## Energy Efficiency Commitment 2005 – 2008 Administration procedures

## **Consultation document**

July 2004 179/04

### Summary

In May 2004 the Department for Environment, Food and Rural Affairs (Defra) issued a consultation document on its proposals for the Energy Efficiency Commitment (EEC) 2005 – 2008. The EEC requires suppliers to achieve improvements in domestic energy efficiency and as such forms part of the Government's Climate Change Programme. Using less energy was highlighted within the Government's Energy White Paper 2003 as being the cheapest, cleanest and safest way of addressing the Government's energy policy objectives. At least 50% of the energy saving achieved under the EEC must be targeted by suppliers at certain low-income domestic consumers; hence the EEC also contributes to the Government's Fuel Poverty Strategy.

Defra's consultation sets out the draft Electricity and Gas (Energy Efficiency Obligations) Order 2004. The finalised version of this Order, to be laid before Parliament further to consideration of responses to Defra's consultation being considered, will provide the statutory basis for the EEC from 1 April 2005 until 31 March 2008. Ofgem is required to administer the EEC and this document sets out Ofgem's proposals for doing so.

The Order will impose an obligation upon licensed gas and electricity suppliers, that have at least 15,000 domestic consumers, to meet an energy efficiency target and will set the broad framework for how this obligation is to be achieved. This document sets out how Ofgem proposes to determine the energy efficiency targets for each gas or electricity supplier on whom obligations will be imposed by the Order once it has been approved by Parliament.

In order to comply with their obligations, suppliers will be required to notify Ofgem of their proposed energy efficiency actions or 'schemes'. Ofgem will then be required to approve a proposal as qualifying action if it is satisfied that it would result in improvements in energy efficiency. Once a supplier has completed a scheme it must notify Ofgem who will determine the actual improvement in energy efficiency to be attributed to that action.

This document sets out the timescales and format for suppliers to notify Ofgem of their proposed and completed schemes. The criteria for determining whether an action will lead to an improvement in energy efficiency are detailed; along with the information that will be collected by Ofgem to determine the improvement in energy efficiency to be attributed to completed schemes. Guidelines are provided on how suppliers can demonstrate that at least 50% of the total improvements in energy efficiency have been

made in relation to domestic consumers in the Priority Group. Ofgem will also monitor each supplier's progress against its energy efficiency target through regular reporting requirements. Where necessary, Ofgem will enforce compliance with the requirements of the Order.

The EEC 2005 – 2008 will follow on from the current EEC which runs from 1 April 2002 – 31 March 2005. Ofgem's review of the supplier's progress during the second year of the EEC is available at www.ofgem.gov.uk. As set out in Defra's consultation proposals and in Energy Efficiency: The Government's Plan for Action, May 2004, a review of the EEC will be conducted in 2007. The Government is committed to a continuation of the EEC until 2011 and a firm target from 2008 will be set following this review. Ofgem's consultation proposals only relate to the three-year period 2005 – 2008.

Ofgem's procedures for administering the Order will be finalised in the light of responses to this consultation and to reflect the Order that comes into force.

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# 1. Introduction

1.1. The Electricity Act 1989 and the Gas Act 1986 enable the Secretary of State to make an Order which imposes an energy efficiency obligation on electricity distributors and suppliers and gas transporters and suppliers.

## Defra's consultation on the EEC 2005 - 2008

- 1.2. The Energy Efficiency Commitment from April 2005, Consultation Proposals, was published by Defra in May 2004<sup>1</sup>. It sets out the draft Electricity and Gas (Energy Efficiency Obligations) Order 2004 ('the Order'), which provides the statutory basis for the Energy Efficiency Commitment programme (EEC) 2005 2008. The Order sets an overall target for the promotion of improvements in energy efficiency in relation to domestic consumers from 1 April 2005 31 March 2008. Under the Order suppliers will be set an energy efficiency target, determined by Ofgem, to be achieved by 31 March 2008.
- 1.3. At least 50% of the target for improvements in energy efficiency must be in relation to domestic consumers in receipt of certain income-related benefits or tax credits. For the purpose of the administration of the Order, these consumers will be known as the 'Priority Group'.
- 1.4. The closing date for responses to Defra's consultation is 13 August 2004.
- 1.5. The EEC forms part of the Government's Climate Change Programme as it is aimed primarily at reducing carbon emissions from households through improvements in energy efficiency. The Government's Energy White Paper<sup>2</sup> states that the cheapest, cleanest and safest way of addressing the Government's energy policy objectives is through using less energy. Improvements in energy efficiency can also contribute to the alleviation of fuel poverty and the EEC is therefore highlighted in the UK Fuel Poverty Strategy, November 2001.

<sup>&</sup>lt;sup>1</sup> This document is available at <u>http://www.defra.gov.uk/corporate/consult/eec/consultation.pdf</u>

<sup>&</sup>lt;sup>2</sup> Energy White Paper our energy future - creating a low carbon economy, February 2003

## Administration proposals

- 1.6. Ofgem is required to administer the EEC by setting each supplier's target, monitoring suppliers' activity and, where necessary, enforcing compliance by a supplier. This document sets out Ofgem's proposals for administering the EEC post 2005 by approving suppliers' proposed actions, determining the improvements in energy efficiency to be attributed to those completed actions and putting procedures in place to monitor suppliers' progress in meeting their targets. These proposals have been developed in response to Defra's consultation proposals on the EEC post 2005. The outcome of Ofgem's consultation will be dependent upon the conclusions reached by Defra following their consultation, in particular with regard to the final Order approved by Parliament.
- 1.7. Following the consultation process, and once the Electricity and Gas (Energy Efficiency Obligations) Order 2004 comes into force, Ofgem will finalise its administration procedures. Following this, Ofgem also plans to publish guidance on the technical aspects of delivering measures, for example the British Standards, which underlie the assumptions as to improvements in energy efficiency, that need to be adhered to when installing certain measures.

### The Energy Efficiency Commitment

- 1.8. The EEC 2005 2008 follows on from the current EEC which runs from 1 April 2002 until 31 March 2005. Ofgem's latest Annual Review on suppliers' progress against their current EEC targets is available on Ofgem's website www.ofgem.gov.uk.
- 1.9. As set out in Defra's consultation proposals and in Energy Efficiency: The Government's Plan for Action, May 2004, a review of the EEC will be conducted in 2007. The Government is committed to a continuation of the EEC until 2011 and a firm target from 2008 will be set following this review. Ofgem's consultation proposals do not cover the three year period 2008 2011.

## Structure of the consultation

- 1.10. Chapter 2 sets out the process for consultation and the main points which Ofgem is seeking views on. Ofgem's proposals for determining each supplier's energy efficiency targets are set out in Chapter 3. Chapters 4 and 5 set out the mechanics of administration with Chapter 4 focusing on suppliers' proposals and Chapter 5 detailing the procedures for suppliers to demonstrate compliance. The criteria used for setting out how Ofgem will determine whether a proposed action by a supplier is a qualifying action will be set out in Chapter 6. Chapter 7 then goes on to set out how Ofgem will determine the improvements in energy efficiency from such qualifying actions. Chapter 8 sets out the procedures which suppliers should put in place to monitor their activity under the EEC 2005 – 2008. A glossary of terms and abbreviations is provided in Appendix 4.
- 1.11. Throughout this document, references to articles are to those in the draft Order. In the process of drawing up these proposals on the administration of the Order, Ofgem has, in relation to certain matters, suggested amendments to the draft Order for Defra's consideration. These suggestions are designed to aid the administration of the Order.

## Timetable

1.12. Defra is planning to lay the Electricity and Gas (Energy Efficiency Obligations) Order 2004 ("the Order") before Parliament in November this year. Ofgem's decisions on how the EEC post 2005 will be administered will be published once the Order has come into force.

# 2. Consultation

### Issues for consultation

2.1. This document sets out Ofgem's proposals for administering the EEC 2005 – 2008 following Defra's consultation and draft Order. Ofgem welcomes comments on any matter addressed in this paper. Responses are particularly sought on the following proposals.

### **Target setting**

Comments are invited on how Ofgem proposes to determine and alter the suppliers' energy efficiency targets, Chapter 3.

### Supplier's proposals

4.25 Views on the proposal that suppliers' quarterly reports should also detail the number of cavity wall insulations they have installed each quarter are welcome.

Comments are invited on the proposed EEC Scheme Notification *pro forma* which is referred to in 4.9 and 5.7 and is available at www.ofgem.gov.uk.

### Compliance

5.14 Ofgem welcomes views on whether it might be appropriate to conduct monitoring additional to auditing, such as mystery shopping.

### **Qualifying action**

6.9 Ofgem welcomes comments on the proposed principles which will be taken into consideration when determining whether a proposed action is a qualifying action, particularly

ii) (b) Comments are invited where CFLs are provided for free and person-toperson and Ofgem is proposing that the consumer be asked if they wish to receive the lamps and that they should provide their name and address as evidence of this. ii) (d) Views are welcomed on the proposal that where more than two CFLs are provided for free, a mixture of wattage and lamp type should be offered to the consumer.

vii) (a) Comments are invited on the proposal to require DIY loft insulation schemes to increase sales by 20% and that this should be achieved in relation to previous sales levels for 2001 or a later year if the retailer has not partnered with a supplier during the 2001 Order.

vii) (a) Ofgem welcomes the views of consultees on whether it is appropriate to use a 20% increase on 2001 sales for CFLs also. Views are invited on any alternative methods of demonstrating additionality for this measure.

vii) (b) Consultees are also asked to consider whether additionality in retail appliance schemes should be demonstrated by the retailer increasing the proportion of A, A + and A + + appliances sold over those with a lower energy rating.

6.17 Ofgem invites consultees to suggest ways of conducting robust sampling to determine the proportion of households benefiting from a scheme who are within the Priority Group.

### Determining improvements in energy efficiency

7.17 Views are encouraged on Ofgem's proposals to calculate one set of energy savings for loft insulation, dependant upon the depth of the insulation installed and type of material used for insulation.

7.29 Ofgem welcomes comments on applying a 12.5% correction factor to DIY loft insulation, following the monitoring results of the suppliers' activity under the current EEC.

7.43 Views are invited on the proposal to apply a correction factor of 30% to DIY radiator panels to reflect the proportion of the housing stock which is suitable for this measure.

7.45 Comments are welcomed on the proposal to quantify separately the energy savings for lamps installed in low-use fittings.

7.52 Ofgem invites views on the three delivery routes identified for the direct delivery of lamps and the limits on the number of lamps which can be provided in each case.

7.57 Comments are welcome on the proposal to determine separately the energy savings for A, A + and A+ + rated appliances.

7.70 Ofgem invites views on the proposal to maintain a distinction when calculating the energy savings from boiler upgrades and exemptions or exceptions to the Building Regulations.

7.76 For schemes involving fuel switching, comments are welcome on maintaining a distinction between partial and full heating systems.

### Monitoring

8.4 Views are welcome on the proposals to monitor consumers receiving loft insulation or radiator panels for DIY installation or CFLs to help inform Defra's review of the EEC in 2007 and the EEC post 2008.

8.6 Ofgem welcomes views on suppliers using standard questions when monitoring their actions under the EEC 2005 – 2008.

8.10 and 8.27 Ofgem invites views on the proposal for suppliers to continue monitoring consumer satisfaction only for those schemes involving professionally installed insulation and heating measures.

### Views invited

2.2. Comments are invited on the proposals raised in this document. These should be sent to:

Fiona Kenyon Environmental Affairs Directorate Ofgem 9 Millbank London SW1P 3GE Email: eec@ofgem.gov.uk Telephone: 020 7901 7155 Fax: 020 7901 7387

The closing date for responses is Monday 13 September 2004.

### Contact

2.3. If you wish to discuss this consultation paper, please contact Kate Smith at the address above or on 020 7901 7488.

### Confidentiality

2.4. All responses will normally be published on the Ofgem website and held electronically in the Ofgem Research and Information Centre unless they are marked confidential. Respondents should try to confine confidential information to the appendices of their responses. Ofgem would prefer to receive nonconfidential responses and to receive responses in an electronic form.

# 3. Energy efficiency targets

3.1. This chapter covers Ofgem's interpretation of the way a supplier's energy efficiency target would be determined and altered as currently provided for in the draft of the Order.

## The overall energy efficiency target

3.2. Article 2(1) proposes that the overall target for the promotion of improvements in energy efficiency in relation to domestic consumers in Great Britain for the period 1 April 2005 to 31 March 2008 is 130 fuel-standardised tera watt hours (TWh). The illustrative mix used to establish this proposed target is given in Defra's Consultation Proposals.

## Energy efficiency obligations

- 3.3. Article 4(1) of the draft Order requires Ofgem to determine an energy efficiency target to be achieved by suppliers who supply at least 15,000 domestic consumers. In relation to this provision, Ofgem understands that where a supply business holds a number of licences, the intention is that the 15,000 minimum applies to the supply business and not to each licensee individually. Accordingly, a licensee within the supply business that does not reach the 15,000 consumer minimum individually may still be subject to a target. Ofgem is currently clarifying this matter with Defra.
- 3.4. To comply with its energy efficiency obligation, a supplier must achieve the latest energy efficiency target determined for it by Ofgem by 31 March 2008.Ofgem must notify each supplier of its target by 31 January each year.
- 3.5. Article 3 states that the energy efficiency target must be met by actions approved as qualifying actions where at least 50% of the total improvement in energy efficiency resulting from those actions are achieved in relation to those consumers who are in receipt of at least one of the benefit or tax credits listed in the Schedule to the draft of the Order.

### Defining a supplier

3.6. Article 1 (2) defines a supplier as:

"An electricity supplier or a gas supplier who supplies at least 15,000 domestic consumers (including those supplied by his holding company or subsidiary or by any subsidiary of such a holding company, where "holding company" and "subsidiary" have the same meaning as in section 736 of the Companies Act 1985)."

