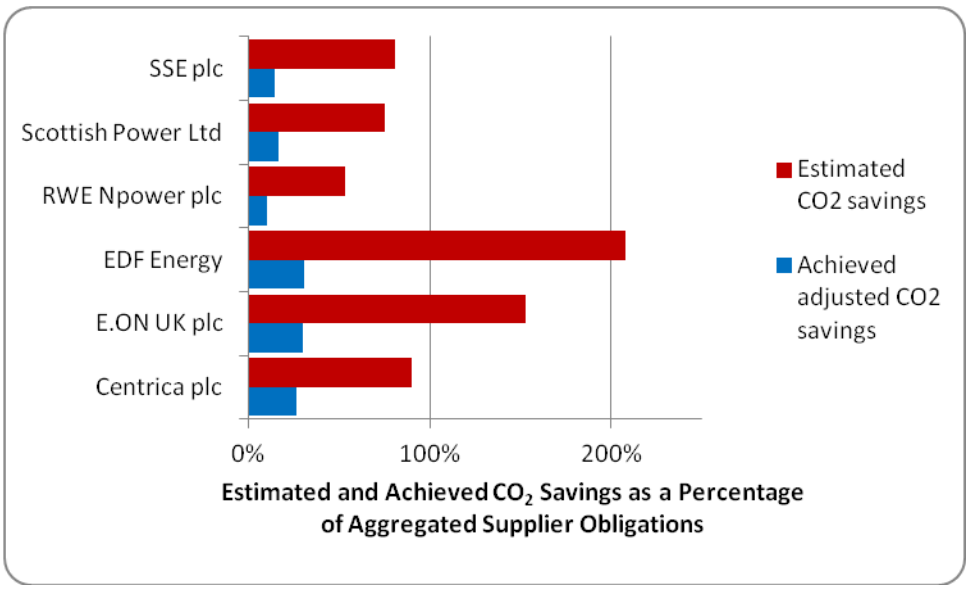
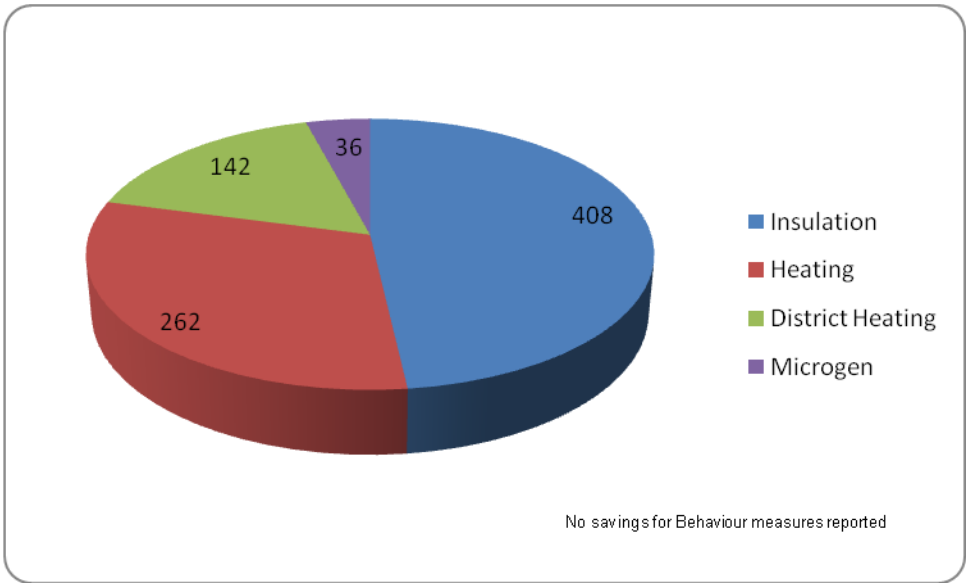


Figure 2.10 Unadjusted savings ($ktCO_2$) reported by suppliers

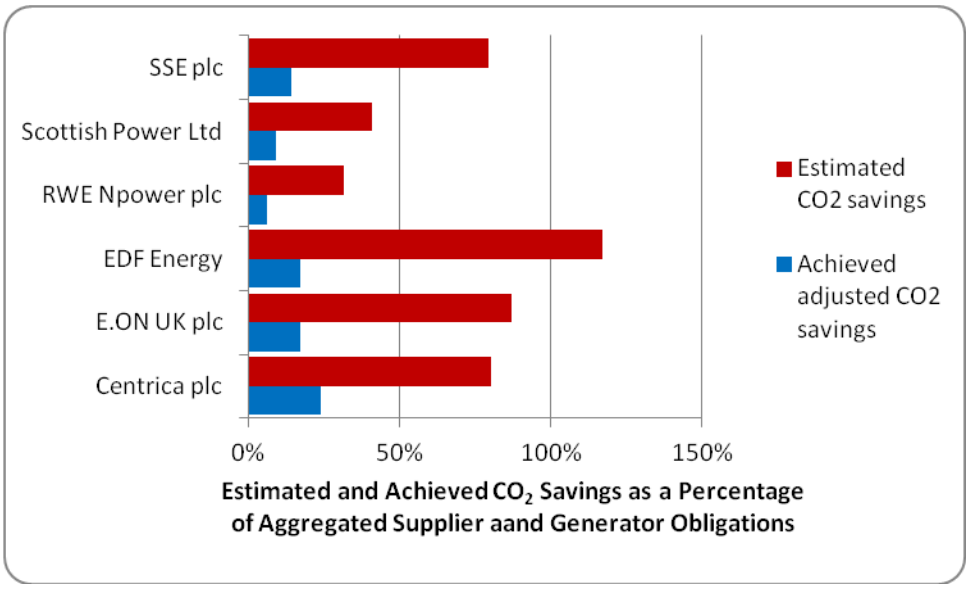


Vertically Integrated Groups

2.21. As indicated above, the six vertically integrated groups have proposed all schemes to date through their supply licences. Intra-group trading was noted in Ofgem's report on the first full year of the CESP and further requests for such trading are to be expected.

2.22. A comparison of the estimated and achieved savings against aggregated obligations (i.e. all supply and generator licence holders' obligations) is presented in figure 2.11. This provides a more meaningful assessment of these companies' progress and shows that estimated CO_2 savings amount to 73% of the aggregated obligations with reported adjusted CO_2 savings standing at 16%.

Figure 2.11 Estimated and achieved CO_2 savings for the 6 vertically integrated companies as percentages of total aggregated obligations



Regional Analysis

2.23. Schemes have been proposed for all GB regions. The number of schemes and the expected CO_2 savings resulting from them are shown in figure 2.13, below. The reported number of individual measures installed and the dwellings benefitting from them are illustrated in figure 2.14. More detailed information is provided in table 2.1.

2.24. There remain noticeable differences between the regions with the North West and Scotland having significantly more schemes than other areas. However, these differences are not as marked as at the end of the first full year of the CESP.

2.25. Figure 2.12 contrasts the percentage of eligible LSOAs in each region with the estimated CO_2 savings (as a percentage of the total). The high scheme counts in the North West and Scotland mirror the proportion of LSOAs in those regions. Conversely, as noted in the previous report, the reverse is the case in London where there is a significant mismatch between the number of eligible areas and both the scheme count and estimated CO_2 savings.

Table 2.1 Regional breakdown of schemes, measures, dwellings benefitting and CO_2 savings

Region	Eligible LSOAs	Percentage LSOAs	Schemes	Measures in schemes	Estimated CO_2 saving Mt	Reported CO_2 saving Mt	Dwellings benefitting	Measures installed
East Midlands	187	4%	17	75	1.33	0.30	3,236	5,273
East of England	114	3%	11	47	0.26	0.02	315	452
London	795	17%	23	105	0.86	0.10	2,815	3,925
North East	265	6%	28	124	1.02	0.22	3,062	6,634
North West	768	17%	64	278	2.91	0.75	5,869	12,490
Scotland	976	22%	52	233	2.13	0.39	3,947	8,511
South East	104	2%	6	25	0.16	0.05	621	1,134
South West	93	2%	11	36	0.34	0.02	231	305
Wales	284	6%	36	189	1.33	0.30	3,213	5,135
West Midlands	491	11%	26	119	1.58	0.58	4,508	9,844
Yorkshire and the Humber	431	10%	29	168	1.40	0.22	2,771	5,228

One multi-region scheme for solar PV not included in the above

Figure 2.12 Percentage of eligible LSOAs in each region and estimated proportional CO_2 savings

