EXPLANATORY MEMORANDUM TO

THE HOME ENERGY EFFICIENCY SCHEME (ENGLAND) (AMENDMENT) REGULATIONS 2011

2011 NO. 833

1. This explanatory memorandum has been prepared by the Department of Energy and Climate Change and is laid before the House of Commons by Command of Her Majesty.

This memorandum contains information for the Joint Committee on Statutory Instruments.

2. Purpose of the instrument

2.1 This explanatory memorandum has been prepared for The Home Energy Efficiency Scheme (England) (Amendment) Regulations 2011 ('the Regulations') which amend the existing Home Energy Efficiency Scheme (England) Regulations 2005 (S.I. 2005/1530) ('the principal Regulations').

2.2 The principal Regulations provide the legal basis for the payment of grant for the provision of energy efficiency measures, known as 'Warm Front' . The Warm Front scheme enables the administering agency to accept applications for the payment of grant for energy efficiency assistance from people who are entitled to certain benefits (and who are considered to be vulnerable to fuel poverty), and to install heating and insulation measures that will improve the thermal efficiency of their homes. The Spending Review 2010 committed to fund a smaller, better targeted, Warm Front scheme for the next two years. As a result, the Department of Energy and Climate Change consulted on proposals to revise the Fuel Poverty Strategy, under which the Warm Front scheme is a delivery mechanism for alleviating fuel poverty. The amendments to the Fuel Poverty Strategy are designed to better target the eligibility criteria for the people that are to be assisted under Warm Front, and introduces a thermal efficiency test for properties where grant for assistance is to be available . In accordance with the outcomes of the consultation on amending the Fuel Poverty Strategy, the Regulations refine the eligibility criteria and introduce an energy efficiency – or SAP (Standard Assessment Procedure) threshold and make a number of minor changes to the works for which grant may be paid.

3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1 The Regulations (amending the principal Regulations) will enable applications to be approved from people who, as a household, receive a certain set of targeted income related benefits and who live in less energy efficient properties with a SAP threshold of 55 or less. The changes to the eligibility criteria will mean that

people who receive non-income related benefits are no longer eligible for assistance. The effect of these changes will be to narrow the group of people eligible for assistance from 4.3million to 1.5million households. In addition, a person who has received a grant in relation to one property will be prohibited from applying again within 12 months, for a grant in relation to another property. This is to prevent a single tenant making multiple applications on behalf of the same freeholder.

4. Legislative Context

4.1 The principal Regulations, most recently amended by The Home Energy Efficiency Scheme (England) (Amendment) Regulations 2010 (S.I. 2010/1893) are made under Section 15 of the Social Security Act 1990 (c.27) and provide for the payment of grant to improve the energy efficiency of eligible households. The consent of HM Treasury has been sought and obtained in accordance with section 15(8) of the Social Security Act 1990.

5. Territorial Extent and Application

5.1 This instrument applies to England.

6. European Convention on Human Rights

6.1 As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

7. Policy background

7.1 Warm Front is part of a package of key programmes for tackling fuel poverty in the private sector in England. Originally launched as the Home Energy Efficiency Scheme, it was re-branded in February 2001 as Warm Front. This rebranding is relevant only in so far as it is the public name given to the scheme as implemented by the Regulations.

7.2 Warm Front provides insulation and heating measures to eligible households in receipt of the benefits and credits specified in regulation 4 of the principal Regulations. Following an application, an assessment is carried out to establish whether the applicant is eligible for assistance. If eligibility is confirmed, suitable insulation and/or heating measures as appropriate are installed.

7.3 Warm Front was afforded £1.1 billion of funding for the spending period 2008-11, with £345m available in 2010/11. The Spending Review committed funding for a smaller, targeted Warm Front scheme; £110m in 2011/12 and £100m in 2012/13. The scheme will continue until towards the end of 2012/13 by which point the Energy Company Obligation (the ECO), which will work in tandem with the Green Deal, is expected to be in place. The ECO is expected by Government to play a greater role than previous obligations on energy suppliers in supporting vulnerable households to heat their homes adequately.

8. Consultation outcome

8.1 The Government consulted on amending reference to the Warm Front Scheme Eligibility Criteria as set out in the UK Fuel Poverty Strategy 2001. The Warm Homes and Energy Conservation Act 2000 requires the Secretary of State to consult in the preparation of any revisions to the Strategy. Revision of the Strategy requires consequential amendments to be made to the regulations underpinning the operation of the Warm Front scheme.