- 3.7. The energy efficiency target is required to be achieved by the licensee and failure to satisfy the energy efficiency obligation is a breach of a relevant requirement of the particular licence.
- 3.8. In accordance with article 1(3), a person who ceases to be a supplier as defined in the draft Order, after 31 December 2004 (ie, has less than 15,000 domestic consumers, including the domestic consumers of the other members of the group of companies to which it belongs) will continue to be treated as a supplier and will therefore remain subject to an energy efficiency target to be met by 31 March 2008.

### Defining a domestic consumer

3.9. A domestic consumer is defined in article 1 (2) as:

a person supplied with electricity or gas at domestic premises for domestic purposes."

3.10. Ofgem has asked Defra to consider changing the requirement for the purpose of establishing whether a supplier will have an energy efficiency obligation from one in respect of domestic consumers to one in respect of domestic customers as domestic customer is defined within the supply licence. In that case, a domestic customer would be:

"a customer supplied or requiring to be supplied with electricity at domestic premises (but excluding such customer in so far as he is supplied or requires to be supplied at premises other than domestic premises)." 3.11. Where electricity or gas is supplied to a domestic consumer (or customer as the case may be) at non-domestic premises, the supply to the non-domestic premises is not relevant for the purposes of the energy efficiency obligation.

### The criteria in the draft Order

- 3.12. Article 4(1) of the draft Order states that if a supplier is a supplier on 31 December 2004, it shall be required to achieve its target from 1 April 2005. If the supplier is a supplier on a subsequent 31 December, the supplier will have a target from the following 1 April. The draft Order also makes provision for Ofgem to alter a target from 1 April subsequent to it being set. Should the draft Order be changed to reflect the 15,000 consumer (or customer as the case may be) limit applying to a supply business instead of an individual supplier, the provision will need to be redrafted.
- 3.13. A supplier's energy efficiency target shall be determined or altered by reference to the following criteria:
  - The overall target under article 2 (1),
  - The total number of domestic consumers supplied in Great Britain on the preceding 31 December,
  - The number of domestic consumers supplied by the supplier on 31 December 2004 and any anniversary of that date,
  - The time available for its achievement, and
  - The relevant adjustment factor.

### Figure 3.1 The relevant adjustment factor

[8.94 + InN-In(1 + 0.00008N)] / 18.1284 Where N is the number of domestic consumers supplied by a supplier divided by 1,000

In is the natural logarithm

3.14. The relevant adjustment factor included in article 4(3) of the draft Order has been revised by Defra and therefore the relevant adjustment factor presented in

Figure 3.1 above differs to that in Defra's consultation. Figure 3.2 below provides an illustration of how the relevant adjustment factor is applied to domestic consumer numbers to provide an EEC-adjusted number for target setting.

Domestic consumer	Relevant adjustment	EEC-adjusted
numbers	factor	consumer numbers
15,000	0.642	9,637
50,000	0.709	35,436
100,000	0.747	74,674
1,000,000	0.870	869,950
15,000,000	0.980	14,701,254

### Figure 3.2 Example EEC adjusted consumer numbers

- 3.15. The relevant adjustment factor has been devised by Defra with the intention of apportioning the overall energy efficiency target between suppliers in such a way that progressively tighter energy efficiency targets are imposed on suppliers with greater numbers of domestic consumers. In order to neutralise the benefit for supply businesses holding a number of consumers on a number of licenses, Ofgem is proposing to apply the relevant adjustment factor to the total consumer numbers within a supply business group. The resultant figure will then be apportioned between each licensee in the business in relation to the number of domestic consumers (or customers, as the case may be) supplied by each supply licensee in the business.
- 3.16. Ofgem and Defra are currently considering refinement of the criteria contained within article 4(2) in relation to the averaging of the number of domestic consumers over the period of the Order (or domestic customers, as the case may be) for target setting purposes and reconsideration of the definition of N to allow for averaging each supplier's domestic consumer numbers (or customer numbers as the case may be) over the three years of the EEC.

## Determining the energy efficiency targets on 31 January 2005

- 3.17. Article 4 (4) states that a supplier shall notify Ofgem by 14 January each year of the number of domestic consumers supplied by it on the preceding 31 December. Accordingly, for the first year, notification must be received by Ofgem by 14 January 2005.
- 3.18. Due to the definition of "supplier" in article 1(2), this notification would need to include details of the structure of the group to which the supplier company belongs and should detail the number of domestic consumers supplied by the holding company, or subsidiary, or by any subsidiary of the holding company. This information would still be needed should changes to the draft Order be made according to Ofgem's suggestions.
- 3.19. Under the draft Order, where a supplier has at least 15,000 domestic consumers on 31 December 2004, it will be subject to an energy efficiency obligation and an energy efficiency target will be set for it. The number of the supplier's domestic consumers would be multiplied by the relevant adjustment factor set out in article 4(3) to determine the supplier's EEC-adjusted domestic consumer numbers. Ofgem will then apportion the overall target of 130 TWh between suppliers in proportion to their EEC-adjusted domestic consumer numbers. The resulting figure (in GWh), will be the supplier's energy efficiency target.
- 3.20. In the case of the draft Order being revised as suggested above; i.e. where a group's supply business supplies at least 15,000 domestic customers, the group's supply business total customer numbers would be EEC-adjusted. The overall target of 130 TWh would be apportioned between group supply businesses and obligated suppliers that are not part of a group supply business in proportion to their EEC-adjusted domestic customer numbers. The resultant figure would be apportioned between each licensee in the group in relation to the number of domestic customers it supplies.
- 3.21. Under article 4 (5) of the draft Order, Ofgem will notify each supplier by 31January 2005 of the energy efficiency target to be achieved by it from 1 April 2005.

# Determining and altering the energy efficiency targets by 31 January 2006

- 3.22. Article 4 (4) states that a supplier shall notify Ofgem by 14 January 2006 of its number of domestic consumers supplied on 31 December 2005. This notification would need to include details of the structure of the group to which the supplier company belongs and should detail the number of domestic consumers supplied by the holding company, or subsidiary, or by any subsidiary of the holding company. This information would still be needed should changes to the draft Order be made according to Ofgem's suggestions.
- 3.23. Where a supplier has at least 15,000 domestic consumers on 31 December 2004 and / or on 31 December 2005 their average domestic consumer numbers on these dates will be calculated.
- 3.24. Where a supply licensee is not a supplier for the purposes of the draft Order on both 31 December 2004 and on 31 December 2005, but is considered to be a supplier on one of those dates, they will be subject to an energy efficiency target. On the date when a licensed supplier is not considered to be a supplier for the purposes of the draft of the Order it will be considered to have zero domestic consumers for the purpose of calculating its average domestic consumer numbers.
- 3.25. The average number of the supplier's domestic consumers will be multiplied by the relevant adjustment factor set out in article 4(3). Ofgem will then apportion the overall target of 130 TWh between suppliers in proportion to their EEC-adjusted domestic consumer numbers. The resulting figure (in GWh), will be the supplier's energy efficiency target.
- 3.26. Under article 4 (5) of the draft Order, Ofgem will notify each supplier by 31 January 2006 of the energy efficiency target to be achieved by it from 1 April 2006.
- 3.27. Should the draft Order be revised in the way proposed by Ofgem in relation to group supply businesses, these provisions will need to be redrafted.

# Determining and altering the energy efficiency targets by 31 January 2007

- 3.28. Article 4 (4) states that a supplier shall notify Ofgem by 14 January 2007 of its number of domestic consumers supplied on 31 December 2006. This notification would need to include details of the structure of the group to which the supplier company belongs and should detail the number of domestic consumers supplied by the holding company, or subsidiary, or by any subsidiary of the holding company. This information would still be needed should changes to the draft Order be made according to Ofgem's suggestions.
- 3.29. Where a supplier has at least 15,000 domestic consumers on 31 December 2004, 31 December 2005 or on 31 December 2006 their average consumer numbers on these dates will be calculated.
- 3.30. Where a supply licensee is not a supplier for the purposes of the draft Order on 31 December 2004 and on 31 December 2005 and on 31 December 2006 inclusive but is considered to be a supplier on at least one of those dates, they will be subject to an energy efficiency target. On the date(s) when a licensed supplier is not considered to be a supplier for the purposes of the draft Order they will be considered to have zero domestic consumers for the purpose of calculating their average domestic consumer numbers.
- 3.31. The average number of the supplier's domestic consumers will be multiplied by the relevant adjustment factor set out in article 4(3). Ofgem will then apportion the overall target of 130 TWh between suppliers in proportion to their EEC-adjusted domestic consumer numbers. The resulting figure (in GWh), will be the supplier's energy efficiency target.
- 3.32. Under article 4 (5) of the draft Order, Ofgem will notify each supplier by 31 January 2007 of the energy efficiency target to be achieved by it from 1 April 2007.
- 3.33. Should the draft Order be revised in the way proposed by Ofgem in relation to group supply businesses, these provisions will need to be redrafted.

# Timetable for determining and altering the energy efficiency targets

3.34. Figure 3.3 below sets out the timetable for determining and altering each supplier's energy efficiency target.

Date of domestic	Supplier provides	Ofgem notifies
consumer numbers	domestic consumer	suppliers of their
	numbers to Ofgem	targets
31 December 2004	By 14 January 2005	By 31 January 2005
31 December 2005	By 14 January 2006	By 31 January 2006
31 December 2006	By 14 January 2007	By 31 January 2007

### Figure 3.3 Timetable for determining and altering energy efficiency targets

### Changes to the Order

3.35. Defra's Consultation states that, in the event of unforeseen circumstances, it may be necessary for a supplier's energy efficiency target to be altered. If the Order is amended for this reason, Ofgem's procedures for determining or altering a supplier's target will change accordingly.

# 4. Suppliers' proposed actions

4.1. This chapter sets out the procedures by which Ofgem proposes to administer the EEC on the basis of the draft Order. These procedures include those for assessing whether a proposed action can be considered a qualifying action and for reporting quarterly to Ofgem.

## **Qualifying actions**

- 4.2. Under article 5(1) of the draft Order, a supplier is required to notify Ofgem of any proposed action which it intends is to qualify for the purpose of meeting the whole or part of its energy efficiency target. The supplier must indicate how the proposed action would contribute, if at all, to achieving 50% of the total improvement in energy efficiency resulting from its actions in relation to consumers in the Priority Group.
- 4.3. For the purpose of administering the draft Order, 'actions' will be referred to as schemes.
- 4.4. It is important to note that the draft of the Order requires at least 50% of the total improvement in energy efficiency resulting from actions approved as qualifying actions to result from actions achieved in relation to the Priority Group.
  Therefore, an individual action is not required to meet the Priority Group test, provided that on the date that the target must be achieved, 31 March 2008, the Priority Group requirement has been met.
- 4.5. Article 5(2) states that Ofgem may approve as qualifying action an action that a supplier has notified to it under article 5(1)(a) if it is satisfied that the action would result in improvements in energy efficiency. The supplier must be able to demonstrate that its activity causes the improvement in energy efficiency. Ofgem will consider whether a proposed action is a qualifying action on a case-by-case basis. However, in order to be satisfied that a proposed action would result in an improvement in energy efficiency, Ofgem will take account of the factors set out in Chapter 6 of this document.
- 4.6. Under article 5(3), Ofgem is required to estimate what improvement in energy efficiency would be attributable to the notified action, or to any result of that

action if it were taken. This estimation will be made using the information set out in Chapter 7. Ofgem will then notify the supplier accordingly.

- 4.7. Any changes made to an action which has been approved as a qualifying action may mean that that action can no longer be considered qualifying. In such a situation, suppliers should again notify Ofgem under article 5(1) of the draft Order. Ofgem will assess whether the action can be considered a qualifying action and will estimate what improvement in energy efficiency would be attributed to that action, or to any result of that action, if it were taken as notified.
- 4.8. Ofgem can only determine the improvement in energy efficiency attributable to a qualifying action after that action has been taken and it is the determination of the improvement in energy efficiency attributable, if any, which will count towards a supplier's obligation under article 3.

### Format for notifications of proposed actions

- 4.9. Notifications under article 5(1) should consist of two pro forma. The first pro forma is the EEC Scheme Spreadsheet, which will be made available to suppliers. It details the improvement in energy efficiency (known as "energy savings" on the spreadsheet) attributable to the standard energy efficiency measures. Suppliers should use the EEC Scheme Spreadsheet to indicate which measures, and how many, they propose to deliver. The second pro forma, is the EEC Scheme Notification pro forma. This provides the format for a written description of the proposed action and how the improvement in energy efficiency resulting from the action may be achieved in relation to the Priority Group. The proposed EEC Scheme Notification pro forma is available on Ofgem's website (www.ofgem.gov.uk). Hard copies of the EEC Scheme pro forma can be obtained from Ofgem using the details in Chapter 2.
- 4.10. The EEC Scheme Notification *pro forma* will include a checklist to ensure that the necessary information has been provided to demonstrate an improvement in energy efficiency. If all the relevant information has not been provided then the notification will not be considered to be complete. In that case, Ofgem will be unable to assess whether the proposed action can be considered qualifying action.

4.11. Suppliers must provide notifications under article 5(1) in writing, ideally in an electronic format and emailed to eec@ofgem.gov.uk.

### Timescales for notifications of proposed actions

- 4.12. Suppliers are invited to begin providing notifications of proposed actions under article 5(1) from 3 January 2005. The schedule in Appendix 1 provides guidance on the timeframes in which Ofgem aims to assess proposed actions should notifications be provided by the dates specified and provided that all the necessary information is provided.
- 4.13. The draft Order requires suppliers to notify Ofgem of their proposed actions before those actions are begun, with the exception of those actions undertaken during the current EEC. Ofgem is currently discussing revising the draft Order to give suppliers more flexibility, whilst ensuring that it can administer the Order effectively. Ofgem's proposals are for suppliers to notify them of their proposed action within one month of that action starting. Any such change will be reflected within the final version of Ofgem's administration procedures.