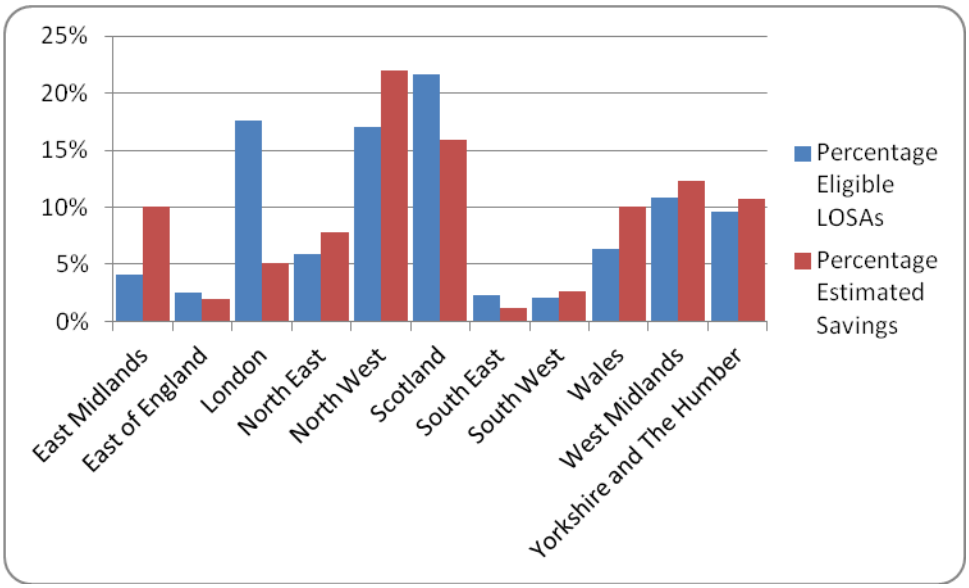
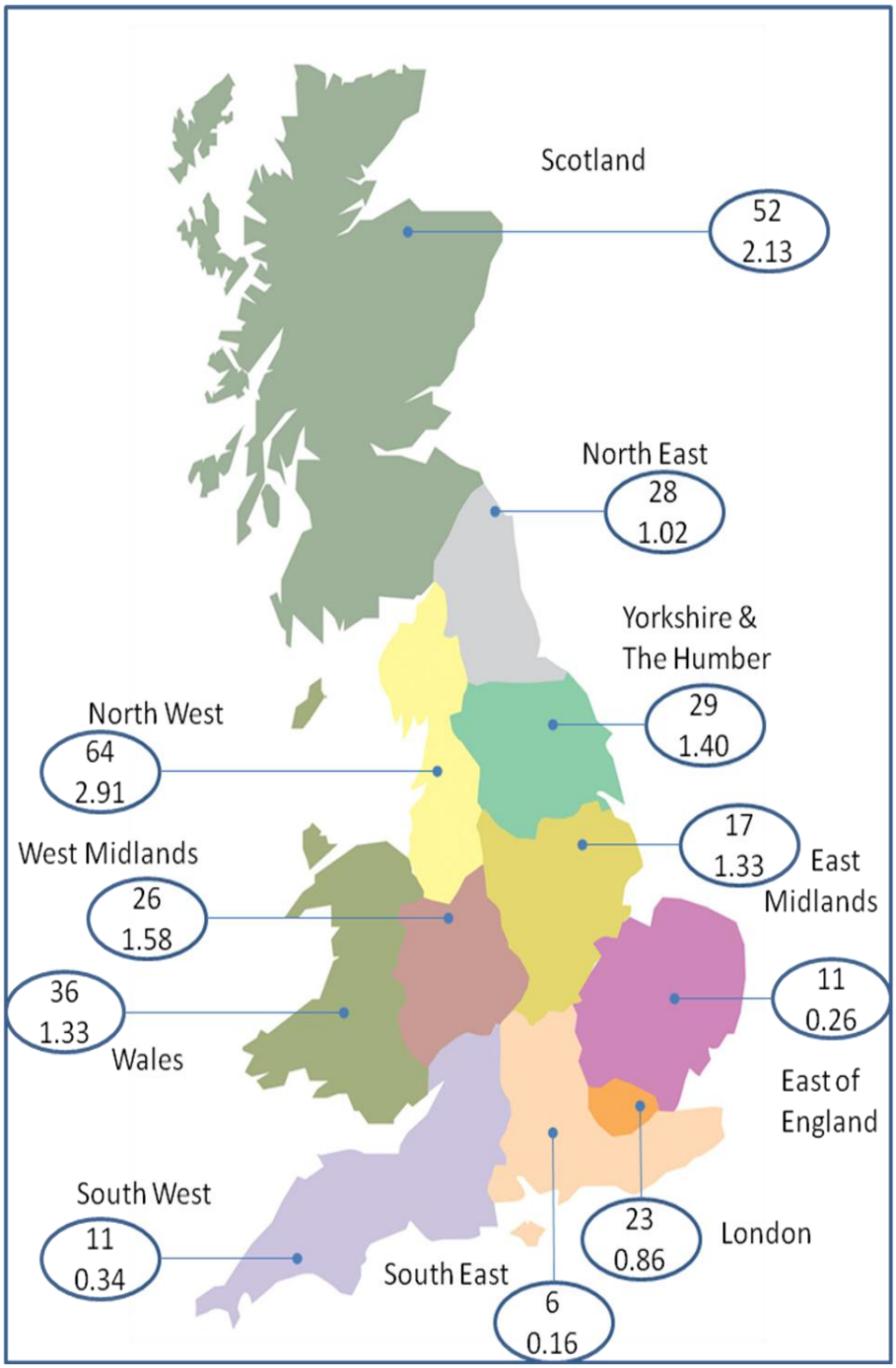
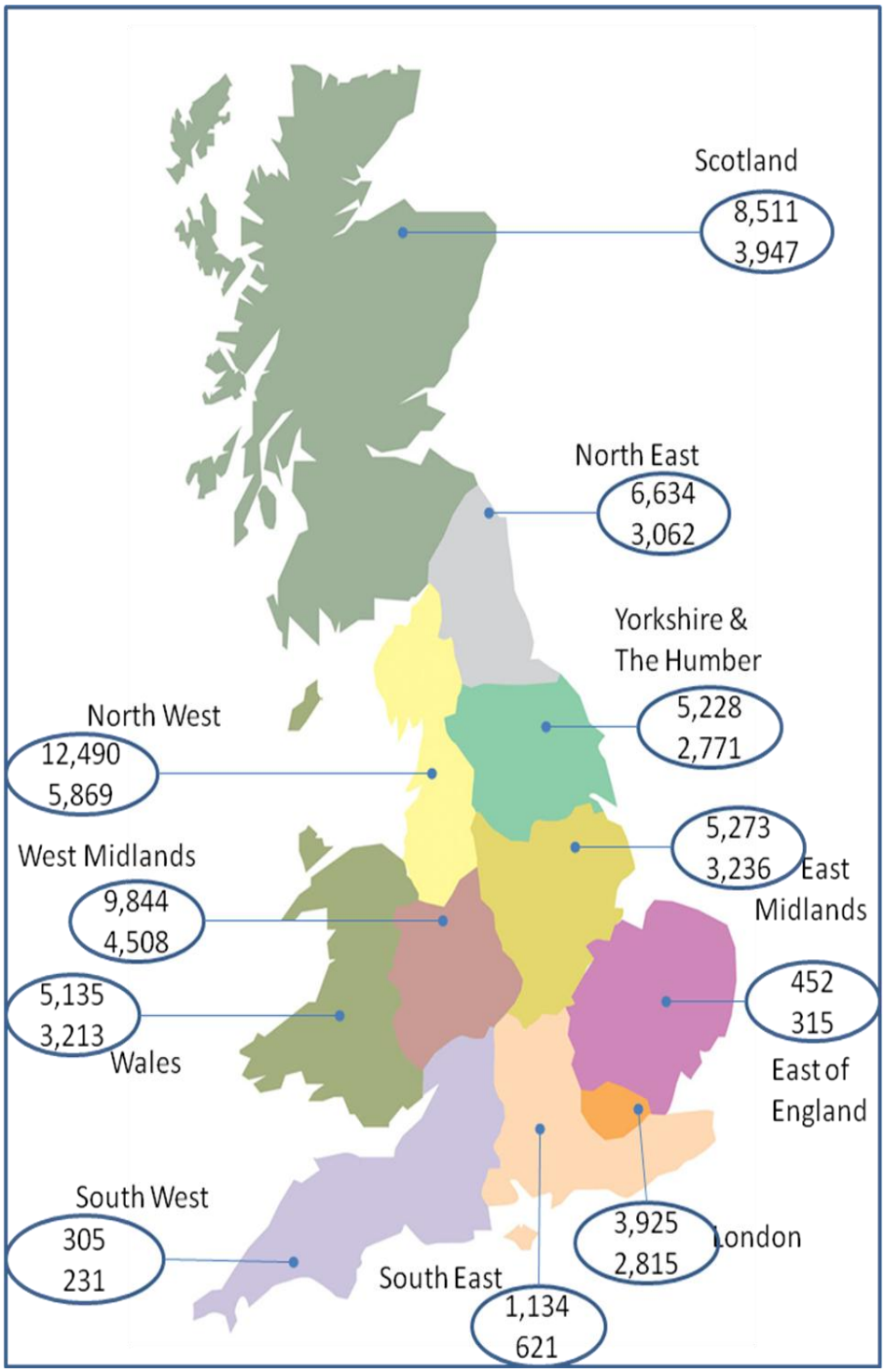


Figure 2.13 Scheme proposals and estimated CO_2 savings (Mt) in each region of Great Britain



One multi-region scheme for solar PV not included in the above

Figure 2.13 Number of individual measures installed (top) and number of dwellings (bottom) receiving these installations in each region of Great Britain



2.26. The number of individual measures so far installed in dwellings in each region and the associated unadjusted CO_2 savings are shown below in figures 2.15 to 2.25.

Figure 2.15 Measures installed and unadjusted CO_2 savings (kt) in East Midlands

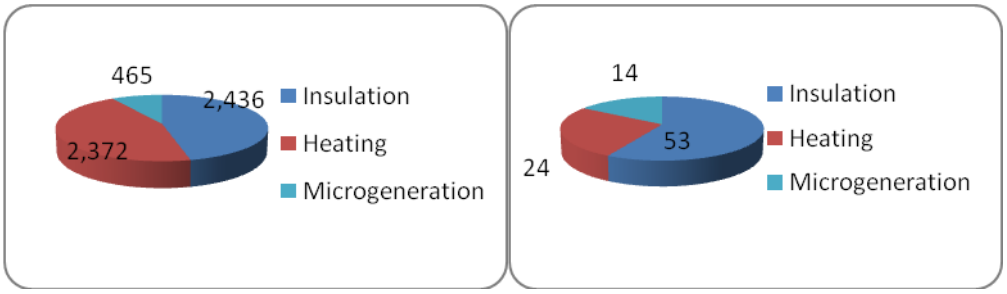


Figure 2.16 Measures installed and unadjusted CO_2 savings (kt) in East of England