8.2 After taking account of consultation responses and the findings of the Impact Assessment, the Government decided:

- To amend the UK Fuel Poverty Strategy 2001, at paragraph 4.51,
- That, given the consensus that the scheme needs to be better targeted, and given the resources available, the income related benefits set out in the Regulations provide the most effective balance between targeting fuel poor households and covering the vulnerable groups identified in the UK Fuel Poverty Strategy 2001.
- The scheme will provide assistance to a property with a SAP threshold of 55 or less.

9. Guidance

9.1 We continue to work closely with the administering agency to monitor the budget and spend profile and ensure compliance with the principal Regulations (as amended).

10. Impact

10.1 The amending instrument will not impact on business, charities , voluntary bodies or the public sector. The impact assessment prepared focuses on the possible policy options identified for amending the scheme's eligibility criteria. It shows how the alternative eligibility criteria that were considered impact on the distribution of support across different types of households.

10.2 The Impact Assessment is attached to this memorandum and will be published alongside the Explanatory Memorandum on www.legislation.gov.uk.

11. Regulating small business

11.1 The legislation does not apply to small business.

12. Monitoring & review

12.1 The Government has a structured governance framework in place to ensure the administering agency is complying with the regulations. This includes monitoring of spend, ensuring only eligible applicants receive assistance and appropriate use of monies on agreed measures. Government meets with the administering agency on a monthly and quarterly basis to review performance, spend and risks and issues.

13. Contact

Helen Wilson at the Department of Energy and Climate Change; Tel: 0300 068 6645 or email: helen.wilson @decc.gsi.gov.uk can answer queries regarding the instrument.

Title:	Impact Assessment (IA)
Amendments to the eligibility criteria for the Warm Front scheme	**IA No:** DECC026
Lead department or agency: Department of Energy and Climate Change	**Date:** 10/03/2011
Other departments or agencies:	**Stage:** Final
	Source of intervention: Domestic
	Type of measure: Other
	Contact for enquiries: samuel.jenkins@decc.gsi.gov.uk

Summary: Intervention and Options

What is the problem under consideration? Why is government intervention necessary?

Households that need to spend 10% or more of their income to adequately heat their homes are defined as being in fuel poverty. In many cases the most cost-effective method of reducing the cost of maintaining an adequate level of warmth is through improving the thermal efficiency of homes. Warm Front is an existing scheme that provides grants to cover most or all of the costs of home heating and energy efficiency measures for eligible households. At present an estimated 53% of fuel poor households are eligible for assistance under Warm Front. Against a backdrop of rising energy prices and a declining Warm Front budget, this impact assessment considers the eligibility under the scheme to ensure that the available resources are better targeted at vulnerable and fuel poor households.

What are the policy objectives and the intended effects?

1. The existing policy objective is to improve the warmth and energy efficiency of households that are vulnerable to fuel poverty. This has the intended effect of helping reduce vulnerability to fuel poverty by lowering the cost of maintaining an adequate level of warmth and helping to ensure that homes are adequately heated, with positive effects on social inclusion, and physical and mental health.
2. The proposals in this impact assessment aim to refine the existing eligibility criteria for assistance under the Warm Front scheme so as to ensure that a reduced Warm Front budget is targeted towards the most vulnerable households.

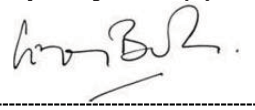
What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Do Nothing - maintain the current eligibility criteria for the Warm Front scheme;
Policy Option 1 - maintain the current Warm Front eligibility criteria minus Attendance Allowance and Disability Living Allowance;
Policy Option 2 (the preferred option) - introduce the same criteria that underpin Cold Weather Payments, for homes below an energy efficiency performance threshold;
Policy Option 3 - introduce the same criteria that underpin Cold Weather Payments and Child Tax Credits under £16,190 income threshold, for homes below an energy efficiency performance threshold;
Policy Option 4 - introduce the same criteria that underpin Pension Credit plus Child Tax Credit under £16,190 income threshold, for homes below an energy efficiency performance threshold;
Policy Option 5 - introduce the same criteria that underpin Pension Credit Guarantee plus Child Tax Credit under £5,200 income threshold, for homes below an energy efficiency performance standard.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 6/2012	
What is the basis for this review? Please select. **If applicable, set sunset clause date:** Month/Year	
Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?	Yes

Ministerial Sign-off For final proposal stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.

Signed by the responsible Minister:  Date: 10 March 2011

Summary: Analysis and Evidence

Policy Option 1

Description:

Maintain current Warm Front eligibility criteria minus Attendance Allowance and Disability Living Allowance for homes below an energy efficiency threshold.