### Carrying forward energy savings from the EEC 2002 - 2005

- 4.14. Article 5(7) of the draft Order makes provision for action taken by a supplier during April 2002 March 2005, which does not count towards its target under the Electricity and Gas (Energy Efficiency Obligations) Order 2001 ('the 2001 Order') to be counted towards its target under the EEC 2005 2008.
- 4.15. Suppliers shall notify Ofgem of actions taken during April 2002 March 2005 under article 5(1). Ofgem may then approve this action if it is satisfied that it will result in an improvement in energy efficiency. Ofgem shall determine what improvement in energy efficiency is to be attributed to the action or to any result of that action, under article 5(5). In order to be able to make this determination the action must have been approved as a qualifying action under the 2001 Order. The process for this is set out below.
- 4.16. The 2001 Order requires that a supplier meets its target by 31 March 2005. Ofgem's Administration Procedures for that Order require suppliers to submit their scheme completion reports by 30 April 2005. This deadline includes any

EEC 2002 – 2005 schemes of which suppliers are intending to carry over all or part of the energy savings to the EEC post April 2005.

- 4.17. As set out in Ofgem's Administration Procedures for the 2001 Order, once all of a supplier's actions have been approved, Ofgem will assess the improvements in energy efficiency to be attributed to the supplier's total approved activity. It will then determine whether at least 50 per cent of the supplier's energy saving activity counting towards its target, has been achieved in relation to domestic consumers within the Priority Group. Where this requirement is satisfied, Ofgem will determine that the action taken by the suppler is a qualifying action. Following this process Ofgem can decide whether, and by how much, a supplier has exceeded its target under the 2001 Order.
- 4.18. In order to be counted under the draft Order, a supplier must identify any measures that it has delivered between 1 April 2002 and 31 March 2005 and which equate to improvements in energy efficiency that have not counted towards the target under the 2001 Order. Such actions must be notified to Ofgem under article 5(1) to be considered as contributing towards an energy efficiency target under the Order. The action may then be approved as a qualifying action under article 5(2) and Ofgem will be required to determine the improvement in energy efficiency to be attributed to the result of that action under article 5(5) of the draft Order. Under the 2001 Order Ofgem is required to report to the Secretary of State by 31 July 2005 to outline each supplier's compliance. To enable Ofgem to provide a full and accurate report, notifications of proposed carry over action should be received by Ofgem by 30 April 2005.

### **Transfers**

### Transferring qualifying action

4.19. Under article 6(a) of the draft Order, Ofgem may agree to the whole or part of a supplier's energy efficiency target being treated as having been achieved by an action, approved by Ofgem as qualifying action, that is undertaken by another supplier. Suppliers wishing to transfer qualifying action must make a written request to Ofgem.

4.20. Ofgem considers it reasonable to withhold agreement to such a written request if notification under article 5(4) has not been provided for the qualifying action to be transferred (ie, that the action that Ofgem approved as a qualifying action has not been taken) and Ofgem has not determined the energy efficiency improvement to be attributed to the action. This requirement will aid the administration of transfers within the EEC. Alternatively, the transfer of a qualifying action from one supplier to another may restrict one supplier's ability to demonstrate compliance with their obligation. In such a case, Ofgem may consider it reasonable to withhold agreement to a transfer.

### **Transferring targets**

- 4.21. Under article 6 (b), Ofgem may agree to the whole or part of a supplier's energy efficiency target being transferred to another supplier. Suppliers wishing to make such a transfer must make a written request to Ofgem. If the transfer is agreed, Ofgem will transfer the target to the relevant supplier by adding it to their existing target.
- 4.22. Ofgem appreciates that a group's supply business may choose to deal with its supply licensees' obligations centrally and anticipates requests for transfers of targets to a single licensee in the group on this basis.

## Quarterly reports

4.23. In order to report to the Secretary of State annually as required in the draft Order, under the monitoring provisions in article 7, Ofgem requires quarterly reports from each supplier to provide information relating to its qualifying actions. This information should be provided using the Quarterly Progress Report *pro-forma*, which will be provided to suppliers at the times stated below in Figure 4.1.

Quarter	Ofgem provides the pro	Suppliers return the
	forma to suppliers	completed pro forma
1 January – 30 June 2005	28 June 2005	11 July 2005
1 July – 30 September 2005	28 September 2005	11 October 2005
1 October – 31 December 2005	29 December 2005	11 January 2006
1 January – 31 March 2006	29 March 2006	1 April 2006
1 April – 30 June 2006	28 June 2006	10 July 2006
1 July – 30 September 2006	28 September 2006	10 October 2006
1 October – 31 December 2006	27 December 2006	10 January 2007
1 January – 31 March 2007	29 March 2007	10 April 2007
1 April – 30 June 2007	28 June 2007	10 July 2007
1 July – 30 September 2007	27 September 2007	9 October 2007
1 October – 31 December 2007	27 December 2007	10 January 2008
1 January – 31 March 2008	27 March 2008	9 April 2008

### Figure 4.1 Schedule for processing quarterly reports

- 4.24. Suppliers will only be required to detail those actions which have been approved as qualifying actions under article 5 (2) of the draft Order.
- 4.25. Ofgem proposes that suppliers also detail the number of cavity wall insulations they have installed each quarter.

## Annual reports

4.26. Under article 8, Ofgem is required to report to the Secretary of State each year on the progress made by each supplier towards complying with its energy

efficiency obligation and the progress made towards achieving the overall target of 130 TWh.

4.27. Suppliers are encouraged to produce reports on their progress towards complying with their energy efficiency obligations, as Ofgem considers it important that suppliers make information on their progress available to consumers and so that they know how they can benefit from measures that result in improvements in energy efficiency.

# 5. Compliance

5.1. This chapter sets out how Ofgem will determine the improvements in energy efficiency to be attributed to completed actions. Procedures for auditing and for determining compliance with a supplier's energy efficiency obligation are also detailed.

## Determining improvements in energy efficiency

- 5.2. Article 5(4) requires a supplier to notify Ofgem when an action has been taken.Ideally this notification will be as soon as possible after completion of the action and by 30 April 2008 at the end of the programme.
- 5.3. Once Ofgem has received this notification it shall determine what improvement in energy efficiency is to be attributed to the action or to any result of it, under article 5(5) of the draft Order. In order to be able to make this determination, the notification must detail all of the relevant information, including monitoring information as set out in Chapter 8.
- 5.4. Ofgem will notify the supplier of its determination as to what improvement in energy efficiency is to be attributed to the action.
- 5.5. In order to demonstrate compliance with its energy efficiency target, as set out in article 3, a supplier must demonstrate what proportion of the improvements in energy efficiency resulted from actions achieved in relation to domestic consumers in the Priority Group. In order for Ofgem to make this assessment, suppliers will be expected to be able to provide Ofgem with the types of evidence set out in Chapter 6 when making a notification under article 5(4).

### Format for notifications of actions taken

- 5.6. Notifications under article 5(4) should consist of two *pro forma*. The first *pro forma* is the EEC Scheme Spreadsheet. Suppliers should use the EEC Scheme Spreadsheet to indicate which measures, and how many, they have delivered.
- 5.7. The second *pro forma*, the EEC Scheme Notification *pro forma*, provides the format for a written description of the action taken and how it was achieved in

other relevant supporting evidence will also need to be included when making a notification under article 5(4), as set out in Chapter 8. The EEC Scheme Notification *pro forma* will include a checklist to ensure that the necessary information has been provided to enable Ofgem to determine the improvement in energy efficiency to be attributed to the actions taken by the supplier. If all the relevant information has not been provided then the notification will not be considered to be complete and Ofgem will be unable to make this determination. The proposed EEC Scheme Notification *pro forma* is available on Ofgem's website (www.ofgem.gov.uk). Hard copies of the EEC Scheme *pro forma* can be obtained from Ofgem using the details in Chapter 2.

5.8. Suppliers must provide notifications under article 5(4) of the draft Order in writing, ideally in an electronic format emailed to eec@ofgem.gov.uk.

### Timescales for notifications of actions taken

5.9. Ofgem will assess notifications made under this article according to the schedule in Appendix 1. The schedule provides guidance on the timeframes in which Ofgem aims to assess completed actions provided that all the necessary information is provided. As stated above, all notifications under Article 5(4) must be received by 30 April 2008. However, Ofgem encourages suppliers to make such notifications as soon as possible after an action has been taken in order to aid its administration of the Order.

### **Completion and progress reports**

- 5.10. A supplier can make notifications under article 5(4) once all of an action has been taken (known as a Completion Report). Ofgem will also accept notifications when part of an action has been taken (known as a Progress Report).
- 5.11. Making a notification in the case of part of an action being taken when a scheme is part of the way through enables Ofgem to determine what improvement in energy efficiency should be attributed in relation to completed measures to date. For example, if a supplier proposes an action to deliver insulation over the three years of the Order, it can either submit one completion report at the end or submit a progress report in each of the three years. This has been designed to improve the administration of the Order. Progress reports will be cumulative

until an action is completed in full. Once a suitable point has been reached in the delivery of a scheme, suppliers can and are encouraged by Ofgem to issue a notification to Ofgem. Ofgem can then determine the improvement in energy efficiency attributable to that action.

## Auditing

- 5.12. Ofgem considers it important to audit a sample of each supplier's schemes. Under article 7, each supplier shall provide information to Ofgem relating to its proposals for complying with its energy efficiency obligation.
- 5.13. Ofgem will appoint an independent auditor to carry out the audits and proposes that two rounds of auditing are conducted during the period of the Order, one round in 2006 and the second round from late 2007 and including the first quarter of 2008. Auditing will ascertain whether:
  - the proposed actions are being delivered as notified under article 5(1),
  - there is evidence of the actions being performed, specifically the types and numbers of measures purchased by domestic consumers or installed by the supplier, and that contracts are in place with any project partners identified.
  - there is accurate monitoring of those in relation to whom actions are taken to determine whether they are within the Priority Group, and
  - procedures are in place for technical monitoring or for any other monitoring required for an action.
- 5.14. Ofgem proposes that it may be appropriate to conduct an alternative form of monitoring, such as mystery shopping, to audit the delivery of measures for which improvements in energy efficiency are claimed.

## Compliance with the energy efficiency obligations

5.15. As set out in article 3, the supplier's energy efficiency target must be met by actions approved as qualifying actions where at least 50% of the total

improvement in energy efficiency resulting from those actions is achieved in relation to domestic consumers in the Priority Group.

- 5.16. Ofgem will only be in a position to determine whether a supplier has met its energy efficiency obligation after 31 March 2008, once it has determined the improvement in energy efficiency to be attributed to all actions taken by the supplier.
- 5.17. As set out in article 9, any requirement placed on a supplier under the Order is a relevant requirement for the purposes of Part 1 of the Gas Act 1986 and Part 1 of the Electricity Act 1989. The Authority shall take enforcement action if it is satisfied that a supplier is contravening, or is likely to contravene, a relevant requirement. Such action may be by way of an order for securing compliance and/or by the imposition of a penalty.

# 6. Qualifying action

6.1. Chapter 4 covers the proposed procedures for suppliers notifying Ofgem of their proposed activity. This chapter details the criteria that Ofgem will use to assess whether a proposed action can be approved as a qualifying action under article 5(2) of the draft Order.

## Definition of a qualifying action

- 6.2. Under article 5(2) of the draft Order, a 'qualifying action' is an action which Ofgem is satisfied would result in improvements in energy efficiency. Ofgem will assess the improvement in energy efficiency in terms of a lifetime-discounted, fuel-standardised energy saving. This is in line with the way in which Defra propose to set the overall target.
- 6.3. Under article 1(2), energy efficiency includes improvements in energy efficiency in the use by consumers of gas, electricity, liquid petroleum gas (LPG), oil or coal.
- 6.4. Qualifying actions must be achieved in relation to domestic consumers. A domestic consumer is defined in article 1(2) of the draft Order as "a person supplied with electricity or gas at domestic premises for domestic purposes."
  Suppliers are not limited to assisting their own domestic consumers and can achieve improvements in energy efficiency in relation to any domestic consumer in Great Britain.

# Criteria to establish whether a proposed action would result in improvements in energy efficiency

- 6.5. Under article 5(2) of the draft Order, Ofgem will assess whether it is satisfied that a supplier's proposed action will result in improvements in energy efficiency. Action taken by a supplier will involve the provision or installation of an energy efficiency measure.
- 6.6. Throughout this document, an energy efficiency measure refers to a single product eg, a low-energy light bulb or an energy efficient fridge-freezer, or to a

single installation of a product eg, the installation of insulation within a cavity wall or loft, or the installation of an energy efficient boiler.

- 6.7. The action a supplier takes to achieve the energy efficiency improvement is termed the 'delivery mechanism'. Ofgem acknowledges that a supplier may be working with different project partners eg, measure manufacturers, retailers, installers or social housing partners, and that the measure may be delivered to the consumer in different ways eg, through mail-order, a retail store for self-installation or professionally installed through a third-party contractor.
- 6.8. In order to assess whether a proposed action can be considered as a qualifying action, Ofgem must be satisfied that an improvement in energy efficiency will result:
  - i. through the measure or measures to be delivered or installed,
  - ii. through the way in which a supplier proposes to undertake the action,
  - iii. in relation to domestic consumers,
  - iv. in Great Britain,
  - v. which is additional to that required to be achieved by minimum legal requirements,
  - vi. which is additional to the improvement that would be achieved by the project partner without the supplier's funding,
  - vii. due to the supplier's activity and not due to other external factors.
- 6.9. Ofgem will assess whether a proposed action is qualifying on a case-by-case basis. The principles which will be taken into consideration are set out below;
  - Ofgem must be satisfied the measures delivered through a supplier's action will result in an improvement in energy efficiency. Defra has included a list of measures within the illustrative mix for the EEC 2005-2008 (Tables 1 to 3 of Defra's consultation document). Ofgem is satisfied that these measures, and several others delivered under the 2001 Order, would result in an improvement in energy efficiency provided that they are appropriately and correctly installed and that they are used.