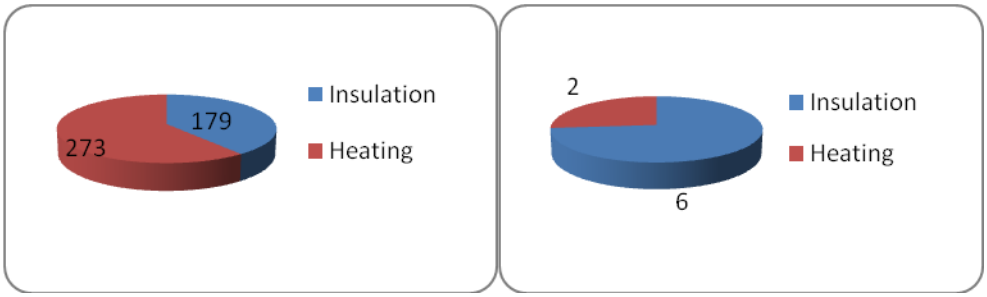


Figure 2.17 Measures installed and unadjusted CO_2 savings (kt) in London

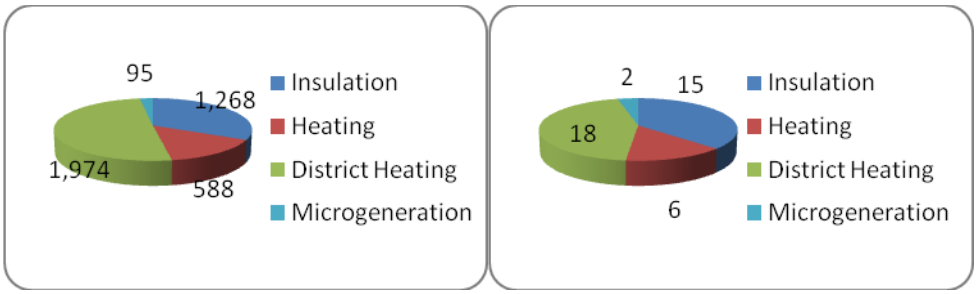


Figure 2.18 Measures installed and unadjusted CO_2 savings (kt) in North East

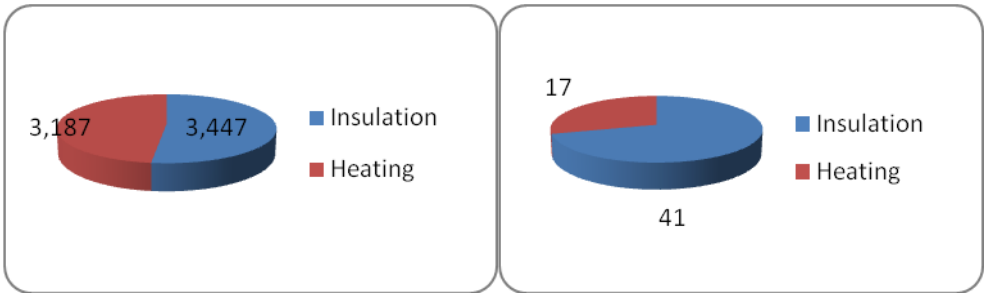


Figure 2.19 Measures installed and unadjusted CO_2 savings (kt) in North West

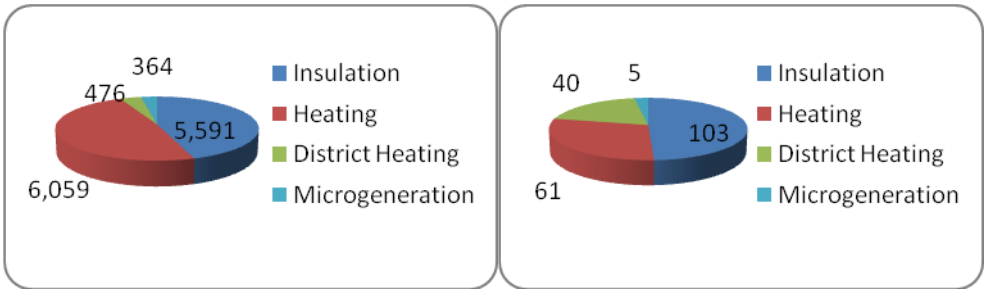


Figure 2.20 Measures installed and unadjusted CO_2 savings (kt) in Scotland

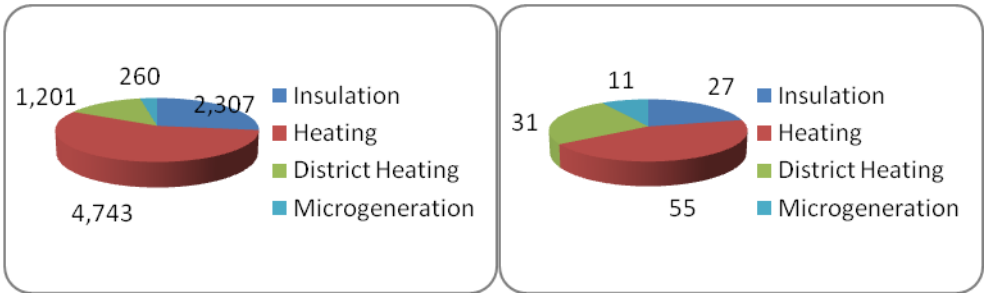


Figure 2.21 Measures installed and unadjusted CO_2 savings (kt) in South East

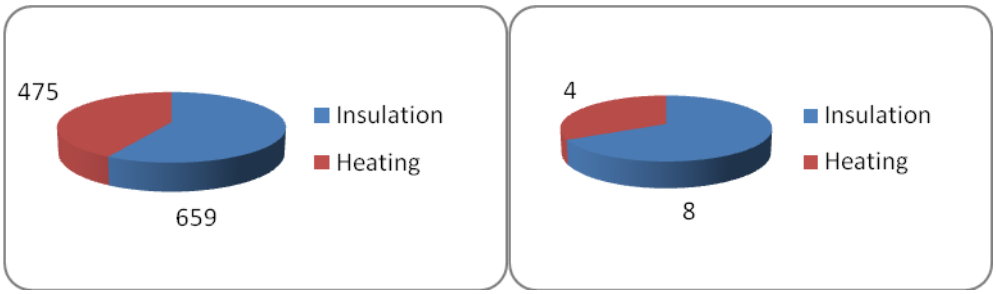


Figure 2.22 Measures installed and unadjusted CO_2 savings (kt) in South West

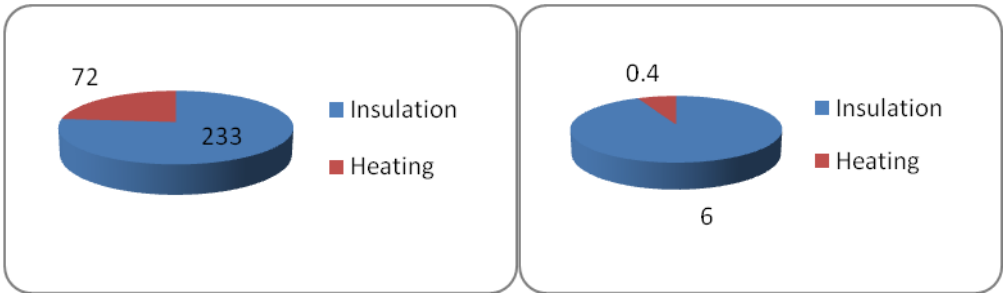


Figure 2.23 Measures installed and unadjusted CO_2 savings (kt) in Wales

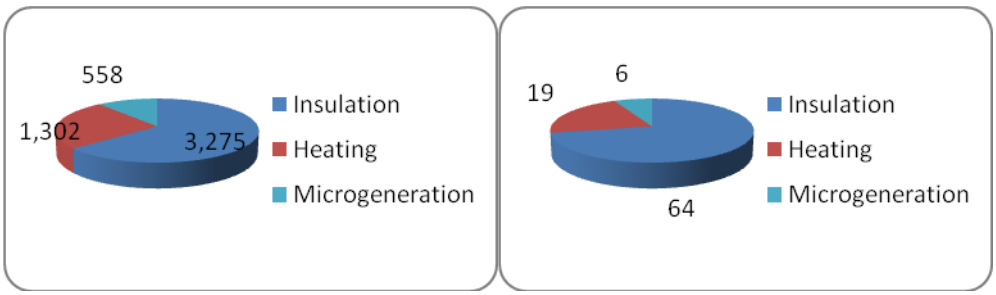


Figure 2.24 Measures installed and unadjusted CO_2 savings (kt) in West Midlands

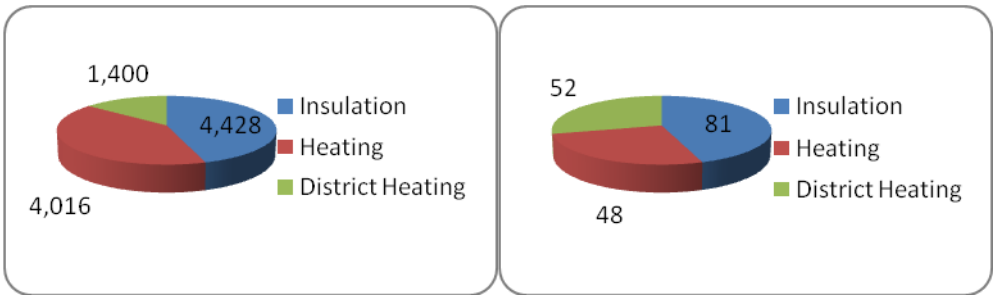
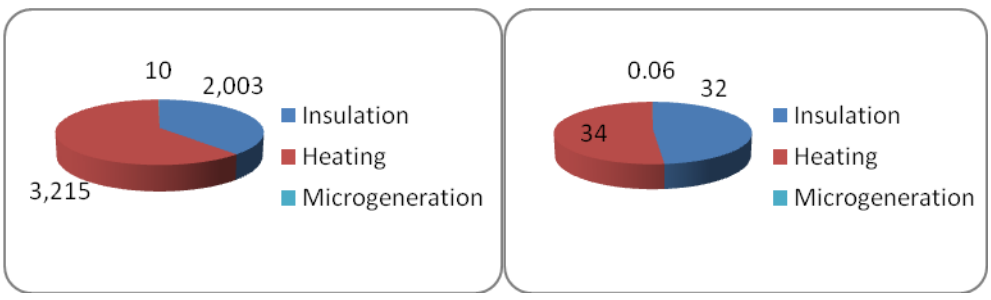


Figure 2.25 Measures installed and unadjusted CO_2 savings (kt) in Yorkshire and the Humber



Measures Analysis

2.27. On average, 4.6 measures have been offered per scheme meaning that across all schemes a total of 1,400 measures have been offered[2]. The percentage of schemes containing each measure is given in figure 2.26.

2.28. Measures are categorised into 5 main types: insulation, heating, district heating, behavioural (energy advice packages) and microgeneration (see appendix 1). Relative numbers offered of each type are illustrated in figure 2.27.

2.29. Altogether insulation and heating measures account for 88% of the total and, as noted above, have contributed 80% of the unadjusted CO_2 savings.

2.30. External solid wall insulation and loft insulation are the most prevalent insulation measures, being offered in 62% and 58% of schemes respectively. However, figures 2.28 and 2.29 show that over twice as many dwellings have received the former measure. Unadjusted CO_2 savings arising from those installations are over 9 times higher than achieved through loft insulation. There is a 4% cap on loft insulation activity.

2.31. Heating controls[3], replacement boiler and fuel switching are offered in respectively 72%, 61% and 46% of schemes.

2.32. As may be seen from figures 2.30 and 2.31 many more dwellings have received the first two of these measures but fuel switching has contributed the greatest unadjusted CO_2 saving.

[2] The total number of measures offered (1,400) is calculated as the average number of measures per scheme (4.605) multiplied by the total number of schemes (304). In this document, wherever there is a reference to the number of measures offered, this is the formulation used.
[3] Heating controls only qualify if installed in conjunction with a new heating system.