Price Base Year 2009	PV Base Year 2010	Time Period Years 42	Net Benefit (Present Value (PV)) (£m)		
			Low: 79	**High:** 96	**Best Estimate: 90**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			0.03	**1.4**
High			0.08	**3.1**
Best Estimate	None		0.06	**2.2**

Description and scale of key monetised costs by 'main affected groups'

Equity weighted value of hidden costs associated with installing Warm Front measures: PV £2.2m.
The monetised costs of delivering Warm Front are included in the Do Nothing baseline, which are detailed in the evidence base.

Other key non-monetised costs by 'main affected groups'

None identified - all other costs are the same as the Do Nothing baseline.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			2.5	**80**
High			3.2	**99**
Best Estimate	None		2.9	**92**

Description and scale of key monetised benefits by 'main affected groups'

Equity weighted bill savings to recipient households net of foregone savings for households no longer eligible - PV £88m;
Equity weighted value of comfort taking from improved energy efficiency of homes - PV £4m.
The monetised benefits of Warm Front are included in the Do Nothing baseline, which detailed in the evidence base.

Other key non-monetised benefits by 'main affected groups'

Greater reduction of fuel poverty through better targeting of Warm Front Assistance at vulnerable households; Greater reduction of negative health impacts of fuel poverty, and subsequent improvement in quality of life.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5%

The same number of measures are delivered to the same number of households as in the Do Nothing baseline option; Bill savings for each measure installed are calculated based on the estimated lifetime of each measure; For installations of new boilers/central heating, it is assumed that these are replacing non-central electric heating, and net energy/bill savings are the net result of a reduction in electricity use and an increase in the fuel that the new boiler/heating system uses (i.e. gas, oil, LPG, electricity);
For installations of insulation, it is assumed that no previous insulation of that type exists in the home already (i.e. if cavity wall insulation is installed, it is assumed no previous insulation existed in the wall);
A reduced discount rate of 3% is used after 30 years.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: 0	**Benefits:** 0	**Net:** 0	No	NA

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			England		
From what date will the policy be implemented?			06/04/2011		
Which organisation(s) will enforce the policy?			DECC		
What is the annual change in enforcement cost (£m)?			N/A		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			N/A		
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0	**Non-traded:** 0	
Does the proposal have an impact on competition?			No		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			**Costs:** 0%	**Benefits:** 0%	
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	**Micro** 0%	**< 20** 0%	**Small** 0%	**Medium** 0%	**Large** 0%
Are any of these organisations exempt?	Yes	Yes	Yes	Yes	Yes

Specific Impact Tests: Checklist

Does your policy option/proposal have an impact on…?	**Impact**	**Page ref within IA**
Statutory equality duties[1] Statutory Equality Duties Impact Test guidance	Yes	25
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	Yes	26
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	No	

[1] Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Summary: Analysis and Evidence

Policy Option 2

Description:

Introduce Cold Weather Payment eligibility criteria, for homes below an energy efficiency threshold.

Price Base Year 2009	PV Base Year 2010	Time Period Years 42	Net Benefit (Present Value (PV)) (£m)		
			Low: 76	**High:** 93	**Best Estimate: 86**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			0.03	**1.3**
High			0.07	**3.0**
Best Estimate	None		0.05	**2.1**

Description and scale of key monetised costs by 'main affected groups'

Equity weighted value of hidden costs associated with installing Warm Front measures: PV £2.1m.
The monetised costs of delivering Warm Front are included in the Do Nothing baseline, which are detailed in the evidence base.

Other key non-monetised costs by 'main affected groups'

Small increase in menu costs for Warm Front delivery contractor.
All other costs are the same as the Do Nothing baseline.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			2.5	**77**
High			3.1	**96**
Best Estimate	None		2.8	**89**

Description and scale of key monetised benefits by 'main affected groups'

Equity weighted bill savings to recipient households net of foregone savings for households no longer eligible - PV £85m;
Equity weighted value of comfort taking from improved energy efficiency of homes - PV £3m.
The monetised benefits of Warm Front are included in the Do Nothing baseline, which detailed in the evidence base.