- Ofgem must be satisfied that the way in which a supplier proposes to undertake the action will result in an improvement in energy efficiency.
   For delivery mechanisms involving consumer self-installation, Ofgem must be satisfied that the consumer will install the measure correctly and that there will be an improvement in energy efficiency. Ofgem proposes that the following principles should apply when assessing whether this is likely to be the case.
  - (a) If the measure requires no cost contribution from the consumer, the measure must either be professionally installed within the consumer's property eg, loft or cavity wall insulation; or for selfinstallation measures eg, low energy lamps, the consumer must request the measure(s) either in writing or by telephone.
  - (b) Ofgem anticipates that there will be situations where a supplier wishes to provide low energy lamps for free and in person eg, distributing them at a charity event. In such cases, the consumer should be asked if they wish to receive lamps and, if so, Ofgem proposes that the consumer should provide their name and address to help demonstrate this wish. This will give confidence that the measures are needed, will be installed and that an improvement in energy efficiency will result. Ofgem welcomes views on this point or any alternative suggestions as to how the supplier could demonstrate that the consumer has requested the lamps without name and address details being collected.
  - (c) If a supplier offers low energy lamps through a mail-order route with a contribution towards the cost from the consumer, the supplier must offer a choice in the wattage and the number of lamps to maximise the possibility that all of the lamps will be used by the consumer and the anticipated improvement in energy efficiency will be achieved.
  - (d) If a supplier fully funds the provision of lamps to a consumer, Ofgem acknowledges that it may not be practical for the supplier to offer the consumer a choice of wattage or type (ie, stick or decorative) of lamp. To maximise the possibility of the lamps being used, Ofgem

proposes that suppliers should offer a mixture of wattage and lamp type where more than two lamps are being provided for free.

- iii) Ofgem must be satisfied that the action will lead to an improvement in energy efficiency in relation to domestic consumers. An improvement in energy efficiency in relation to commercial consumers is not qualifying for the purposes of a supplier meeting its EEC target.
  - (a) When delivering certain measures in conjunction with a retail partner, the retail partner should identify which sales are made through trade accounts. The supplier should ensure that the sales data provided by the retailer does not include any sales through trade accounts, where appropriate.
- iv) Ofgem must also be satisfied that the action will lead to an improvement in energy efficiency in Great Britain.
  - (a) If a supplier's activity involves the provision or installation of a measure to a consumer, the supplier should ensure that the consumer's home is in Great Britain.
  - (b) If a supplier promotes measures through a retail partner, Ofgem acknowledges the impracticability in identifying the installation location of the purchased measure(s). Ofgem will consider a measure purchased in a retail store within Great Britain as resulting in an improvement in energy efficiency in Great Britain.
- v) Ofgem must be satisfied that a supplier's proposed action will result in an improvement in energy efficiency which is additional to that required to be achieved by minimum legal requirements. For example, the Building Regulations 2000 require reasonable provision to be made for the conservation of fuel and power in dwellings by limiting the heat loss through the fabric of the building, providing space and hot water systems which are energy efficient and providing efficient lighting systems. As households are legally required to meet these regulations, only improvements in energy efficiency above what would be achieved by householders meeting these
requirements will be considered as qualifying action. The Building (Amendment) Regulation's 2001 Approved Document L1<sup>3</sup> is due to be revised later this year, with any changes expected to come into force on 1 April 2005 and 31 December 2005. In relation to the EEC 2005-2008, Ofgem will approve qualifying actions in line with the minimum legal requirements from 1 April 2005. Ofgem will also have regard to any further regulatory changes which take effect within the programmes duration.

- vi) Where a supplier is undertaking action in partnership with third parties, Ofgem must be satisfied that the supplier's proposed action will result in improvements in energy efficiency additional to those that would be achieved by the project partner without the supplier's funding. Ofgem has identified two examples below where it anticipates that this will be particularly relevant. Other cases will be assessed on an individual basis.
  - (a) When partnering with social housing providers (SHPs), a supplier must obtain written confirmation that its involvement has resulted in additional improvements in energy efficiency. A sample declaration form is included in Appendix 2, which should be signed by the SHP to demonstrate additionality.
  - (b) When partnering with manufacturers to improve the energy efficiency performance of a measure at the production stage, a supplier's action must result in improvements in energy efficiency additional to mandatory requirements and those achieved by voluntary industry agreements. It is anticipated that this will be particularly relevant to consumer electronics.
- Vii) Ofgem must be satisfied that the supplier's activity has led to an improvement in energy efficiency and it is not due to other external factors.
  - (a) Where a supplier is undertaking action in conjunction with a retail partner, additionality can be difficult to demonstrate. As such, whilst

<sup>&</sup>lt;sup>3</sup> "Approved Document L1, Conservation of fuel and power in dwellings" 2002 edition, Office of the Deputy Prime Minister

each retail scheme will be considered on a case-by-case basis, Ofgem considers that the supplier should demonstrate a pre-defined percentage increase in sales in order to demonstrate an improvement in energy efficiency as a result of its action. In the case of Do-It-Yourself (DIY) loft insulation and low energy lamps (Compact Fluorescent Lamps CFLs) sold through a retailer, Defra's illustrative mix (Table 1) forecasts that suppliers will be able to achieve 100% and 85% increases in the sales of the respective measures as part of their EEC 2005-2008 activity. Based upon its experience of the current programme, Ofgem does not consider it realistic to expect suppliers to achieve this level of additional sales for each of the measures. In addition, Ofgem considers that it will be appropriate to derive a different pre-defined percentage for CFLs and for DIY loft insulation.

Under the current EEC, suppliers must increase sales by 20% over 2001 levels. Ofgem intends to retain this level of increased sales for DIY loft insulation and proposes that this should be achieved in relation to previous sales levels for 2001 or a later year if the retailer has not partnered with a supplier during the 2001 Order.

For CFLs delivered through a retail partner, Ofgem is unsure whether a percentage increase in sales compared to a previous year is the ideal way for a supplier to demonstrate that its action has lead to an additional improvement in energy efficiency because considerable changes have taken place in this market in the intervening years. Ofgem welcomes the views of consultees on whether it is appropriate to use a 20% increase on 2001 sales. Ofgem would also welcome any suggestions of alternative methods of demonstrating additionality.

For retail schemes involving other measures Ofgem proposes to assess them on a case by case basis.

(b) Suppliers may be able to undertake action in conjunction with other government programmes, such as Warm Front, providing that the supplier can clearly demonstrate that its action has resulted in an improvement in energy efficiency above what would have happened without their involvement. Suppliers cannot be accredited with measures paid for by the Government.

 viii) Heating controls, draught-proofing and set-top boxes have been identified in Defra's draft target-setting model as having low levels of 'business as usual' activity prior to the Order coming into force. Ofgem will therefore not require suppliers to demonstrate additionality when delivering such measures.

Ofgem will not require suppliers to demonstrate additionality for insulation measures which are promoted to and installed in private sector properties. For boiler replacements, suppliers will only be required to demonstrate that its activity will lead to an additional improvement in energy efficiency when the measure is delivered through a retail partnership or in partnership with a SHP. Ofgem will assess such actions on a case-by-case basis.

The current level of sales and market penetration of appliances rated A on the EU energy label is not low. The EEC 2002 – 2005 has led to transformation of the appliance market and it is therefore no longer appropriate to compare the sales of A rated appliances with those prior to the EEC, in 2001. Where suppliers deliver A rated appliances under the EEC post 2005, Ofgem proposes that the retailer must demonstrate that the supplier's action has increased the proportion of A rated appliances (including A + and A + + appliances) sold by the retailer compared to the proportion sold in 2004. Under the Energy Efficiency Recommended programme A + and A + + appliance labels will be introduced from July 2004. At this stage Ofgem considers it likely that these models will be additional, however sales data from July 2004 will inform this decision.

## The Priority Group

- 6.10. To comply with its energy efficiency obligation, each supplier must achieve its energy efficiency target by 31 March 2008. As set out in article 3 of the draft Order, this energy efficiency target must be met by qualifying actions where at least 50% of the improvement in energy efficiency resulting from those actions are achieved within the Priority Group. The Priority Group is defined as those households in receipt of at least one of the qualifying benefits or credits detailed in the Schedule to the draft Order.
- 6.11. In order to demonstrate how an approved action has contributed, if at all, to the Priority Group requirement, suppliers will be required to monitor recipients of measures. Where the action does not involve visiting the consumer's home, suppliers must monitor a random sample of recipients. Notifications of proposed action under article 5(1) should indicate how the action would contribute to the Priority Group and how this will be monitored. The results of the monitoring must then be submitted to Ofgem as part of a notification under article 5(4) of the draft Order so that Ofgem can determine what improvement in energy efficiency is to be attributed to the Priority Group.
- 6.12. Suppliers will generally be expected to conduct their monitoring in the following ways and supply the necessary evidence to Ofgem.
  - i. Where a scheme involves a home visit by the supplier, for example installing insulation or heating measures, Ofgem expects the supplier to ascertain whether the recipient is in the Priority Group at the time of the home visit. Ofgem would expect the supplier to request to be shown evidence of whether the recipient is in the Priority Group, such as the recipient's benefit book and, for Child Tax Credit and Working Tax Credit, their latest Tax Credits Awards Notice to confirm their relevant income.
  - ii. Where a supplier carries out a scheme with a SHP, Ofgem will require sight of a written declaration in the form of that provided in Appendix 2. The SHP should state the percentage of recipients that are in the Priority Group. If the SHP is unaware of the relevant income of those households only receiving Child Tax Credit or Working Tax Credit, then Ofgem would expect the SHP to make all reasonable efforts to obtain this information (for example, if the

scheme involves a home visit, by requesting to be shown the recipient's latest Tax Credits Awards Notice to confirm their relevant income). This declaration should be provided after the scheme has been completed. Alternatively, the project partner can sign the declaration before the scheme has been completed, but must provide written confirmation that the declaration is correct once the project has been completed. A signed hard copy of the declaration should be provided by each SHP. Where it is not possible for the SHP to provide a signed hard copy, the text of the declaration can be emailed to the supplier.

- iii. Where a scheme involves promoting measures through a retailer, Ofgem expects the supplier to survey recipients, for example by providing a questionnaire with the measure that includes a question about whether the recipient is in receipt of any of the qualifying benefits or credits. Where it is not possible to detail each of the qualifying benefits, the supplier should notify Ofgem at the proposal notification stage.
- iv. For schemes such as mail order schemes, where the supplier requires the recipient to fill in a response form, Ofgem expects the response form to include a question about whether the householder is in receipt of any of the benefits described in the draft Order. The full list of qualifying benefits and credits should be included on the response form.
- v. For schemes where measures, such as CFLs, are given out person-to-person suppliers should show the recipient of a measure the list of qualifying benefits and credits and ask them to confirm whether they are in receipt of one of those benefits.
- vi. Where project partners, such as charities, are delivering measures on behalf of suppliers they may not need to survey recipients if they already have knowledge about them, for example if they have been monitored previously. In this situation the project partner should produce a signed letter stating the proportion of recipients who are in the Priority Group and detailing how this information has been derived. The SHP declaration is not appropriate for this purpose.

- vii. Where a scheme is delivered in such a way that it is not appropriate to survey the recipients of the measures, a supplier should not claim an improvement in energy efficiency in relation to the Priority Group.
- viii. In the case of a supplier failing to provide a meaningful proportion of responses (eg with a confidence level of less than one) to any survey carried out, they may provide alternative evidence. Ofgem will review this information and will decide if it is satisfactory evidence. If so, it will determine an appropriate improvement in energy efficiency to be attributed to the Priority Group.
- 6.13. Whilst each action will be assessed on a case-by-case basis, suppliers will generally be expected to monitor a sample of scheme recipients to ensure that it is claiming Priority Group energy savings which are statistically significant at a confidence level of 95% and a confidence interval of 1. Figure 6.1 illustrates the minimum absolute sample sizes which would be required for different combinations of the number of scheme recipients and Priority Group percentages. If a supplier demonstrated the percentage of Priority Group recipients using the minimum sample size outlined in Figure 6.1, the supplier would then claim the proven percentage. For example, if a supplier demonstrated that 10% of recipients of a scheme involving 50,000 recipients were in the Priority Group using a minimum sample size of 3,204 (representing a confidence level of 95% and confidence interval of 1), the supplier would then claim a Priority Group percentage of 10%.
- 6.14. Ofgem also proposes that a supplier could define a minimum sample size using a higher confidence interval if it so wishes. In such cases, the supplier would claim the proven Priority Group percentage minus the confidence interval. For example, if a supplier demonstrated that 10% of recipients of a scheme involving 50,000 recipients were in the Priority Group a reduced sample size which represented a confidence level of 95% and a confidence interval of 2 (ie, using a minimum sample size of 850), the supplier would then claim a Priority Group percentage of 8%.
- 6.15. It should be emphasised that the samples sizes included within Figure 6.1 are for illustrative purposes only the scheme-specific monitoring sample size will need to be calculated at the time of initial scheme notification based upon the

anticipated scale of the supplier's activity. Ofgem acknowledges that the minimum sample sizes for smaller-scale schemes with fewer recipients are disproportionately large. Where a supplier is proposing a small-scale scheme with few recipients Ofgem is proposing to apply an alternative monitoring sample size according to the number of recipients and the expected Priority Group percentage. This will be agreed with the supplier on a case-by-case basis.

6.16. It will be the supplier's responsibility to liaise with Ofgem to adjust the absolute sample size if its activity deviates considerably from its initial notification. The minimum sample size is the number of consumers from which a completed questionnaire should be obtained. The scheme recipient is the consumer to whom the measure was delivered, or in whose house the measure was installed, or who purchased the measure.