Figure 2.26 Percentage of schemes in which each measure features

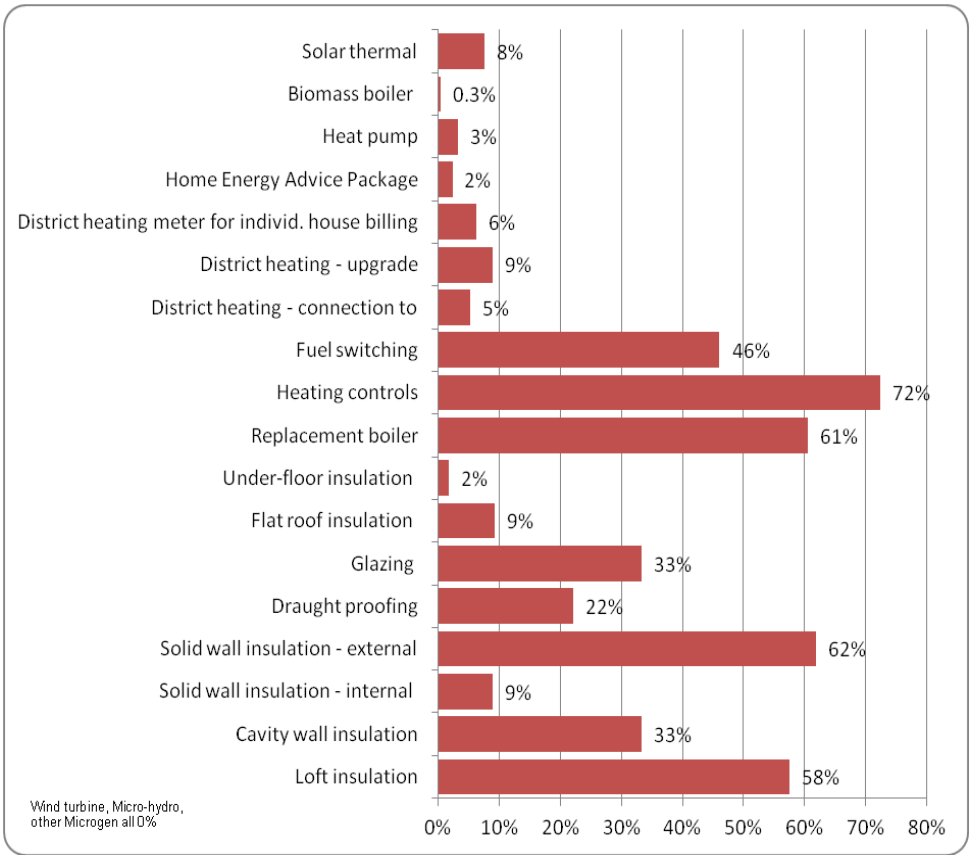


Figure 2.27 Relative numbers of measures submitted

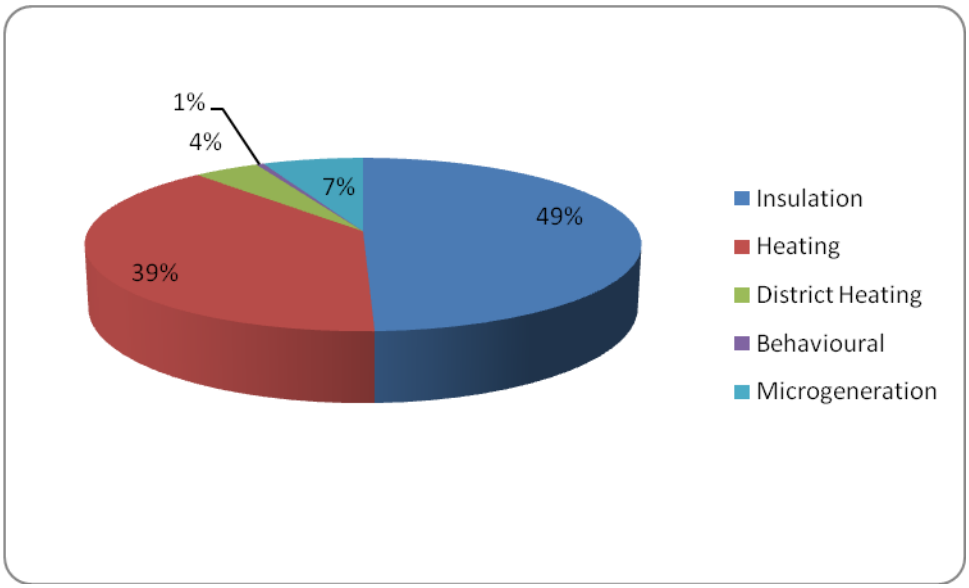


Figure 2.28 Unadjusted CO_2 savings ($ktCO_2$) from insulation measures

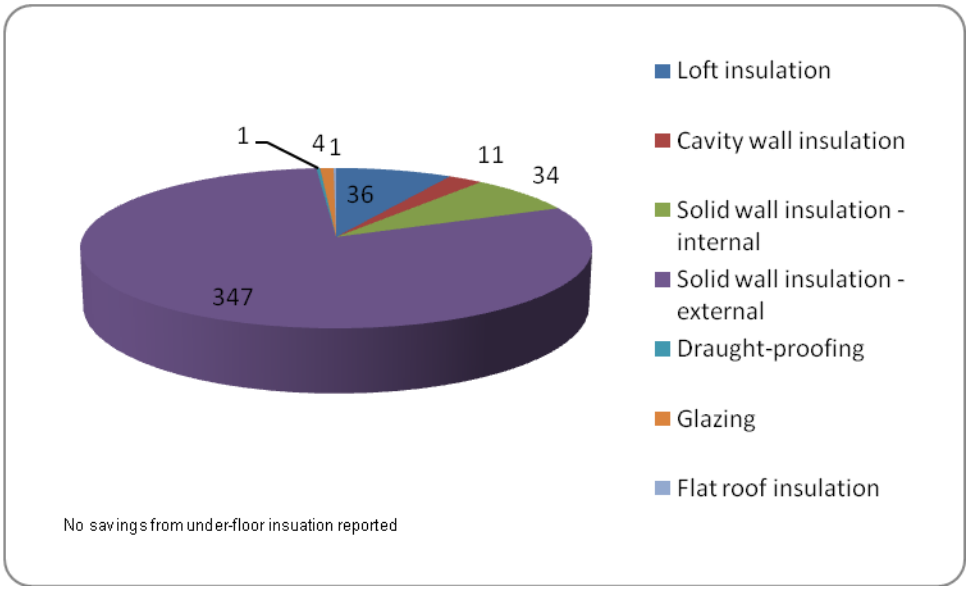


Figure 2.29 Number of individual insulation measures installed

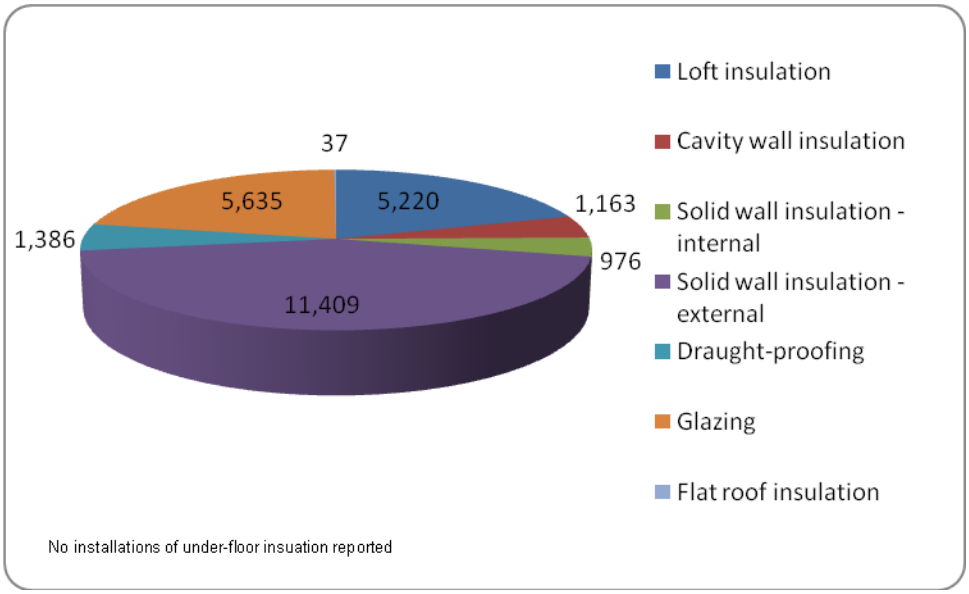


Figure 2.30 Unadjusted CO_2 savings ($ktCO_2$) from heating measures

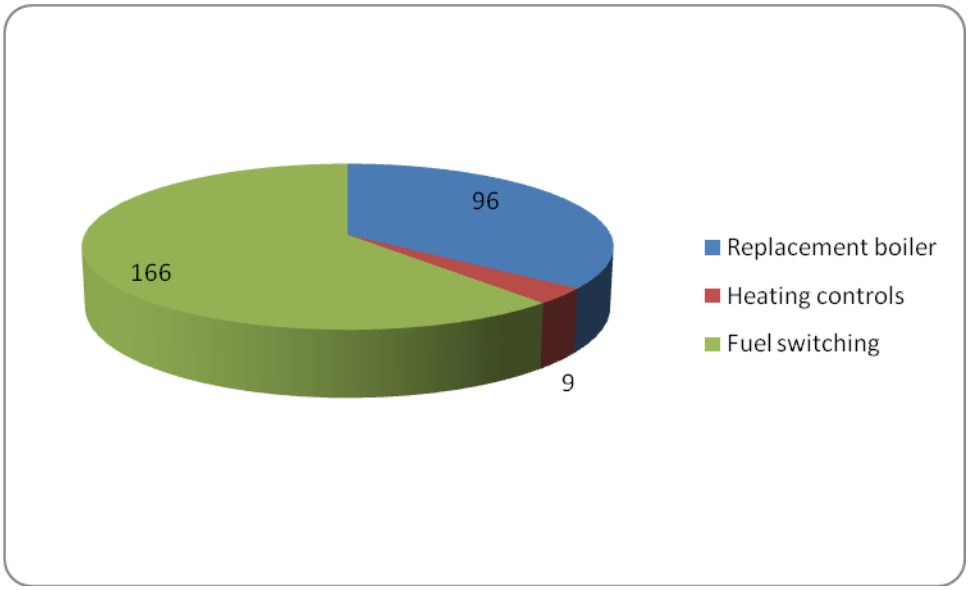
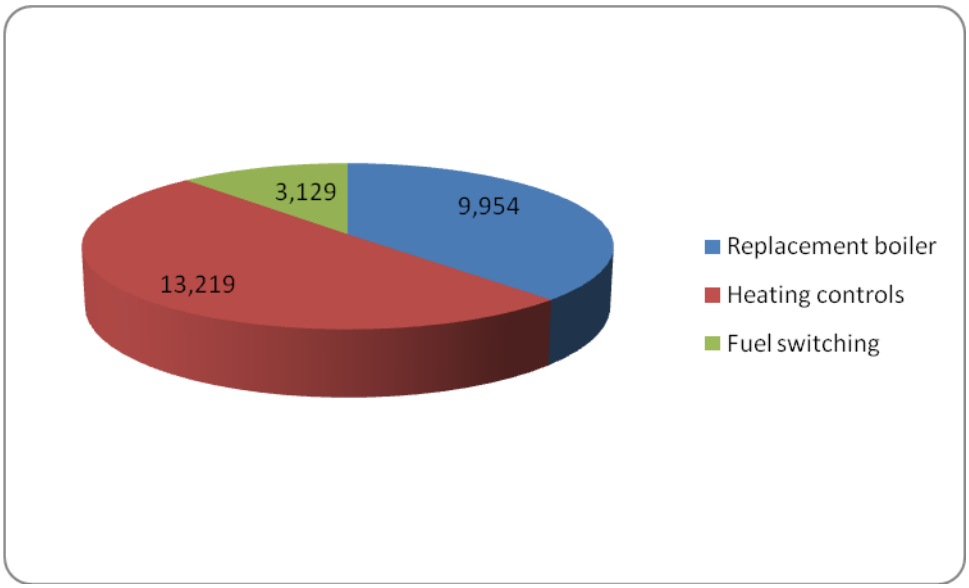


Figure 2.31 Number of individual heating measures installed



2.33. Home energy advice packages (behaviour) have been offered in just 7 schemes, all from suppliers. To date no savings via this route have been reported.