Figure 6.1 Calculation of Priority Group monitoring sample sizes based on 95%
confidence level and a confidence interval of 1

	Exp	ected Priority C	Group/non Priori	ty Group perce	ntage (%) of rec	ipients
Number of	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
measure recipients		Statis	stically significal	nt sample size r	required	
5,000	1,328	2,033	2,746	3,076	3,231	3,278
7,500	1,457	2,351	3,360	3,869	4,118	4,194
10,000	1,531	2,551	3,784	4,441	4,773	4,875
25,000	1 <i>,</i> 685	3,011	4,895	6,054	6,687	6,889
50,000	1,744	3,204	5,426	6,888	7,720	7,990
75,000	1,765	3,274	5,629	7,219	8,138	8,439
100,000	1,775	3,310	5,737	7,397	8,365	8,684
250,000	1,794	3,377	5,941	7,741	8,807	9,161
500,000	1 <i>,</i> 801	3,400	6,013	7,862	8,965	9,332
750,000	1,803	3,408	6,037	7,904	9,019	9,390
1,000,000	1,804	3,412	6,049	7,925	9,046	9,420

6.17. Ofgem invites consultees to suggest alternative ways of conducting robust sampling to determine the proportion of households within the Priority Group.

## Defra's consultation

6.18. Defra's consultation seeks views on accrediting the improvement in energy efficiency resulting from partnerships with SHPs in relation to the supplier's financial contribution to that action. Views are also invited on whether the

current incentive for the uplift on energy services activity should continue for the first year of the Order. If provision is made for this within the final Order, Ofgem will amend its administration procedures accordingly.

6.19. Any energy service activity proposed by suppliers will be assessed separately for the purposes of the draft Order and for the trial suspension of the 28 day rule<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Testing domestic consumer take up of energy services: direction to initiate trial suspension of 28 day rule, Ofgem, May 2004. Energy Efficiency Commitment 2005 – 2008

## 7. Improvements in energy efficiency

- 7.1. This chapter sets out the measures included within Defra's target-setting model for the EEC 2005-2008 and outlines how Ofgem proposes to determine the improvement in energy efficiency to be attributed to each supplier's actions. This chapter draws on Ofgem's experience of administering the EEC 2001 Order and, consequently, also covers several other measures not included in the illustrative mix, which suppliers are likely to provide or install as part of their activity towards their EEC targets.
- 7.2. First, the general methodology used to estimate and determine the improvement in energy efficiency is outlined. Each broad group of measures insulation, lighting, heating and appliances is then examined in turn. The final section of this chapter provides guidance on the evaluation of new or innovative measures.

## Estimation and determination of the improvement in energy efficiency

- 7.3. The improvement in energy efficiency attributed to an action will be quantified in terms of a lifetime-discounted, fuel standardised energy saving. Quantifying energy savings in this way is consistent with the way in which Defra has set the overall target in the draft Order. Ofgem will follow a three step process to estimate and determine the improvement in energy efficiency to be attributed to an action.
  - i. An annual energy saving (kWh/a) will be derived for each measure delivered. This will be calculated in a manner consistent with that used by Defra in its target setting model. The annual energy saving will represent the improvement in energy efficiency achieved over the course of a year, by the measure. For the majority of insulation and lighting measures, this will be a comparison of the before and after scenarios with all other relevant circumstances remaining the same; eg, the energy consumption required to heat a home to the same level before and after insulation has been installed. For measures where the consumer would be required to comply with minimum legal requirements eg, the Building Regulations 2000, the energy consumption of the consumer's property after the installation of the measure will be compared to the energy

consumption of a property which has complied with the minimum requirements. This methodology will be relevant for heating measures and all measures installed in new build properties.

- ii. A multiplier will be applied to the annual energy saving of the measure to reflect the carbon content of the fuel type which will be saved by the installation of the measure. This will calculate the annual fuel-standardised energy saving (kWh/a) of the measure. Article 2(2) states the multipliers and the fuel types to which they apply.
- iii. To calculate the lifetime-discounted, fuel standardised energy savings (kWh), the annual fuel-standardised energy saving is applied over the stated lifetime of the measure and discounted by 3.5% annually. The 3.5% discount factor is the standard HM Treasury discount rate and its use is in accordance with Defra's illustrative mix. Ofgem proposes to use measure lifetimes which are in accordance with Defra's illustrative mix.
- 7.4. Under article 5(3) of the draft Order, Ofgem will estimate the improvement in energy efficiency that the measures delivered as part of a supplier's proposed action will achieve, if taken as notified, and notify the supplier accordingly. Ofgem will quantify the improvement in energy efficiency on an *ex ante* basis and, unless the measures delivered as part of the action deviate from those notified to Ofgem, these will be the energy savings determined by Ofgem once the action has been taken. Only in exceptional circumstances will Ofgem consider an *ex post* approval of activity. *Ex post* analysis might be necessary for measures where field trials, for instance, have not yet been completed.
- 7.5. Ofgem will quantify ex ante annual energy savings for the measures likely to be used by suppliers. For measures which are installed into the physical fabric of a consumer's property ie, insulation and heating measures, Ofgem will accredit the energy savings based upon the type of property and the number of bedrooms the property has. As these energy savings will be based upon 'average' floor areas, it is acknowledged that they may not accurately reflect the improvement in energy efficiency achieved in each installation of the measure. However, the use of 'average' energy savings will aid the practicability of administering the Order and the average energy savings should reflect the average improvement in energy efficiency achieved across all suppliers' actions.

- 7.6. In assessing the improvement in energy efficiency from each of the suppliers' schemes Ofgem will use a disaggregation of average property sizes which is representative of the housing stock in Great Britain. The disaggregation will involve a range of property types with a varying number of bedrooms for each and can therefore be expected to conform to the target setting model, where (in Annex 1, Point 9) Defra has assumed that the average house in the Priority Group is smaller by 13%.
- 7.7. For insulation and heating measures, Ofgem will also quantify the improvement in energy efficiency on a fuel-type basis to reflect the different energy demands of the different heating systems in each property type. Ofgem will provide the energy savings for the more common measures in the form of an Excel spreadsheet – the EEC Scheme Spreadsheet – which should be used by suppliers to detail their proposed action. The spreadsheet will estimate the improvement in energy efficiency that an action will result in. All calculations from annual energy savings to lifetime-discounted, fuel standardised energy savings will be done within the EEC Scheme Spreadsheet.
- 7.8. Ofgem does not intend to change the annual energy savings for each measure during the course of the EEC 2005-2008, but does reserve the right to review them in light of new policy or changes to relevant legislation.

## Insulation

## Cavity wall insulation

- 7.9. Ofgem will use the Building Research Establishment's Domestic Energy Model (BREDEM) as the basis for determining the energy savings attributable to cavity wall insulation on a property and fuel type basis.
- 7.10. Ofgem will determine the energy savings for cavity wall insulation using an average cavity width in line with Annex 1, point 33 of Defra's target setting model. As this width is representative of cavities throughout Great Britain, Ofgem will not accredit cavities of greater width with additional energy savings or cavities of a thinner width with less energy savings.
- 7.11. Different energy savings will apply to properties constructed pre and post 1976, due to differences in the thermal characteristics of cavity walls built before and Energy Efficiency Commitment 2005 2008
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after this date. Suppliers must therefore ensure that this information is accurately captured in the site survey.

7.12. Ofgem considers mineral wool insulation, polystyrene beads and Urea Formaldehyde (UF) foam to be appropriate material for insulating cavities and the same improvement in energy efficiency will be attributed to each.

## **Professionally installed loft insulation**

- 7.13. Ofgem will use BREDEM as the basis for determining the energy savings attributable to loft insulation on a property and fuel type basis.
- 7.14. Ofgem proposes to accredit the installation of man-made mineral fibre (MMMF) insulation (ie, glass wool and rock wool) which would achieve a U-value of 0.16W/m<sup>2</sup>K, where the existing depth of insulation is 100mm or less. This has been used as the basis for Defra's target setting model (Annex 1, Point 8). A U-value of 0.16W/m<sup>2</sup>K is the current standard included in Approved Document L1<sup>5</sup>, which provides guidance as to how compliance with the Building Regulations 2000 can be demonstrated.
- 7.15. Ofgem has historically quantified the energy savings resulting from loft insulation based upon the initial depth of insulation, if any, and the depth of insulation installed by a supplier's action. Under the EEC 2002-2005, the loft insulation measure was defined within the EEC Scheme Spreadsheet as an increase in the insulation depth eg, 0mm to 250mm, 25mm to 250mm etc.
- 7.16. However, the calculation of the conductivity of 'formed' loft insulation products was revised during EEC 2002-2005 following the implementation in March 2003 of European standards for thermal insulation products. As a consequence, the depth of insulation that a supplier would have to install to achieve a U-value of  $0.16W/m^2K$  is now different for glass wool and rock wool. As a general rule, a depth of 270mm of insulation is required for glass wool, whereas 250mm is required for rock wool. This difference in depth is due to the difference in thermal conductivity ( $\lambda$ ), and hence the thermal resistance (R), of the two types of insulation.

<sup>&</sup>lt;sup>5</sup> "Approved Document L1, Conservation of fuel and power in dwellings" 2002 edition, Office of the Deputy Prime Minister Energy Efficiency Commitment 2005 – 2008

7.17. Ofgem proposes to calculate one set of energy savings which will cover the insulation of an empty loft and the top-up from various levels of existing insulation. Ofgem will attribute these energy savings to a supplier's action providing that the insulation product installed has the resistance (R) value outlined in Figure 7.1. This applies whether the insulation is installed as a 'formed' product or as a 'blown' product. The manufacturer is legally required to display the product's R value on the product packaging and this is the value the supplier should refer to.

Figure 7.1 The resistance (R) value of the loft insulation required to achieve a U-value of 0.16  $W/m^2 K$ 

	Depth of insulation prior to installation (mm)				
	0	25	50	75	100
Thermal resistance R (m <sup>2</sup> K/W)	6.25	5.625	5.00	4.375	3.75

Ofgem has assumed a thermal conductivity ( $\lambda$ ) of 0.04W/mK for existing insulation

- 7.18. In order to ensure that the energy savings attributable to loft insulation are actually achieved, Ofgem needs to be satisfied that the insulation conformed to the specified quality standards. Where 'formed' loft insulation products are professionally installed, the insulation must be laid across the joists where above the level of the joists, and the loft hatch must be insulated and draught sealed.
- 7.19. Other insulation materials may have their savings independently verified through the new products procedure, which is outlined in later in this chapter.

### **DIY loft insulation**

- 7.20. Within Defra's target-setting model, the energy savings attributable to DIY loft insulation have been quantified on the basis that 460,000 households will be insulated (Table 1). Ofgem's experience of administering the EEC 2002-2005 indicates that suppliers are likely to deliver the vast majority of DIY loft insulation in partnership with retailers, by promoting rolls of loft insulation products.
- 7.21. For this reason, Ofgem will determine the energy savings attributable to loft insulation on a square metre basis for each of the qualifying fuel types. Ofgem proposes that suppliers should be accredited with energy savings resulting from the promotion of products with a minimum thermal resistance (R value) of

2.27m<sup>2</sup>K/W, 3.86m<sup>2</sup>K/W and 4.55m<sup>2</sup>K/W. These values are based upon a thermal conductivity ( $\lambda$ ) of 0.044W/mK.

- 7.22. Ofgem is aware that some of the insulation purchased may not lead to an additional improvement in energy efficiency. In particular, some insulation may be installed in commercial premises or may have been installed in domestic properties to comply with the Building Regulations 2000 or with the Building Standards (Scotland) Regulations<sup>6</sup> eg, the insulation of a newly built extension. Ofgem considers that all insulation purchased through a trade account will be used for either of these purposes. Therefore, such purchases will not be considered as qualifying action. The supplier should therefore ensure that the sales data provided by the retailer does not include any loft insulation sold through a trade account.
- 7.23. In other DIY loft insulation schemes which do not involve a retailer, suppliers should ensure that the offer is restricted to domestic consumers as opposed to builders or insulation contractors or installers. Ofgem does not intend to apply a trade correction factor to these types of schemes, but reserves the right to do so if the results of consumer monitoring indicate that considerable proportions are being used in commercial properties or to meet the legal requirements.
- 7.24. The results of technical monitoring undertaken on suppliers' EEC 2002-2005 DIY loft insulation schemes has highlighted two trends which, together, could have a considerable effect upon whether the calculated improvement in energy efficiency is actually achieved. To ensure that the energy savings attributed per m<sup>2</sup> of DIY loft insulation are an accurate reflection of the actual resulting improvement, Ofgem proposes to apply a correction factor to the *ex ante* energy savings. The two issues and an assessment of their impact based upon monitoring results to date are considered below.
- 7.25. Ofgem is conscious that the correction factor to be applied should be derived from as large a sample as possible. For this reason, Ofgem will ask suppliers to bank DIY loft insulation schemes for the current EEC in the autumn of 2004 together with a summary of all monitoring returns received at that time.

<sup>&</sup>lt;sup>6</sup> As amended by the Building Standards Amendment (Scotland) Regulations 2001

- 7.26. In brief, Ofgem is concerned that,
  - some or all of the insulation purchased by the householder may not be installed, and
  - the insulation may not be used to insulate a loft.
- First, whilst the householder may aim to purchase the amount of insulation 7.27. required, it is inevitable that some of the insulation purchased will not be installed. The householder may purchase the insulation but not actually install it for a range of reasons (eg, lack of time, other priorities etc.), or the householder may insulate their loft but have excess insulation on completion. Ofgem envisages that a consumer will return any unwanted, whole rolls of insulation material to the retail store for a refund. Suppliers should ensure that the number of rolls (or square metres) notified to Ofgem at scheme completion excludes any returned material. For part rolls of products which cannot be refunded by the retailer, Ofgem suggests that the householder will install any excess where possible (ie, they will lay the excess on top of the depth installed in a small area in the loft) or the material will be disposed of. Ofgem considers that this use of the material is not likely to lead to the calculated improvement in energy efficiency and proposes to apply a reduction factor to correct for this. In the absence of better information Ofgem proposes a factor of 2.5%, but welcomes views on the amount of excess insulation per installation.
- 7.28. Second, some householders purchase loft insulation to insulate structures or items other than their loft space. This can include the insulation of unheated spaces eg, garden sheds and garages. Monitoring results indicate that this is in the region of 10% of purchases and Ofgem proposes that this should be factored in the savings attributed to loft insulation.
- 7.29. In proposing a 12.5% correction factor, Ofgem understands the importance of accrediting energy savings in line with the assumptions used to set the overall target. Defra is currently considering amending the target setting model to account for these factors.
- 7.30. Ofgem also considers that suppliers should continue to undertake monitoring on DIY loft insulation installations to support the energy savings that their action has resulted in. Further information is provided in Chapter 8.

## Solid wall insulation

- 7.31. Ofgem will determine the energy savings attributable to internal and external wall insulation on a property and fuel type basis using the Building Research Establishment's Domestic Energy Model (BREDEM).
- 7.32. Internal and external insulation measures are covered by the Building Regulations 2000, which apply in England and Wales and require reasonable provision to be made for the conservation of fuel and power in dwellings by limiting the heat loss through the fabric of the building. Approved Document L1, issued by the Office of the Deputy Prime Minister (ODPM), provides guidance on the insulation of internal and external solid walls in existing properties. Specifically, Approved Document L1 suggests that, when work includes the substantial replacement of an exposed wall or its external rendering or internal finishes, the work to the walls should include the provision of reasonable insulation.
- 7.33. Ofgem will take heed of the revised Approved Document L1 and Part J of the Building Standards (Scotland) Regulations 2001 when making an assessment of the improvement in U-value which should result from the measure. Ofgem currently proposes to approve as a qualifying action internal wall insulation measures which would decrease the U-value of the wall to 0.45W/m<sup>2</sup>K and external wall insulation measures which would decrease the U-value to 0.35W/m<sup>2</sup>K. This is in line with current best practice guidelines.
- 7.34. Ofgem propose to produce a list of example measures which can be used to attain the relevant improvement. However, it will be the supplier's responsibility to ensure that the U-value is achieved.

## Draught proofing

- 7.35. Ofgem will accredit professionally-installed strip and brush draught proofing systems which are installed in properties with high air infiltration rates.
- 7.36. In line with Defra's illustrative mix of measures, Ofgem will accredit a twenty year lifetime for draught proofing installations which are covered by a twenty year guarantee.

## Tank insulation

- 7.37. Within the target-setting model, Defra has assumed that tank insulation is now restricted to the topping-up of or replacement of existing inadequate jackets (Annex 1, Point 20) and that there are no uninsulated hot water tanks.
- 7.38. Ofgem proposes to calculate a single energy saving value which can be attributed where a tank jacket is fitted on a bare tank, or where the tank jacket is fitted on top of existing substandard insulation. The energy saving will be a weighted average value which will reflect different levels of existing insulation.
- 7.39. Tank insulation must be fitted in addition to any existing insulation. Ofgem will not accredit replacement tank jackets.

## **Radiator panels**

- 7.40. Ofgem considers that an improvement in energy efficiency will arise from radiator panels installed on external solid and unfilled cavity walls behind radiators.
- 7.41. Ofgem will accredit energy savings on a square metre basis for louvered or saw toothed panels which have a reflective surface. Different improvements in energy efficiency may be attributed to different manufacturers' panels, based upon research results.
- 7.42. When installing panels on cavity walls, a supplier should undertake checks to ensure that the cavity is unfilled. Ofgem proposed that all properties constructed in England and Wales after 1982 and all properties constructed in Scotland after 2002 should be assumed to have cavity wall insulation. For properties constructed before this date, the supplier should undertake a visual check for drill hole patterns on the outside of the house.
- 7.43. For radiator panels delivered in conjunction with retail partners or through mailorder, suppliers may not be able to limit the offer to consumers whose homes have solid or unfilled cavity walls. To ensure that the energy savings attributed per m<sup>2</sup> of DIY radiator panels are an accurate reflection of the actual resulting improvement, Ofgem proposes to apply a correction factor to the *ex ante* energy savings of radiator panels delivered through these routes. Ofgem proposes a

factor of 30% which reflects the proportion of the housing stock which is of either solid wall or unfilled cavity construction. Ofgem welcomes views on this proposal.

## Lighting

- 7.44. In the EEC 2002-2005, Ofgem has calculated the improvement in energy efficiency attributable to the provision of CFLs based upon the difference in the wattage of the CFL and an equivalent General Lighting Service (GLS) bulb which it is assumed to replace.
- 7.45. Within the illustrative mix for the EEC 2005-2008, Defra has used a single average energy saving figure for each lamp regardless of wattage or type eg, a stick or a "decorative" look-a-like bulb (Annex 1, Point 35). Ofgem is minded to adopt this approach and intends to utilise an average saving figure, calculated in line with Defra's target setting model, for lamps installed in either high or medium use fittings. In addition, Ofgem proposes to separately quantify an energy saving for lamps installed in low use fittings.
- 7.46. As an energy saving for low use fittings is not included within Defra's illustrative mix, Ofgem intends to quantify the energy savings based upon the results of available research. To do this, Ofgem will use;
  - an average annual usage, and
  - a weighted CFL and GLS wattage to be used in the calculation, taking into account that some GLSs are not replaced by CFLs of equivalent wattage.
- 7.47. Ofgem does not intend to differentiate between the average annual usage of lamps installed in the Priority Group and non-Priority households. The average lifetime accredited to low use CFLs will be the same as assumed for high and medium use CFLs in Defra's target setting model.
- 7.48. In addition, Defra has applied a correction factor for the Heat Replacement Effect (HRE) within the energy savings for CFLs in the target setting model. This factor is to acknowledge the heat output from a GLS bulb which will need to be compensated for by the heating system when the bulb is replaced by a lower wattage CFL. Defra is currently undertaking detailed modelling studies as to the

actual additional requirement on the heating system and Ofgem will apply a Heat Replacement Effect correction factor in line with that used in Defra's final target setting model (Annex 1 Point 42).

## **Direct CFLs**

- 7.49. Within Defra's consultation document, there is a distinction between CFLs which are delivered through the supply chain "retail" CFLs and those which are delivered directly, for example for free, through mail-order (including CFLs purchased through the post, over the internet or by telephone) or as part of an incentive package with other measures "direct" CFLs (Annex 1, point 8).
- 7.50. Ofgem must be satisfied that the CFLs delivered through a direct route will result in the improvement in energy efficiency with which they are accredited. There are two reasons why this may not be the case. First, the CFLs may not be installed by the householder and, second, the CFLs may be installed in a lower use light fittings than the energy saving calculation assumes. In order to maximise the possibility that the energy savings will be realised, Ofgem proposes to apply various criteria depending upon the way in which direct CFLs are delivered.
- 7.51. Ofgem envisages that direct CFLs will be delivered in the following three ways:
  - i. through mail-order, whereby a supplier promotes CFLs to a consumer and the consumer then purchases a number of lamps either by post, by telephone or over the internet,
  - ii. at no cost to the consumer, but where consumer action is required to receive the lamps eg, the offer is promoted by a leaflet, but the consumer is required to apply by post, telephone or via the internet in order to receive the lamps.
  - iii. at no cost to the consumer, but where the consumer action required to receive the lamps is minimal eg, the CFLs are distributed by a charitable organisation to its members or the CFLs are delivered with another measure to form part of an energy services scheme.
- 7.52. The criteria which Ofgem proposes to apply to each of the delivery routes are set out below.

i. Suppliers' activity under the EEC 2002-2005 indicates that the majority of CFLs which require a cost contribution from the household eg, mail-order schemes, are delivered to non-Priority households. Ofgem considers that, where a householder is making a cost contribution towards a lamp, they are likely to install the lamp in a high or medium use fitting where a greater amount of energy and money can be saved.

Ofgem proposes that the average number of light fittings in which a CFL may be installed is six taking the following points into account:

- the number of high and medium use fittings in the average property,
- the average size of a non-Priority consumer's house is likely to be larger than a Priority consumer's house and hence have more light fittings,
- a number of CFLs are likely to be already installed within the property, and
- a considerable number of light fittings within the property will be unable to take CFLs eg, spot lights, halogen light fittings, fluorescent strip lighting.

Therefore, Ofgem proposes that the delivery of mail-order lamps should be limited to six CFLs per household, all of which would be assumed to be installed in high or medium use fittings.

ii. Ofgem anticipates that fully-funded CFLs will be targeted towards Priority Group households. These households are more likely to have received CFLs under the EEC 2002-2005 and may, on average, have more CFLs than a non-Priority household in proportion to the number of high and medium use fittings within their property. Ofgem suggests that a Priority Group property will have four remaining high or medium use fittings into which a CFL can be fitted.

Where the consumer is required to request the lamps by post, telephone or over the internet, Ofgem considers that the consumer will install the CFLs in any remaining high and medium use fittings in preference to low use fittings.

For these reasons, lamps that are delivered in this way will be assumed to be used in high or medium use light fittings and should be limited to four per household. The supplier should collect the name and addresses of CFL recipients and cross check this information with its other CFL promotions to ensure that the limit of four is adhered to.

iii. Ofgem recognises that, where the supplier is working in partnership with a charitable organisation or another third party to deliver the CFLs, it may not be possible for the supplier to obtain name and address data eg, for compliance with the data protection act or due to the limited resources of the charity. In addition, such delivery routes are likely to require less consumer action to receive the lamps. For example, the householder may receive the lamps because they are a member of a charity or because they have received other measures from a supplier.

In cases where the lamp recipients cannot be cross-checked with the suppliers other fully-funded CFL activity, Ofgem proposes that suppliers should restrict the provision of CFLs to one per household. It will be assumed that such lamps will be used in low use fittings.

## **Retail CFLs**

7.53. Ofgem will assume that all lamps purchased through a retail route will be used by the consumer in high and medium use fittings.

## **Other lighting products**

7.54. If suppliers wish to deliver alternative types of energy efficient lamps such as candle lamps or outdoor sensor lamps, Ofgem will assess a supplier's proposals on a case by case basis. Schemes involving luminaires will also be assessed on a case by case basis to ensure that the measure and its deliver route leads to an improvement in energy efficiency.

## **Appliances**

7.55. Ofgem considers that installing an appliance which is A, A + or A + + rated under the EU labelling scheme, and which replaces an appliance of a lower rating, will lead to an improvement in energy efficiency.

## Cold and wet appliances

- 7.56. Ofgem's experience of the current EEC programme indicates that there are three principal delivery mechanisms for A-rated cold and wet appliances,
  - an incentive to purchase an A-rated appliance,
  - the trade-in of a working appliance of an average efficiency for a an A-rated model, and
  - the trade-in of a very inefficient, but working, appliance by a Priority household for an A-rated model. This delivery route is termed "Fridgesavers".
- 7.57. Ofgem proposes to separately accredit the energy savings from A + and A + + appliances, which are due to be introduced in July 2004. For incentive delivery routes, the energy savings from US style fridge-freezers will be accredited separately.
- 7.58. In accordance with Defra's target setting model, the HRE will also apply to cold and wet appliances. Ofgem will factor the relevant factors into the energy savings in alignment with Defra's final target setting model.

### Incentive schemes

7.59. Consumers in the market for a new appliance normally buy the average product currently sold within the range of energy labels. In incentive schemes, consumers are incentivised to purchase a more efficient appliance. The energy savings for incentive appliances will represent the difference between the sales weighted average consumption of existing appliances and the consumption of the promoted product.

### Trade-in schemes

7.60. Under trade-in schemes, customers are able to trade-in a working appliance for a more efficient appliance. To qualify, the appliance is assumed to be working at the time of trade-in and then destroyed (in an environmentally acceptable manner) to avoid entry into the second hand market. The energy savings for

consumption of the <u>existing</u> stock of that particular appliance and the more efficient product. The existing stock represents an appliance purchased in 1995.

- 7.61. The achievement of trade-in savings are dependent upon the old appliance being removed from the consumer's household and destroyed to prevent entry into the second hand market. The project partner delivering the appliances should provide a written declaration once the action has been completed to state how many appliances have been removed from consumers' homes. The declaration should also confirm that the appliances have been destroyed, distinguishing between the proportion that have been totally destroyed , the proportion that have been stripped for parts and then destroyed, and the proportion that have been refurbished.
- 7.62. Ofgem will not accredit trade-in energy savings for appliances which have been refurbished as opposed to being destroyed. Incentive energy savings should be claimed for any such appliances.

## **Fridgesavers**

- 7.63. Fridgesavers provide a mechanism for Priority consumers to trade-in an inefficient cold appliance for an A, A+ or A+ + rated model. The improvement in energy efficiency attributable to appliances delivered as Fridgesavers is considerably higher than that for standard trade-in schemes. This is because the householder's existing appliance must be in a suitably bad condition to be eligible for delivery mechanism.
- 7.64. In the absence of any recent monitoring work, the energy savings for Fridgesavers appliances will be calculated in line with the current methodology used for the 2001 Order. To be attributed with Fridgesaver energy savings, the supplier must ensure that the old appliance scores a minimum of three points on the Fridgesaver scoring protocol, as used under the 2001 Order.
- 7.65. The householder receiving the measures must also be in the Priority Group.

### Other appliance measures

7.66. Within the illustrative mix of measures, Defra makes reference to energy efficient models of set top digital to analogue TV converter boxes (Annex 1, point 8).

Ofgem intends to calculate an average energy saving for set top boxes in line with Defra's target setting model.

7.67. In the EEC 2002-2005, suppliers can claim energy savings where a traditional electric kettle is replaced by a jug kettle in a Priority Group or pensioner household. Due to the maturity of the jug kettle market, Ofgem does not consider that there will be an improvement in energy efficiency from the provision of jug kettles.