2.34. District heating measures have been offered in 34 schemes. Reported unadjusted CO_2 savings amount to 142 $ktCO_2$ associated with 5,051 dwellings. Figures 2.32 and 2.33 illustrate these outcomes.

Figure 2.32 Unadjusted CO_2 savings ($ktCO_2$) from district heating measures

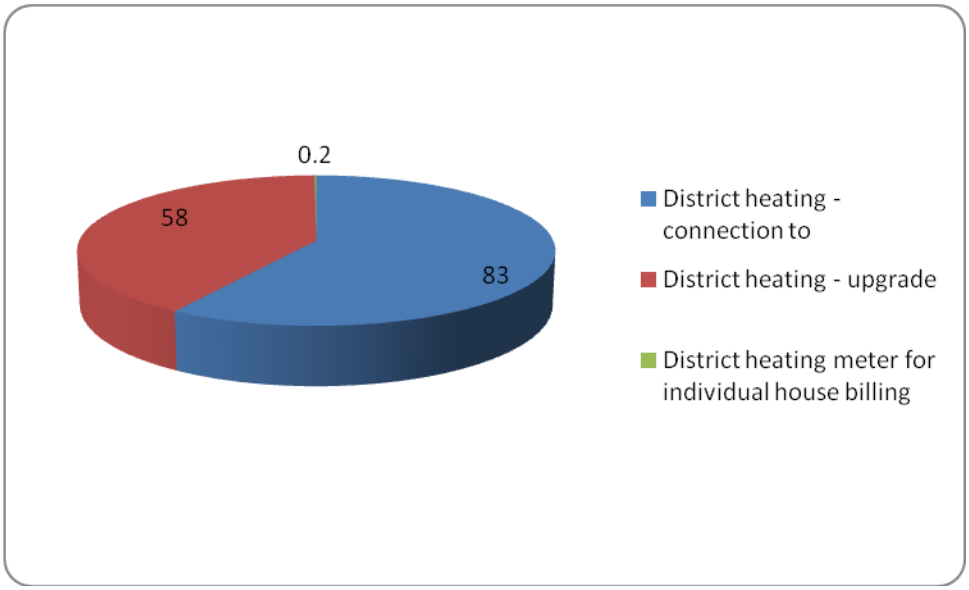
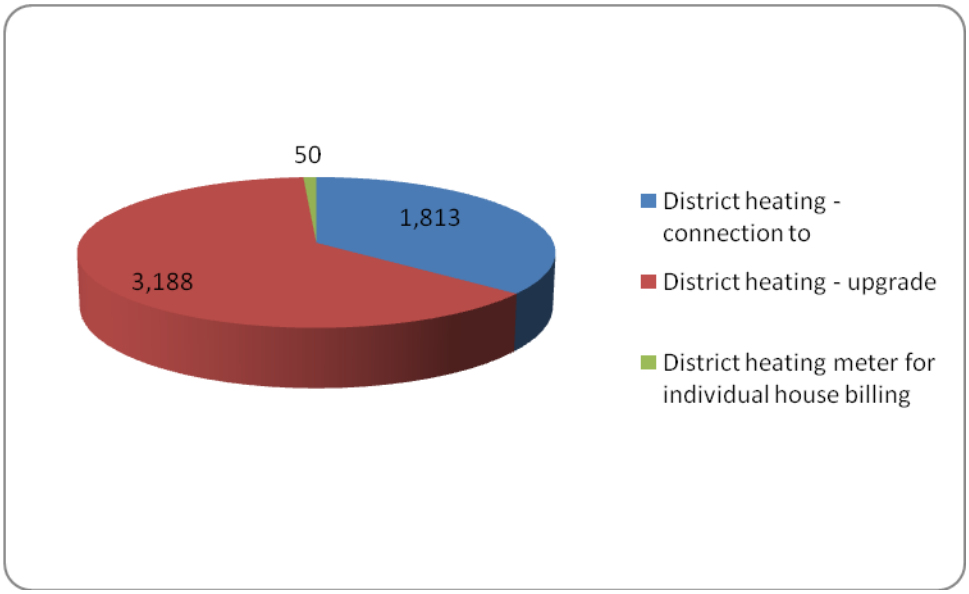


Figure 2.33 Number of individual district heating measures installed



2.35. Microgeneration measures have been offered in 78 schemes but these include only 5 of the 9 types of measure allowable. CO_2 savings data relate to just three types of measure (heat pump, solar thermal, solar PV) as illustrated in figures 2.34 and 2.35.

Figure 2.34 Unadjusted CO_2 savings ($ktCO_2$) from microgeneration measures

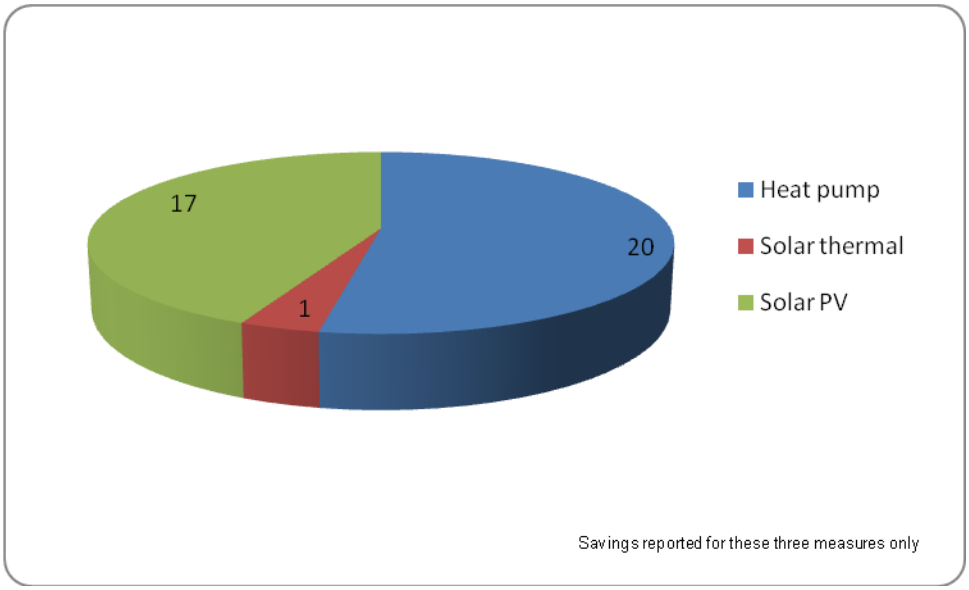
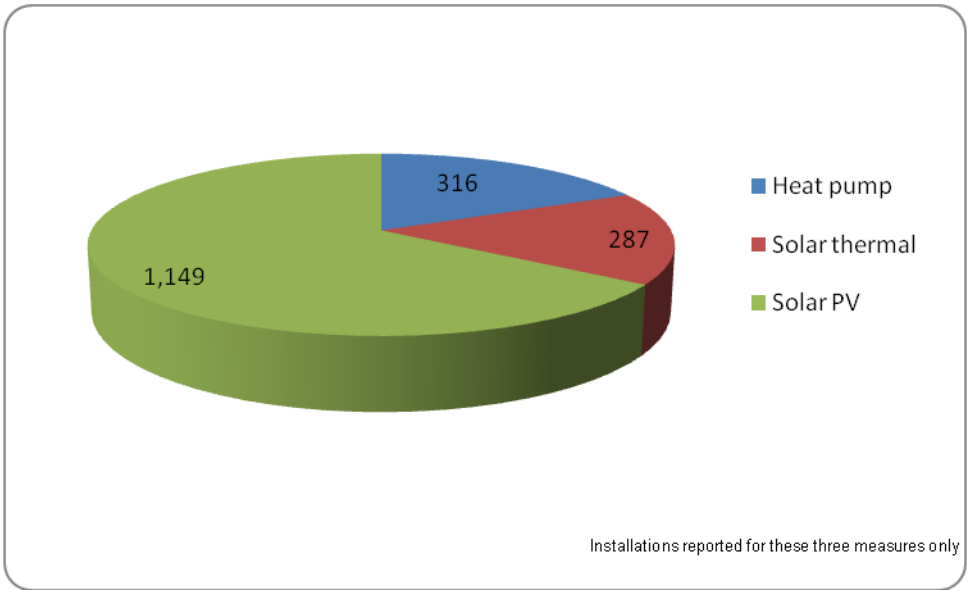


Figure 2.35 Number of indiviudal microgeneration measures installed



Transfers and Trading

2.36. Under article 20(1) of the Order the Authority may agree to the whole or part of an obligated party's obligation to be treated as having been achieved through action undertaken by another supplier or generator (a "transfer").

2.37. Similarly under article 21(1) the Authority may agree to the whole or part of a supplier's or generator's carbon reduction obligation to be traded to another supplier or generator (a "trade").

2.38. In both cases, for the option to be exercised both parties must submit a written request to Ofgem. In the previous annual report, details of a number of inter- and intra-group trades were noted. There has been no such activity in the year to 31 December 2011. However, there is the potential for further trades to be requested in the future as obligated parties seek to optimise delivery of schemes and achievement of bonuses. Ofgem will only approve a trade or transfer if it believes that the obligated party taking on the extra target or transferring qualifying actions will be capable of achieving their revised obligation.

3. Each Generator's Progress

Chapter Summary

A brief outline of each generator group's progress is presented, detailing numbers of schemes, scheme content, reported savings and dwellings benefitting

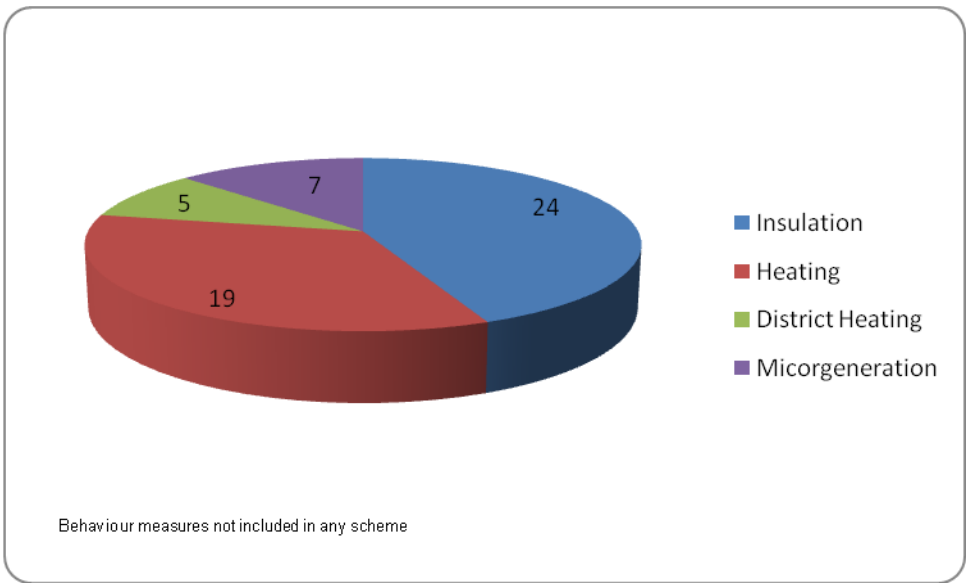
3.1. As noted above, of the 11 generator groups obligated under CESP six also incorporate supply licence holders (see appendix 2). As at 31 December 2011 none of these vertically integrated companies had proposed schemes via their generator licences. Consequently all progress by these groups is reported in chapter 4.