## Heating

## **Boiler replacements**

- 7.68. Within the illustrative mix for the EEC 2005-2008, Defra has included two categories of boiler replacements which distinguish between installations which would be required to comply with the Building Regulations 2000 and installations which would be either exceptions to or exempt from the Regulations.
- 7.69. Approved Document L1 provides guidance as to how compliance with the Building Regulations 2000 can be demonstrated. This document is due to be revised in late 2004 and Defra has assumed, within its target setting model for the EEC 2005-2008, that the guidance will recommend a minimum SEDBUK boiler efficiency of 86% (B rated). In doing so, Defra has proposed that suppliers should be accredited with the improvement in energy efficiency resulting from the provision of a SEDBUK A rated boiler (of a minimum 90% efficiency) in the following situations.
  - The householder would normally be required to install a B rated boiler in order to comply with the Building Regulations 2000. In such cases, the improvement in energy efficiency will be the difference between a B rated and an A rated boiler;
  - ii. The householder would be exempt from, or an exception to, the Building Regulations 2000. Exemptions relate to boiler replacements in Scotland which are covered by different legislation. Exceptions relate to specific circumstances outlined within Approved Document L1 eg, property size. In such cases,

Ofgem proposes that the improvement in energy efficiency will be the difference between a D rated boiler (of 78% efficiency) and an A rated boiler.

7.70. Ofgem intends to maintain this distinction in the calculation of the energy savings to ensure that the measures are accredited in line with the target setting model. However, Ofgem will have regard to the revised guidance in the accreditation of boiler replacements. In particular, Ofgem will await the publication of the revised Approved Document L1 in order to devise a list of exceptions where a supplier can claim the higher savings.

### Heating controls

- 7.71. Within the illustrative mix of measures (paragraph 8), Defra has included the upgrade of heating controls either during the replacement of a boiler or as a stand-alone measure. Ofgem intends to accredit heating control measures which are additional to the guidance provided in the revised Approved Document L1, which is due to be published later this year.
- 7.72. At this time, Ofgem anticipates that an additional improvement in energy efficiency will arise from the installation of thermostatic radiator valves (TRVs) in certain rooms and heating controls with advanced or 'intelligent' features.
- 7.73. Ofgem proposes to accredit heating controls with 'intelligent' features by calculating the energy saving associated with the specific features listed below. If a supplier uses a heating control with a combination of these features, the energy savings associated with each feature would be claimed.
  - i. a delayed start feature which delays the chosen start time for space heating according to the temperature measured inside or outside the property
  - ii. a load or weather compensator feature, which adjusts the temperature of the water circulating through the heating systems according to the temperature measured inside or outside the property
  - iii. a time and temperature zone control feature which allows independent time and temperature control of two zones within the property.

## Fuel substitution

- 7.74. Defra's illustrative mix includes fuel substitution measures which result in a net energy saving to the consumer. Within the target setting model, Defra has assumed that all fuel switches will be to gas central heating with a condensing boiler from focal point gas fires, electricity or coal (Table 1 of Defra's illustrative mix). For the EEC 2002-2005, Ofgem accredits fuel switching measures from electricity, coal or oil heating to gas or LPG central heating and distinguishes between whether the original system was a full system (heating all of the property) or a partial system (heating part of the property).
- 7.75. Ofgem will quantify the energy savings from fuel switching measures in line with Defra's model, but proposes to maintain the distinction between partial and full heating systems.

### Other heating measures

- 7.76. Article 5(6) of the draft Order allows for combined heat and power (CHP) and communal heating to be treated forms of energy efficiency. Ofgem will calculate the energy savings from CHP and communal heating schemes on a case-by-case basis.
- 7.77. Ofgem also considers that solar water heating and ground source heat pumps should be considered qualifying for the purposes of the EEC 2005-2008. Ofgem proposes to accredit these measures in line with the existing methodology using heat demand projections for 2010 in line with Defra's assumptions for the calculation of insulation measures.
- 7.78. Ofgem has participated in the domestic CHP (dCHP) domestic field trials steering group to ensure that the relevant information for determining an improvement in energy efficiency is produced. dCHP may lead to an improvement in energy efficiency, however, as set out in paragraph 7.4 it may be appropriate to accredit this measure on an *ex post* basis.

## New or innovative measures

7.79. Ofgem acknowledges that suppliers may wish to use new or innovative energy efficiency measures to meet their targets, yet the improvement in energy

efficiency attributed to the measure has not been quantified. Ofgem proposes to maintain similar procedures for the assessment of new products. This will ensure that sufficient testing of the product has been carried out to enable Ofgem to determine the improvement in energy efficiency from the new measure. Ofgem will only determine the improvement in energy efficiency resulting from such a measure when it has been notified by a supplier of the proposed action under article 5(1). The procedures for assessing new and innovative measures under the 2001 Order are outlined in the latest version of Ofgem's Technical Guidance Manual. Ofgem proposes to use a similar system post 2005.

## 8. Monitoring qualifying action

8.1. Chapter 6 provides information on the suppliers' proposed actions and how recipients must be monitored to determine whether they are in the Priority Group. Chapter 7 then goes on to consider the information needed to determine the improvement in energy efficiency to be attributed to actions when suppliers are delivering the measures. This information is required for suppliers to complete the EEC Scheme Spreadsheet, eg, the fuel used by a household for heating. This chapter sets out the monitoring which must be conducted after a measure has been installed and will be used by Ofgem in determining the energy saving to be attributed to that action.

## Determining the improvement in energy efficiency in relation to a completed action

- 8.2. Article 5 (4) of the draft Order states that when a qualifying action has been taken, the supplier must notify Ofgem. In order to ensure that the improvement in energy efficiency as estimated for a proposed qualifying action has actually been achieved, Ofgem needs to be satisfied that the measures have been installed and conform to the relevant quality standards. The following monitoring will be required for certain actions.
  - i. Technical monitoring of a sample of households of recipients is necessary for certain measures to ensure that the relevant quality standards have been met. Suppliers should adopt appropriate quality standards with their project partners and contractors before commencing projects. Ofgem plans to revise its Technical Guidance for the current EEC to provide further guidance on the relevant quality standards for the common measures. This guidance will be available to suppliers before the EEC post 2005 commences.
  - ii. Monitoring consumer satisfaction is appropriate when installing measures within consumers' homes, such as heating and insulation. Although it is not necessary to monitor satisfaction for other actions, suppliers are encouraged to monitor consumer satisfaction over the course of the EEC so that they can offer the best possible service to consumers.

8.3. Once Ofgem has received a notification under article 5 (4) of the draft Order it shall determine what improvement in energy efficiency is to be attributed to the action or to any result of that action. Ofgem will not consider that a proposed action has been completed until the action has been monitored. Details of the monitoring results must therefore form part of a supplier's notification under article 5(4).

## Defra's review of the EEC

- 8.4. For certain measures, such as DIY insulation and CFLs, there is limited knowledge on how these measures are actually used by consumers. Under the current EEC suppliers monitor the recipients of measures to determine whether and how they have been installed. Ofgem proposes to continue this monitoring for DIY insulation and CFLs under the EEC 2005 2008. The results of this monitoring will be used to inform Defra's review of the EEC in 2007 and to enable Ofgem to monitor activity but will not be taken into consideration when determining the improvement in energy efficiency attributable to a supplier's actions under the Order.
- 8.5. Suppliers are encouraged to provide data on the measures that they deliver under the Order to the Energy Saving Trust for the purpose of informing the Home Energy Efficiency Database (HEED).

## Standard monitoring questions

- 8.6. In carrying out the auditing of suppliers' activity under the 2001 Order and in assessing scheme completion reports, it has been difficult to check and compare the survey forms used for technical monitoring as they follow different formats and ask different questions. To ensure consistency between suppliers and clarity of administration, Ofgem proposes to outline set questions which the supplier or their project partners and contractors should use during the monitoring of their schemes. These technical monitoring and consumer satisfaction monitoring questions will be provided prior to the commencement of the EEC post 2005 alongside Ofgem's technical guidance.
- 8.7. The monitoring requirements for the standard energy efficiency measures are set out below.

## Insulation

## Professionally installed cavity wall, loft, internal and external insulation and draught proofing

- 8.8. Technical monitoring is necessary for cavity wall, loft, internal and external insulation and draught proofing which is professionally installed. A suitably qualified independent contractor should monitor a minimum of 5% of the dwellings of recipients of an action to ensure that the installation meets the correct standards. Ideally, the monitoring should be conducted within 2 months of installation and should cover each of the delivery mechanisms and contractors involved in an action.
- 8.9. If technical monitoring identifies that a measure has not been installed to the correct standards, the contractor must rectify this before the improvement in energy efficiency can be determined. If 25 % of the technical monitoring returns detail errors Ofgem may require the supplier to conduct additional monitoring.
- 8.10. Consumer satisfaction monitoring should also be conducted on 2% of recipients of each action to help inform Ofgem in determining the improvement in energy efficiency attributable.

### **DIY loft insulation**

- 8.11. Chapter 7 details the adjustment factor which will be applied to sales of DIY loft insulation to take account of the fact that not all the measures sold will lead to an improvement in energy efficiency. A statistically significant sample of the recipients of DIY loft insulation measures will need to be monitored in order to complete the EEC Scheme Spreadsheet, for example to determine the fuel used to heat the dwelling. The statistically significant sample size will be determined when the proposal is notified and will be the same as that for the Priority Group.
- 8.12. In order to gather information on how consumers are actually using and installing these measures, suppliers should monitor a statistically significant number of recipients of DIY loft insulation using the monitoring questions as set out in Appendix 3.

## **Radiator panels**

- 8.13. Radiator panels do not need to be monitored where they have been professionally installed.
- 8.14. Chapter 7 details the adjustment factor which will be applied to sales of DIY radiator panels to take account of the fact that not all the measures sold will lead to an improvement in energy efficiency. A statistically significant sample of the recipients of DIY radiator panels will need to be monitored in order to complete the EEC Scheme Spreadsheet, for example to determine the fuel used to heat the dwelling. The statistically significant sample size will be determined when the proposal is notified and will be the same as that for the Priority Group.
- 8.15. In order to gather information on how consumers are actually using and installing these measures, suppliers should monitor a statistically significant number of recipients of DIY radiator panels using the monitoring questions as set out in Appendix 3.

## Hot water tank jackets

8.16. Ofgem proposes that monitoring installations of hot water tank jackets is not necessary for determining the improvement in energy efficiency attributable.

## Lighting

- 8.17. Suppliers can only deliver CFLs which are accredited under the EST's Energy Efficiency Recommended programme. The EST monitors samples of these bulbs and therefore separate technical monitoring will not be required under the EEC. Ofgem also considers that it is not necessary to monitor consumer satisfaction of recipients of CFLs post 2005 as this information does not influence the improvement in energy efficiency that will result.
- 8.18. The improvement in energy efficiency that will result from the delivery of CFLs does however depend upon those measures being installed and whether the use of the light fitting is high, medium or low. Therefore Chapter 7 proposed limits to the number of CFLs which can be provided via different delivery routes.

- 8.19. Ofgem recognises the importance of monitoring the delivery of direct CFLs to help inform the EEC 2008 2011 and therefore proposes that suppliers survey the recipients of such an action. In order to gather information on whether the CFLs are actually installed, and how they are used, suppliers should monitor a statistically significant number of recipients of direct CFLs using the monitoring questions as set out in Appendix 3.
- 8.20. Monitoring will not be required for retail CFL schemes as it is assumed that the consumer making the decision to purchase the CFLs will install and use them.

## **Appliances**

## Wet and cold appliances

- 8.21. Suppliers are able to deliver appliances which are rated A, A + and A + + under the EU Energy Labelling Scheme. This scheme involves self-certification by the manufacturers of the appliances. Ofgem therefore considers that additional technical monitoring of these appliances is not necessary.
- 8.22. Ofgem considers that it is not necessary to monitor the satisfaction of recipients of wet and cold appliances under the EEC post 2005 as this information does not influence the improvement in energy efficiency that will result.

### Brown goods

8.23. The monitoring requirements for brown goods, such as set top boxes will be determined on a case-by-case basis when a supplier notifies Ofgem of such a proposed action. Suitable monitoring requirements will be required depending on the actual measure and how it is marketed and delivered.

## Heating

## Boilers, ground source heat pumps, solar water heating and fuel switching

8.24. Technical monitoring is necessary for boilers, ground source heat pumps, solar water heating and fuel switching. A suitably qualified independent contractor

to ensure that the installation meets the correct standards. Ideally, the technical monitoring should be conducted within two months of installation and should cover each of the delivery mechanisms and contractors involved in an action.

- 8.25. If technical monitoring identifies that a measure has not been installed to the correct standards, the contractor must rectify this before the improvement in energy efficiency can be determined. If 25 % of the technical monitoring returns detail errors Ofgem may require the supplier to conduct additional monitoring.
- 8.26. When boilers are fitted they have to be commissioned by a Corgi registered installer. The 5% technical monitoring will be in addition to this process. If the installation is an exception or an exemption to the Building Regulations 2000, this must be clearly explained on the monitoring form.
- 8.27. Consumer satisfaction monitoring should also be conducted on 2% of recipients of each action to help inform Ofgem in determining the improvement in energy efficiency attributable.

## Heating controls

8.28. Where heating controls such as TRVs are installed with a boiler they should be included with the technical monitoring requirements detailed above. Where heating controls are installed without a boiler, monitoring is not required.

### СНР

- 8.29. Technical monitoring of CHP installations will be demonstrated by the provision of a CHP Quality Assurance (CHPQA) certificate. Ofgem considers that it may not be necessary to monitor consumer satisfaction of the recipients of a CHP installation in every case as this information may not influence the improvement in energy efficiency that will result.
- 8.30. Figure 8.1 below provides a checklist of the types of monitoring required for each of the standard measures under the EEC 2005 2008 to enable Ofgem to determine what improvement in energy efficiency is to be attributed to an action or to any result of that action, under article 5(5) of the draft Order.

Measure	Technical	Satisfaction	Informing the
	monitoring	monitoring	review of the
			EEC
Cavity wall insulation	~	~	
Loft insulation			
	v	v	
Internal & external insulation	✓	✓	
Hot water tank jackets			
Dedit to a secolo			
Radiator panels			
Draught proofing	√	✓	
DIY loft insulation			✓
DIY radiator panels			✓
Boiler upgrades	✓ <b>√</b>		
Boiler upgrades - exceptions or			
exemptions	~	$\checkmark$	
Heating controls only			
Ground source heat pumps			
Ground source near pumps	v	v	
Solar water heating	✓	✓	
Fuel switching	✓	$\checkmark$	
СНР	✓	$\checkmark$	
CFLs – direct			✓
CFLs – retail			
Appliances			

Electrical goods eg set top boxes		

## **Appendix 1 Scheme notification schedule**

1.1 Schedule detailing deadline dates for notification in order for Ofgem to guarantee assessment of proposed actions by the date specified.