3.2. Of the remaining 5 generators, at 31 December 2011 four had proposed schemes, as detailed below. As noted above, information for IPM and GDF is presented against their pre-merger status.

Drax

3.3. Drax Group has submitted 12 schemes entailing 55 measures as shown in figure 3.1.

Figure 3.1 Measures in Drax schemes



3.4. The group has reported that 1,406 individual measures have been applied to 830 dwellings giving rise to adjusted CO_2 savings that amount to 8% of the group's obligation.

Eggborough

3.5. At 31 December 2011 Eggborough had not submitted any scheme to Ofgem. This situation has since changed.

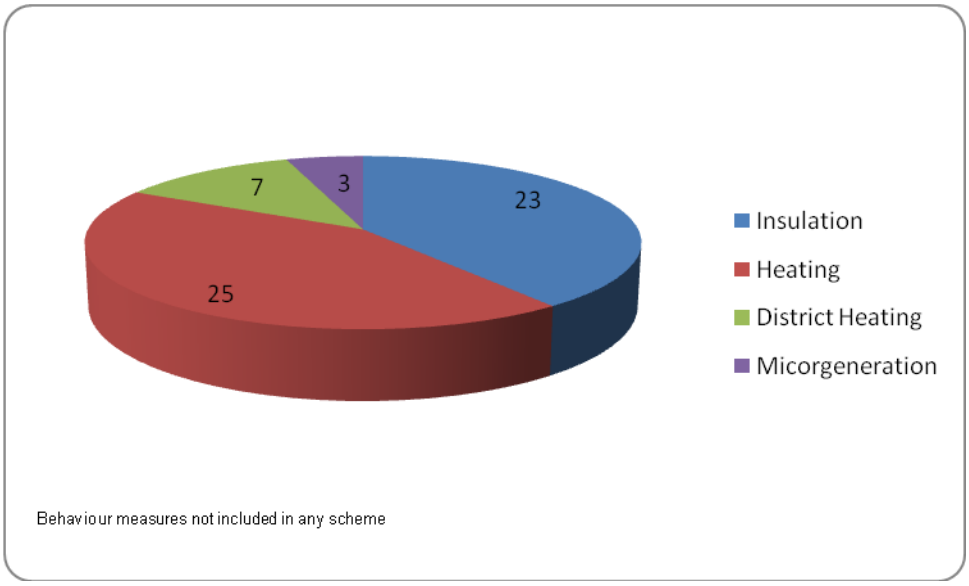
GDF Suez

3.6. GDF has submitted just 1 scheme entailing district heating upgrades. Estimated CO_2 savings from this scheme total almost double the group's obligation. However, no achieved savings have been reported to date.

Intergen

3.7. Intergen has submitted 13 schemes totalling 58 measures as shown in Figure 3.2.

Figure 3.2 Measures in Intergen schemes

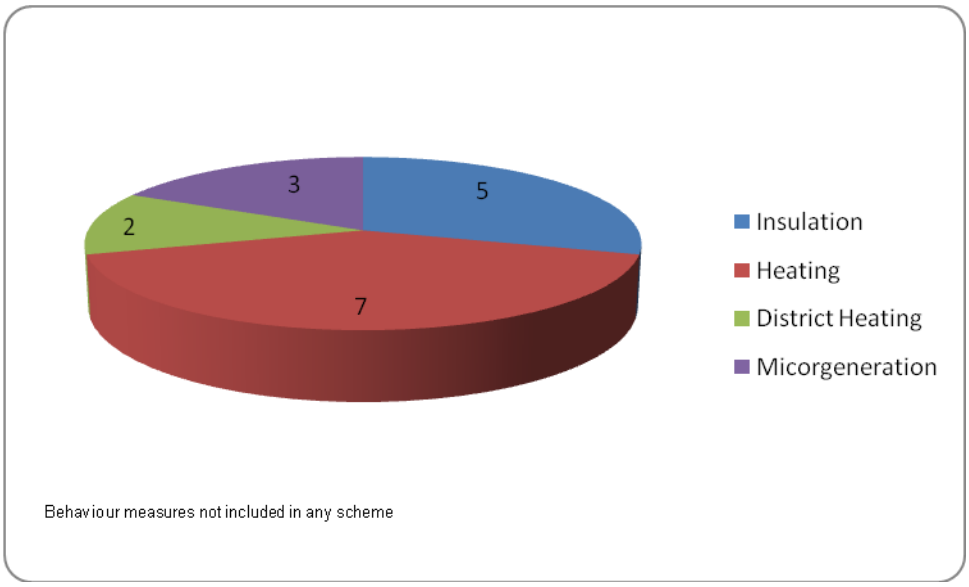


3.8. The group has reported on 84 individual measures applied to 42 dwellings through which it has achieved 3% of its obligation.

IPM

3.9. IPM has submitted 7 schemes incorporating a total of 17 measures. The breakdown of these measures is shown in figure 3.3

Figure 3.3 Measures in IPM schemes



3.10. The group has reported on 400 individual measures applied to 340 dwellings which have resulted in adjusted CO_2 savings of 4% of the group's obligation.

4. Each Supplier's Progress

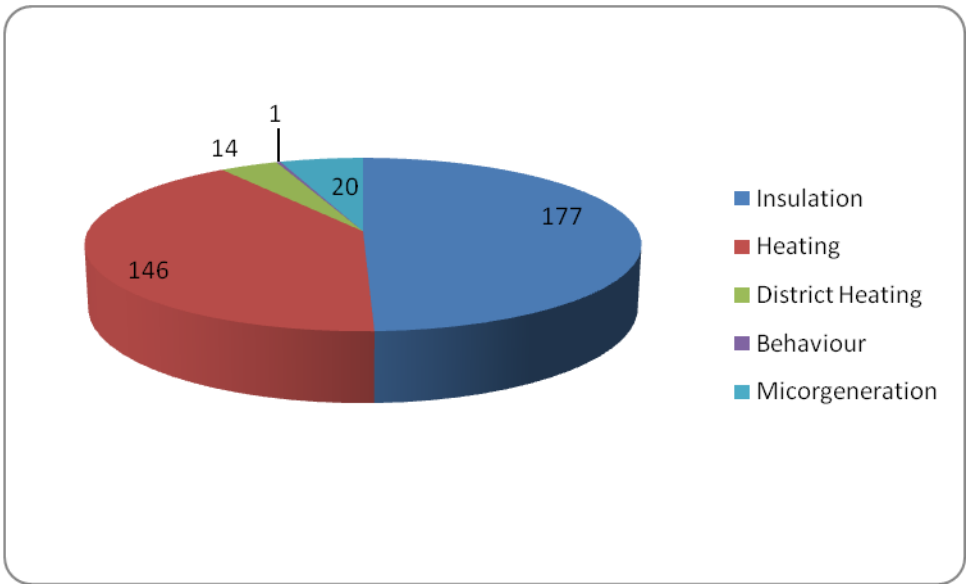
Chapter Summary

Each supplier group's progress towards its aggregated obligation is summarised in this chapter. Information is presented on numbers of schemes, scheme content, dwellings benefitting and CO_2 savings achieved. All groups with supplier licences are vertically integrated and have submitted all their schemes to date under a supply licence. The analyses below are based on each group's combined supplier and generator obligations to provide a realistic view of the group's overall progress.

Centrica

4.1. Centrica has submitted 87 schemes encompassing 358 measures. Insulation measures are contained in 84% of those schemes and heating in 74%. The mix of measures is shown in figure 4.1.

Figure 4.1 Measures in Centrica schemes



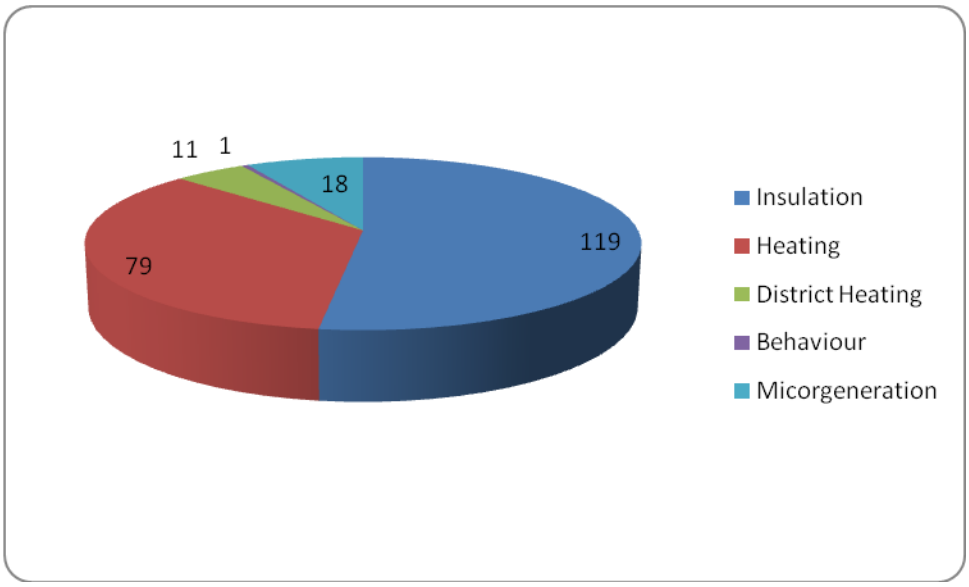
4.2. The group has reported on 23,668 individual measures being installed in 10,518 dwellings resulting in adjusted CO_2 savings of 24% of the group's aggregated obligations.

4.3. On an unadjusted basis 36% of the savings arose from insulation measures, 24% from heating measures and 25% from district heating.