Month	Notification by	Ofgem responds	Supplier to	Ofgem notifies
	supplier under	to the supplier	respond to any	the supplier
	Article 5 (1) or 5		further	
	(5) of the Order		information	
			requests	
January 2005	Monday 3 <sup>rd</sup>	Friday 14 <sup>th</sup>	Friday 21 <sup>st</sup>	Monday 31 <sup>st</sup>
February	Wednesday 1 <sup>st</sup>	Monday 14 <sup>th</sup>	Monday 21 <sup>st</sup>	Monday 28 <sup>th</sup>
2005				
March 2005	Tuesday 1 <sup>st</sup>	Monday 14 <sup>th</sup>	Monday 21 <sup>st</sup>	Thursday 31 <sup>st</sup>
April 2005	Friday 1 <sup>st</sup>	Thursday 14 <sup>th</sup>	Thursday 21 <sup>st</sup>	Friday 29 <sup>th</sup>
May 2005	Tuesday 3 <sup>rd</sup>	Monday 16 <sup>th</sup>	Monday 23 <sup>rd</sup>	Tuesday 31 <sup>st</sup>
June 2005	Wednesday 1 <sup>st</sup>	Tuesday 14 <sup>th</sup>	Tuesday 21 <sup>st</sup>	Thursday 30 <sup>th</sup>
July 2005	Friday 1 <sup>st</sup>	Thursday 14 <sup>th</sup>	Thursday 21 <sup>st</sup>	Friday 29 <sup>th</sup>
August 2005	Monday 1 <sup>st</sup>	Friday 12 <sup>th</sup>	Friday 19 <sup>th</sup>	Wednesday 31 <sup>st</sup>
September 2005	Thursday 1 <sup>st</sup>	Wednesday 14 <sup>th</sup>	Wednesday 21 <sup>st</sup>	Friday 30 <sup>th</sup>
October 2005	Monday 3 <sup>rd</sup>	Friday 14 <sup>th</sup>	Friday 21 <sup>st</sup>	Monday 31 <sup>st</sup>
November 2005	Tuesday 1 <sup>st</sup>	Monday 14 <sup>th</sup>	Monday 21 <sup>st</sup>	Wednesday 30 <sup>th</sup>
December 2005	Thursday 1 <sup>st</sup>	Wednesday 14 <sup>th</sup>	Wednesday 21 <sup>st</sup>	Friday 30 <sup>th</sup>

January 2006	Tuesday 3 <sup>rd</sup>	Monday 16 <sup>th</sup>	Monday 23 <sup>rd</sup>	Tuesday 31 <sup>st</sup>
February 2006	Wednesday 1 <sup>st</sup>	Tuesday 14 <sup>th</sup>	Tuesday 21 <sup>st</sup>	Tuesday 28 <sup>th</sup>
March 2006	Wednesday 1 <sup>st</sup>	Tuesday 14 <sup>th</sup>	Tuesday 21 <sup>st</sup>	Friday 31 <sup>st</sup>
April 2006	Monday 3 <sup>rd</sup>	Tuesday 18 <sup>th</sup>	Tuesday 25 <sup>th</sup>	Friday 28 <sup>th</sup>
May 2006	Tuesday 2 <sup>nd</sup>	Monday 15 <sup>th</sup>	Monday 22 <sup>nd</sup>	Wednesday 31 <sup>st</sup>
June 2006	Thursday 1 <sup>st</sup>	Wednesday 14 <sup>th</sup>	Wednesday 21 <sup>st</sup>	Friday 30 <sup>th</sup>
July 2006	Monday 3 <sup>rd</sup>	Friday 14 <sup>th</sup>	Friday 21 <sup>st</sup>	Monday 31 <sup>st</sup>
August 2006	Tuesday 1 <sup>st</sup>	Monday 14 <sup>th</sup>	Monday 21 <sup>st</sup>	Thursday 31 <sup>st</sup>
September 2006	Friday 1 <sup>st</sup>	Thursday 14 <sup>th</sup>	Thursday 21 <sup>st</sup>	Friday 29 <sup>th</sup>
October 2006	Monday 2 <sup>nd</sup>	Friday 13 <sup>th</sup>	Friday 20 <sup>th</sup>	Tuesday 31 <sup>st</sup>
November 2006	Wednesday 1 <sup>st</sup>	Tuesday 14 <sup>th</sup>	Tuesday 21 <sup>st</sup>	Thursday 30 <sup>th</sup>
December 2006	Friday 1 <sup>st</sup>	Thursday 14 <sup>th</sup>	Thursday 21 <sup>st</sup>	Friday 29 <sup>th</sup>
January 2007	Tuesday 2 <sup>nd</sup>	Monday 15 <sup>th</sup>	Monday 22 <sup>nd</sup>	Wednesday 31 <sup>st</sup>
February 2007	Thursday 1 <sup>st</sup>	Wednesday 14 <sup>th</sup>	Wednesday 21 <sup>st</sup>	Wednesday 28 <sup>th</sup>
March 2007	Thursday 1 <sup>st</sup>	Wednesday 14 <sup>th</sup>	Wednesday 21 <sup>st</sup>	Friday 30 <sup>th</sup>
April 2007	Monday 2 <sup>nd</sup>	Tuesday 17 <sup>th</sup>	Tuesday 24 <sup>th</sup>	Monday 30 <sup>th</sup>
May 2007	Tuesday 1 <sup>st</sup>	Tuesday 15 <sup>th</sup>	Tuesday 22 <sup>nd</sup>	Thursday 31 <sup>st</sup>
June 2007	Friday 1 <sup>st</sup>	Thursday 14 <sup>th</sup>	Thursday 21 <sup>st</sup>	Friday 29 <sup>th</sup>

July 2007	Monday 2 <sup>nd</sup>	Friday 13 <sup>th</sup>	Friday 20 <sup>th</sup>	Tuesday 31 <sup>st</sup>
August 2007	Wednesday 1 <sup>st</sup>	Tuesday 14 <sup>th</sup>	Tuesday 21 <sup>st</sup>	Friday 31 <sup>st</sup>
September 2007	Monday 3 <sup>rd</sup>	Friday 14 <sup>th</sup>	Friday 21 <sup>st</sup>	Friday 28 <sup>th</sup>
October 2007	Monday 1 <sup>st</sup>	Friday 12 <sup>th</sup>	Friday 19 <sup>th</sup>	Wednesday 31 <sup>st</sup>
November 2007	Thursday 1 <sup>st</sup>	Wednesday 14 <sup>th</sup>	Wednesday 21 <sup>st</sup>	Friday 30 <sup>th</sup>
December 2007	Monday 3 <sup>rd</sup>	Friday 14 <sup>th</sup>	Friday 21 <sup>st</sup>	Monday 31 <sup>st</sup>
January 2008	Wednesday 2 <sup>nd</sup>	Tuesday 15 <sup>th</sup>	Tuesday 22 <sup>nd</sup>	Thursday 31 <sup>st</sup>
February 2008	Friday 1 <sup>st</sup>	Thursday 14 <sup>th</sup>	Thursday 21 <sup>st</sup>	Friday 29 <sup>th</sup>
March 2008	Monday 3 <sup>rd</sup>	Friday 14 <sup>th</sup>	Friday 25 <sup>th</sup>	Monday 31 <sup>st</sup>
April 2008	Tuesday 1 <sup>st</sup>	Monday 14 <sup>th</sup>	Wednesday 23rd	Wednesday 30 <sup>th</sup>
April/June 2008	Wednesday 30 <sup>th</sup>	Tuesday 13 <sup>th</sup>	Thursday 22 <sup>nd</sup>	Friday 30 <sup>th</sup>

# Appendix 2 Social Housing Provider declaration

I declare that I am duly authorised to sign this declaration for and on behalf of the Social Housing Provider, and on behalf of the Social Housing Provider I confirm that:

Supplier: .....

Social Housing Provider: .....

Energy Saving Project: .....

.....

Energy Saving Project timescales from: ...../..... to ....../..... to

Specified Priority Group Percentage:.....

- 1. The Supplier has provided the Social Housing Provider with funding which has all been used for the purpose of the Energy Saving Project.
- 2. The Energy Saving Project could not have proceeded without the funding provided by the Supplier for the purpose of the Energy Saving Project, with such funding not being available from the Social Housing Provider itself or from any other third party.
- 3. To the best of the Social Housing Provider's knowledge, information and belief the Specified Priority Group Percentage of recipients of measures delivered under the Energy Saving Project are in receipt of at least one of the following:

Council tax benefit

Housing benefit

Income support

Income-based job seekers allowance

Attendance allowance

Disability living allowance

War disablement pension which includes either a mobility supplement or constant attendance allowance

Disablement pension which includes constant attendance allowance

State pension credit

	Child tax credit where the relevant income is £14,600 or less Working tax credit where the relevant income is £14,600 or less
4.	Where consumers are known to be in receipt of working tax credit or child tax credit only, they have been monitored to determine their relevant income.
5.	The Social Housing Provider will provide the Supplier with the information necessary for the Supplier to complete the EEC Spreadsheet as soon as practicable after completion of the Energy Saving Project, and by no later than 31 March 2008.
6.	The Social Housing Provider agrees that this information can be passed to Ofgem for the purposes of demonstrating the Supplier's compliance with their energy efficiency obligations under the Electricity and Gas (Energy Efficiency Obligations) Order 2004.
	Address, telephone number, fax number and email address of Social Housing Provider:
	Name of authorised signatory:
	Position in organisation:
	Signed Date
	Print Name

## **Appendix 3 Standard monitoring questions**

3.1 The table below sets out the monitoring questions for DIY loft insulation, DIY radiator panels and direct CFLs.

## **DIY Loft insulation**

- 1. How many rolls of insulation did you purchase?
- 2. Which product was it?
- 3. What thickness of insulation did you purchase?
- 4. If none of the insulation has been installed, do you intend to install it?
- 5. Did you use the insulation to insulate a house or a business?
- 6. If it was house, did you use the insulation to insulate: the whole loft space, part of the loft space, walls, floors, garages, out building or conversions or elsewhere?
- 7. Was the insulation installed in a new extension to your house?
- 8. If the insulation has been used within a loft space, was there any insulation in the loft before you put the purchased insulation in? If yes, how much?
- 9. Did you single lay or double lay the insulation
- 10. Did you have any insulation left over?
- 11. Was it part of a roll or a whole roll?

## **DIY Radiator panels**

- 1. How many radiator panels have been purchased?
- 2. How many radiator panels have been installed?
- 3. Have the radiator panels been fixed to the wall behind the radiators?
- 4. How many of the panels have been installed behind radiators on external walls on the house?
- 5. How many of the panels have been installed behind radiators on internal walls on the house?

6. Does the property have solid walls or cavity walls? If it has cavity walls, are they filled or unfilled?

## CFLs direct

- 1. How many CFLs have been received?
- 2. How many CFLs have been installed?
- 3. How many CFLs will be installed and used?
- 4. How many CFLs will never be used?
- 5. How many CFLs do you already have fitted within your house?

## **Appendix 4 Glossary**

Action	The delivery, by a supplier, of energy efficiency measures to domestic consumers (whether direct to those consumers or through a third party). Also referred to as a scheme.
BREDEM	Building Research Establishment's Domestic Energy Model
CFLs	Compact Fluorescent Lamps (energy efficiency light bulbs)
СНР	Combined Heat and Power
dCHP	Domestic Combined Heat and Power
Defra	Department for Environment, Food and Rural Affairs
DIY	Do-it-yourself
EEC	Energy Efficiency Commitment
Fuel standardisation coefficient	A multiplier in terms of a carbon coefficient which relates to the carbon concentration of the relevant fuel type. The coefficients are set out in the draft Order and are coal: 0.56, electricity: 0.8, gas: 0.35, LPG: 0.43 and oil: 0.46
GLS	General Lighting Service bulb
GWh	Giga watt hour (1 million kilo watt hours)
HRE	The Heat Replacement Effect
Illustrative mix	Defra's illustrative mix of measures is presented within its consultation document which states that it represents a balanced selection of measures generally regarded as cost effective. In meeting their EEC obligation suppliers are free to choose their own mix of measures or include other measures, subject to approval by Ofgem.
Lifetime discounted	The projected energy savings for measures (as set out in Defra's illustrative mix) will be discounted over the lifetime of

that measure at the standard Treasury discount rate of 3.5% per year.

LPG	Liquid petroleum gas
ODPM	Office of the Deputy Prime Minister
The (draft) Order	The draft Electricity and Gas (Energy Efficiency Obligations) Order 2004
The 2001 Order	The Electricity and Gas (Energy Efficiency Obligations) Order 2001 Statutory Instrument number 4011
Priority Group	Domestic consumers who are in receipt of a least one of the following: Council tax benefit, Housing benefit, Income support, Income-based job seekers allowance, Attendance allowance, Disability living allowance, War disablement pension which includes either a mobility supplement or constant attendance allowance, Disablement pension which includes constant attendance allowance, State pension credit, Child tax credit where the relevant income is £14,600 or less, Working tax credit where the relevant income is £14,600 or less.
R value	The thermal resistance of a material (m <sup>2</sup> K/W)
SEDBUK	Seasonal Efficiency Database of Boilers in the United Kingdom
SHP	Social Housing Provider – a Local Authority or a Registered Social Landlord
Target setting model	Defra's assumptions and the calculations used in setting the overall EEC target, as set out in Annex 1 of their consultation document.
TRVs	Thermostatic radiator valves
TWh	Tera watt hours (= 1000 GWh)

U value The heat passing through 1 m<sup>2</sup> of a material where the temperature on either side differs by 1°K (W/m<sup>2</sup>K)