EDF

4.4. EDF has submitted 56 schemes encompassing 228 measures. Insulation measures feature in 77% of those schemes and heating measures in 64%. Figure 4.2 illustrates the make-up of EDF schemes

Figure 4.2 Measures in EDF schemes



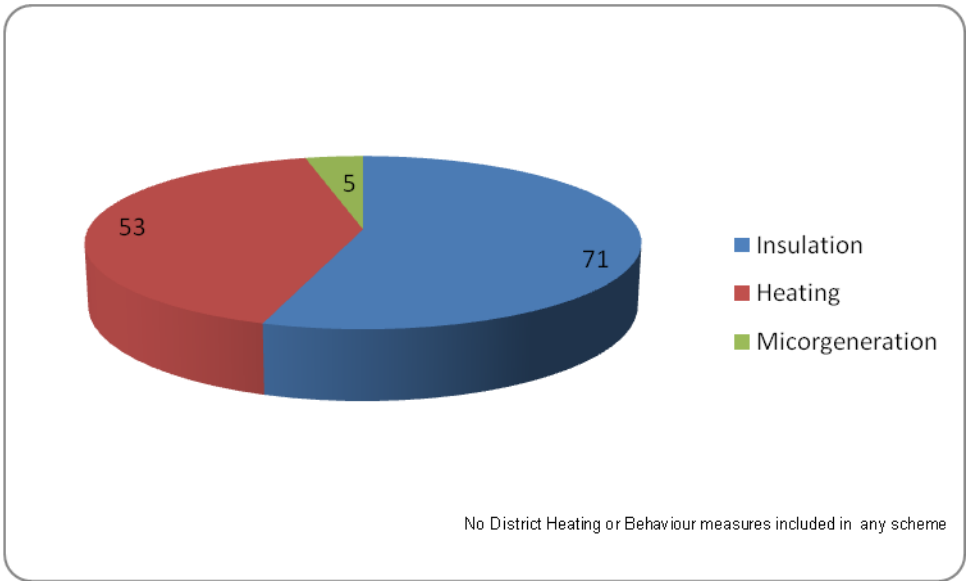
4.5. Reported adjusted savings amount to 17% of the group's aggregated obligations and arise from 7,860 individual measures applied to 5,897 dwellings. On an unadjusted basis the majority of the savings (62%) have come from insulation measures.

E.ON

4.6. E.ON has proposed 21 schemes covering 129 measures. Insulation and heating measures both occur in 95% of schemes. Microgeneration features in 24% of schemes with no behavioural or district heating scheme being offered. The scheme mix is shown in figure 4.3.

4.7. The group has reported on 8,820 individual measures being applied to 4,597 dwellings. The resulting adjusted CO_2 savings amount to 17% of the group's aggregated obligations. On an unadjusted basis 73% of the savings have arisen from insulation measures.

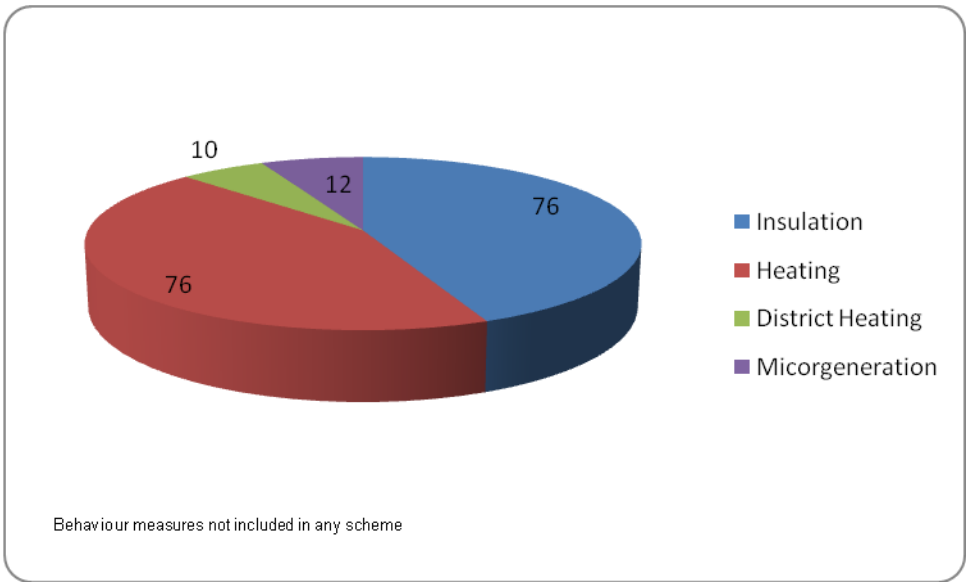
Figure 4.3 Measures in E.ON schemes



Npower

4.8. Npower has submitted 35 schemes incorporating a total of 174 measures. Heating measures feature in 89% of the schemes and insulation in 66%. The make-up of Npower schemes is shown in figure 4.4.

Figure 4.4 Measures in Npower schemes

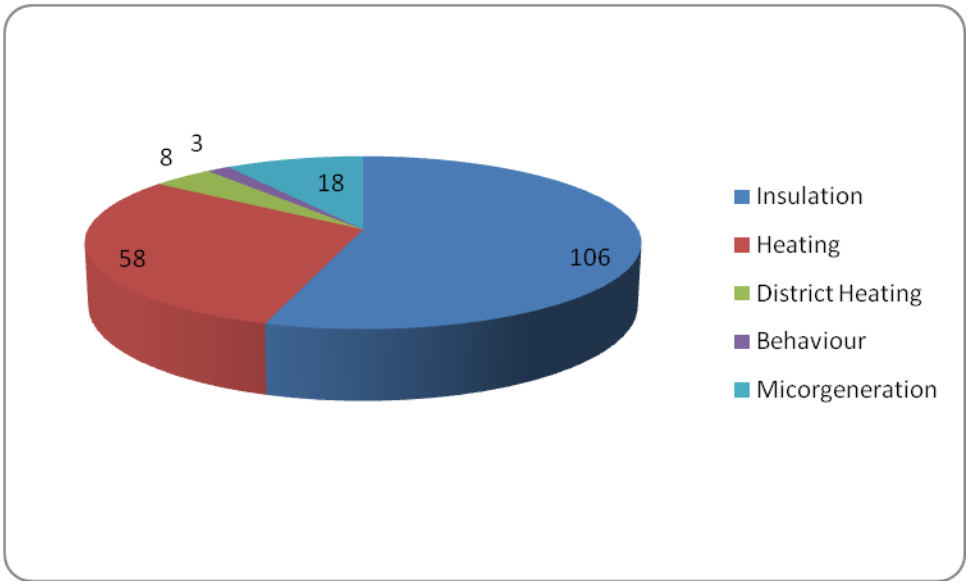


4.9. The group has reported on 5,050 individual measures applied to 2,415 dwellings. The adjusted CO_2 savings achieved through these actions amount to 6% of the group's aggregated obligations. On an unadjusted basis 72% of the savings have been delivered through heating measures.

Scottish & Southern

4.10. Scottish and Southern have submitted 29 schemes encompassing 193 measures. Every scheme features at least one insulation measure and heating measures feature in 76%. The mix of measures offered is shown in figure 4.5.

Figure 4.5 Measures in Scottish and Southern schemes

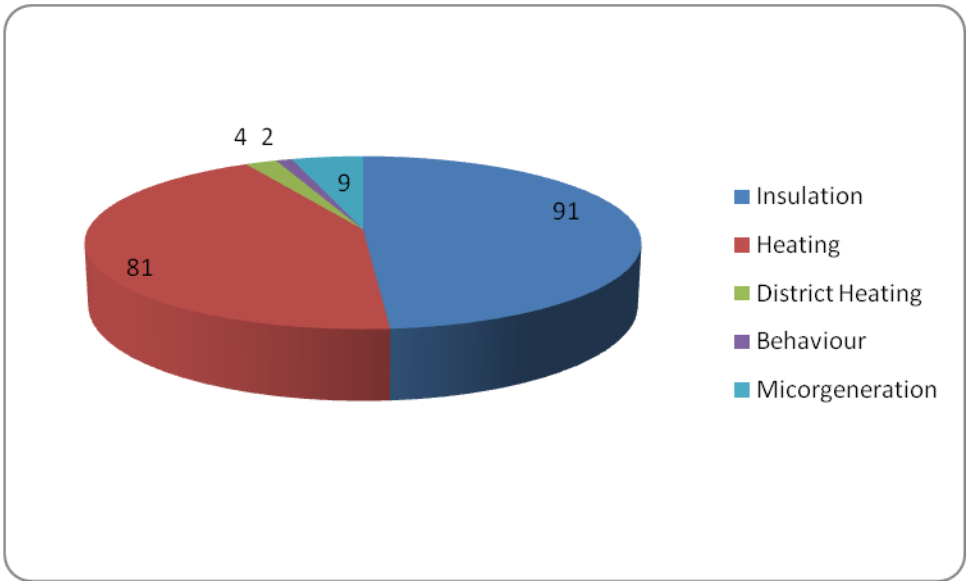


4.11. Scottish and Southern have reported on 6,964 individual measures which have been applied to 3,448 dwellings. The adjusted CO_2 savings achieved amount to 14% of the group's aggregated obligations. On an unadjusted basis 85% of the savings have arisen from insulation measures.

Scottish Power

4.12. Scottish Power has proposed 43 schemes which contain 187 separate measures. Overall 86% of schemes feature heating measures and insulation is offered in 67%. The mix of measures offered is shown in figure 4.6.

Figure 4.6 Measures in Scottish Power schemes



4.13. The group has reported on 4,679 individual measures applied to 2,501 dwellings. These have resulted in adjusted CO_2 savings of 9% of the group's aggregated obligations. Unadjusted savings are relatively evenly spread across insulation (31%), heating (31%) and district heating (35%) measures.

5. Emerging Issues

Chapter Summary

Issues relating to scheme complexity, overall programme size, incentives, compliance and potential outcome are noted in this chapter.

5.1. In its report on the first year of the CESP, Ofgem pointed out that the programme is designed, in part, to be a "bridge to the future" enabling lessons to be learned from a number of innovative elements of the programme.

5.2. Our administration of CESP has highlighted lessons associated with a number of features of the programme including the use of bonus incentives to promote both whole house and community-based approaches, delivery to clearly defined geographical areas, incentivisation or otherwise to install certain measures via CESP "score" adjustments, and the identification and treatment of hard-to-treat properties with appropriate solutions.

5.3. Technical and administrative issues, and their resolution, have been fed back to and discussed with DECC in order to inform the design of future programmes. A number of the important findings and solutions are detailed below.

Technical Issues

5.4. Ofgem has worked with obligated parties, industry and DECC in order to tackle a range of issues that have held up delivery across the programme. These issues have arisen for a number of reasons including but not exclusively new geographic areas, hard to treat properties and non-traditional forms of construction.

5.5. Ofgem has facilitated the simplification of the process of consultation between the supplier and the local authority leading to improved communication and clarification of requirements.

5.6. Ofgem formed the CESP Technical Working Group through which it has been able to resolve a significant number of technical issues including:

- Determining the starting U-values for all solid wall construction types (traditional, non-traditional, high-rise) applicable to solid wall insulation measures;

- Delineating the routes through which obligated parties may demonstrate the suitability of solid wall insulation systems (e.g. via a BBA Agrement certificate);
- Formulating the criteria required to be met for obligated parties to be able to claim solid wall insulation as a means of insulating hard-to-treat cavities;
- Determining how suppliers and generators may claim for cases where a mix of internal and external solid wall insulation is to be installed (e.g. when may this be regarded as the installation of 2 measures), and for cases where a dwelling has a mix of solid and cavity walls (what proportion of the SWI and CWI scores may be claimed);
- Setting the *de minimis* levels below which claims may not be made for flat roof insulation (e.g. minimum area), solar thermal (minimum area), solar PV (minimum peak capacity);
- Implementing consequences for glazing arising from changes to Building Regulations – claims may now only be made for improvements beyond BFRC C-rated;
- Avoiding double counting glazing savings between CERT and CESP where there is a factory gate agreement under CERT;
- Determining that a gas warm air system demonstrated to have an efficiency below 70% may be claimed as a 'G-rated boiler replacement' when it is replaced by a new efficient boiler;
- Determining how the carbon score will be awarded where district heating metering for individual property billing is proposed (in some cases this requires demonstration through a trial).

5.7. The above reflects the progress Ofgem has made in resolving some of the technical issues which were causing delays to scheme approval. It is anticipated that these types of issue will continue to arise until the end of the programme. Ofgem will continue to work with the obligated parties via the Technical Working Group, together with other appropriate parties, to resolve them and ensure scheme approval rates are maximised.

Administration

5.8. The administration of the CESP programme continues to be closely monitored and Ofgem are working closely with the obligated parties to ensure information requirements are met. It should be noted that with eight months of the programme remaining and obligated parties' reported activity at 15% of the overall target, that the burden of administering the remainder of the programme at low risk will be challenging and at times contentious.

5.9. The steps taken in 2011 to alleviate the technical issues have enabled Ofgem to unblock the accreditation of a large number of schemes. By the end of March 2012 140 schemes were accredited, more than double the number in December 2011.

5.10. In 2011 Ofgem met its KPI for the CESP programme responding to over 90% of new scheme submissions within 10 working days. The Ofgem budget for

operating the scheme in the period (1 January to 31 December 2011) was £568,100.

Forward Look

5.11. Due to the nature of the incentives it is difficult to predict how achieved savings from current schemes will accumulate and whether they will reach or exceed the estimated savings. The area bonus in particular introduces a step function in the CESP "score" because it is not triggered until the percentage of domestic energy users in a specific LSOA to whom actions have been provided exceeds 25%. Therefore it is unlikely to be clear whether it applies until a substantial number of schemes have reached their end date and all installations from those schemes have been reported.

5.12. Obligated parties are clearly aware of the challenge with 85% of the overall target to be achieved in the final year.

5.13. Ofgem will determine whether suppliers and generators have achieved their obligations and notify them of that determination by 30 April 2013, and will submit a final report to the Secretary of State by 1 May 2013.

5.14. Should any obligated party fail to meet its CESP obligation Ofgem would consider enforcement action at the time. Ofgem has powers, which include imposing significant financial penalties of up to 10% of an obligated party's annual turnover, which it could impose following an investigation.

Appendices

Index

Appendix 1 – Qualifying Actions

1.1. Qualifying actions (measures) as described in this report are outlined in the table, below.

Measure Type	Measure
Insulation	Loft insulation
	Cavity wall insulation
	Solid wall insulation (external)
	Solid wall insulation (internal)
	Draft proofing
	Double glazing
	Flat roof insulation
	Under-floor insulation
Heating	Replacement boiler
	Heating controls
	Fuel switching
District heating	Connection to a district heating scheme
	Upgrade of a district heating scheme
	District heating meter for individual house billing
Behavioural	Home energy advice package
Microgeneration	Heat pump
	Biomass boiler
	Solar hot water
	Other microgeneration (heat)
	Solar PV
	Wind turbine
	Micro-hydro
	Other microgeneration (electricity)
	Micro-CHP

Appendix 2 – Generator and Supplier Licenses and Companies' Structure

Parties obligated under the Community Energy Saving Programme Order 2009, as at 14 March 2011, are

Suppliers

Group Name	Licence Holder	Product Supplied
Centrica plc	British Gas Trading Ltd	Electricity
	British Gas Trading Ltd	Gas
EDF Energy	EDF Energy Customers plc	Electricity
	SEEBOARD Energy Limited	Electricity
	SWEB Energy Limited	Electricity
	EDF Energy Customers plc	Gas
	SEEBOARD Energy Gas Limited	Gas
E.ON UK plc	E.ON Energy Limited	Electricity
	Economy Power Limited	Electricity
	E.ON Energy Limited	Gas
	E.ON Energy Gas (Eastern) Limited	Gas
RWE Npower plc	Npower Limited	Electricity
	Npower Northern Supply Limited	Electricity
	Npower Northern Limited	Electricity
	Npower Yorkshire Supply Limited	Electricity
	Npower Direct Limited	Electricity
	Electricity Plus Supply Limited	Electricity
	Npower Yorkshire Limited	Electricity
	Npower Gas Limited	Gas
	Npower Commercial Gas Limited	Gas
	Npower Northern Limited	Gas
	YE Gas Limited	Gas
	Npower Direct Limited	Gas
	Gas Plus Supply Limited	Gas
	Npower Yorkshire Limited	Gas

Group Name	Licence Holder	Product Supplied
Scottish Power Ltd	Scottish Power Energy Retail Limited	Electricity
	Scottish Power Energy Retail Limited	Gas
SSE plc	SSE Energy Supply Limited	Electricity
	South Wales Electricity Limited	Electricity
	Southern Electric Gas Limited	Gas
	SWALEC Gas Limited	Gas
	Atlantic Gas Limited	Gas
	Scottish Hydro Electric Gas Limited	Gas

Generators

Group Name	Licence Holder
Centrica plc	Centrica Barry Limited
	Centrica Brigg Limited
	Centrica KL Limited
	Centrica KPS Limited
	Centrica Langage Limited
	Centrica PB Limited
	Centrica RPS Limited
	Centrica SHB Limited
Drax Group plc	Drax Power Limited
Eggborogh Power Ltd	Eggborough Power Ltd
EDF Energy	EDF Energy Nuclear Generation Limited
	EDF Energy (Jade Power Generation Limited)
	EDF Energy (Sutton Bridge Power Limited)
	West Burton Limited
	British Energy Generation (UK) Limited
	EDF Development Company Limited
	EDF Energy (West Burton Power) Limited
	NNB Generation Company Limited
E.ON UK	E.ON UK plc
	Citigen (London) Limited
	Enfield Energy Centre Limited
GDF Suez SA*	GDF Suez Teeside Limited
	GDF Suez Shotton Limited
	GDF Suez Marketing Limited

The Community Energy Saving Programme (CESP) 2009 - 2012, at 31 December 2011

Group Name	Licence Holder
Intergen Projects (UK) Limited	Rocksavage Power Company Limited
	Coryton Energy Company Limited
	Spalding Energy Company Limited
IPM (UK) Power*	Rugeley Power Generation Limited
	Indian Queens Power Limited
	Saltend Cogeneration Company Limited
	Deeside Power Limited
	First Hydro Company
	International Power plc
	IPM Energy Trading Limited
RWE Npower plc	RWE Npower plc
	Npower Cogen Trading Limited
	Gwynt Y Mor Offshore Wind Farm Limited
	NPower Direct Limited
SSE plc	SSE Generation Limited
	SSEPG (Operations) Limited
	Medway Power Limited
	Keadby Generation Limited
	Fibre Power (Slough) Limited
	Greater Gabbard Offshore Wind Farm Limited
	Uskmouth Power Company Limited
	Keadby Developments Limited
ScottishPower Generation Limited	ScottishPower Generation Limited
	ScottishPower (DCL) Limited
	ScottishPower (SCPL) Limited)

*On 10 August 2010 GDF Suez and IPM announced their intention to merge. Under the deal a number of GDF assets transferred into IPM. The above table shows the pre-merger composition of each group.

Appendix 3 – 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 (such as the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Acts of 2004, 2008 and 2010) as well as arising from directly effective European Community legislation.

1.3. References to the Gas Act and the Electricity Act in this appendix are to Part 1 of those Acts.[4] 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.[5]

1.4. The Authority's principal objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes and electricity conveyed by distribution or transmission systems. The interests of such consumers are their interests taken as a whole, including their interests in the reduction of greenhouse gases and in the security of the supply of gas and electricity to them.

1.5. The Authority is generally required to carry out its functions in the manner it considers is best calculated to further the principal objective, wherever appropriate by promoting effective competition between persons engaged in, or commercial activities connected with,

- the shipping, transportation or supply of gas conveyed through pipes;
- the generation, transmission, distribution or supply of electricity;
- the provision or use of electricity interconnectors.

1.6. Before deciding to carry out its functions in a particular manner with a view to promoting competition, the Authority will have to consider the extent to which the interests of consumers would be protected by that manner of carrying out those

[4] Entitled "Gas Supply" and "Electricity Supply" respectively.
[5] 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.

functions and whether there is any other manner (whether or not it would promote competition) in which the Authority could carry out those functions which would better protect those interests.

1.7. In performing these duties, the Authority must 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[6]; and
- the need to contribute to the achievement of sustainable development.

1.8. In performing these duties, the Authority must have regard to the interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.[7]

1.9. 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[8] 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; and
- secure a diverse and viable long-term energy supply,

  and shall, in carrying out those functions, have regard to the effect on the environment.

1.10. In carrying out these functions the Authority must also have regard to:

- 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.

[6] 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 Acts in the case of Electricity Act functions.
[7] The Authority may have regard to other descriptions of consumers.
[8] Or persons authorised by exemptions to carry on any activity.

1.11. The Authority may, in carrying out a function under the Gas Act and the Electricity Act, have regard to any interests of consumers in relation to communications services and electronic communications apparatus or to water or sewerage services (within the meaning of the Water Industry Act 1991), which are affected by the carrying out of that function.

1.12. 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[9] 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.

[9] Council Regulation (EC) 1/2003.

Appendix 4 - Glossary

A

Adjusted CO_2 savings

Carbon dioxide reduction arising from qualifying actions as determined by applying the appropriate carbon coefficient values as set out in Schedule 3 of the Order and subsequently adjusted as described in articles 24 and 25 of the Order (adjustments and bonuses)

Aggregated obligation

The sum of obligations imposed on individual licence holders within a group of companies

Achieved savings

Carbon savings from activity that the obligated parties have completed

C

CERT

Carbon Emissions Reduction Target

CESP

Community Energy Saving Programme 2009-2012

CHP

Combined heat and power

CO_2

Carbon dioxide

D

DECC

Department of Energy and Climate Change

E

ECO

Energy Company Obligation

Estimated savings

Carbon savings associated with scheme submissions that have not yet been achieved but that are estimated will be achieved if the schemes deliver as planned.

I

IMD

Index of Multiple Deprivation

K

$ktCO_2$

Thousands of tonnes of carbon dioxide

L

LSOA

Lower super output area

M

$MtCO_2$

Millions of tonnes of carbon dioxide

O

Order, The

The Electricity and Gas (Community Energy Saving Programme) Order 2009

P

PV

Photovoltaics

U

Unadjusted CO_2 savings

Carbon dioxide reduction arising from qualifying actions as determined by applying the appropriate carbon coefficient values as set out in Schedule 3 of the Order but before any specific measures adjustments or bonuses have been applied