Other key non-monetised benefits by 'main affected groups'

Greater reduction of fuel poverty through better targeting of Warm Front Assistance at vulnerable households; Greater reduction of negative health impacts of fuel poverty, and subsequent improvement in quality of life.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

The same number of measures are delivered to the same number of households as in the Do Nothing baseline option; Bill savings for each measure installed are calculated based on the estimated lifetime of each measure; For installations of new boilers/central heating, it is assumed that these are replacing non-central electric heating, and net energy/bill savings are the net result of a reduction in electricity use and an increase in the fuel that the new boiler/heating system uses (i.e. gas, oil, LPG, electricity);
For installations of insulation, it is assumed that no previous insulation of that type exists in the home already (i.e. if cavity wall insulation is installed, it is assumed no previous insulation existed in the wall);
A reduced discount rate of 3% is used after 30 years.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: 0	**Benefits:** 0	**Net:** 0	No	NA

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			England		
From what date will the policy be implemented?			06/04/2011		
Which organisation(s) will enforce the policy?			DECC		
What is the annual change in enforcement cost (£m)?			N/A		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			N/A		
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0	**Non-traded:** 0	
Does the proposal have an impact on competition?			No		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			**Costs:** 0%	**Benefits:** 0%	
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	**Micro** 0%	**< 20** 0%	**Small** 0%	**Medium** 0%	**Large** 0%
Are any of these organisations exempt?	Yes	Yes	Yes	Yes	Yes

Specific Impact Tests: Checklist

Does your policy option/proposal have an impact on…?	**Impact**	**Page ref within IA**
Statutory equality duties[1] Statutory Equality Duties Impact Test guidance	Yes	25
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	Yes	25
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	No	

[1] Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Summary: Analysis and Evidence

Policy Option 3

Description:

Introduce Cold Weather Payment eligibility criteria plus Child Tax Credit and under an income threshold of £16,190, for homes below an energy efficiency threshold.

Price Base Year 2009	PV Base Year 2010	Time Period Years 42	Net Benefit (Present Value (PV)) (£m)		
			Low: 49	High: 60	Best Estimate: **56**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			0.02	**0.8**
High			0.05	**1.9**
Best Estimate	None		0.03	**1.4**

Description and scale of key monetised costs by 'main affected groups'

Equity weighted value of hidden costs associated with installing Warm Front measures: PV £1.4m.
The monetised costs of delivering Warm Front are included in the Do Nothing baseline, which are detailed in the evidence base.

Other key non-monetised costs by 'main affected groups'

Small increase in menu costs for Warm Front delivery contractor.
All other costs are the same as the Do Nothing baseline.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			1.6	**50**
High			2.0	**62**
Best Estimate	None		1.8	**57**

Description and scale of key monetised benefits by 'main affected groups'

Equity weighted bill savings to recipient households net of foregone savings for households no longer eligible - PV £55m;
Equity weighted value of comfort taking from improved energy efficiency of homes - PV £2m.
The monetised benefits of Warm Front are included in the Do Nothing baseline, which detailed in the evidence base.

Other key non-monetised benefits by 'main affected groups'

Greater reduction of fuel poverty through better targeting of Warm Front Assistance at vulnerable households; Greater reduction of negative health impacts of fuel poverty, and subsequent improvement in quality of life.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

The same number of measures are delivered to the same number of households as in the Do Nothing baseline option; Bill savings for each measure installed are calculated based on the estimated lifetime of each measure; For installations of new boilers/central heating, it is assumed that these are replacing non-central electric heating, and net energy/bill savings are the net result of a reduction in electricity use and an increase in the fuel that the new boiler/heating system uses (i.e. gas, oil, LPG, electricity);
For installations of insulation, it is assumed that no previous insulation of that type exists in the home already (i.e. if cavity wall insulation is installed, it is assumed no previous insulation existed in the wall);
A reduced discount rate of 3% is used after 30 years.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: 0	**Benefits:** 0	**Net:** 0	No	NA

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			England		
From what date will the policy be implemented?			06/04/2011		
Which organisation(s) will enforce the policy?			DECC		
What is the annual change in enforcement cost (£m)?			N/A		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			N/A		
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0	**Non-traded:** 0	
Does the proposal have an impact on competition?			No		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			**Costs:** 0%	**Benefits:** 0%	
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	**Micro** 0%	**< 20** 0%	**Small** 0%	**Medium** 0%	**Large** 0%
Are any of these organisations exempt?	Yes	Yes	Yes	Yes	Yes

Specific Impact Tests: Checklist

Does your policy option/proposal have an impact on…?	**Impact**	**Page ref within IA**
Statutory equality duties[1] Statutory Equality Duties Impact Test guidance	Yes	25
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	Yes	26
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	No	

[1] Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Summary: Analysis and Evidence

Policy Option 4

Description:

Introduce eligibility criteria in line with Pension Credit or Child Tax Credit and under an income threshold of £16,190, for homes below an energy efficiency threshold.

Price Base Year 2009	PV Base Year 2010	Time Period Years 42	Net Benefit (Present Value (PV)) (£m)		
			Low: 89	**High:** 109	**Best Estimate: 102**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			0.04	**1.5**
High			0.09	**3.5**
Best Estimate	None		0.06	**2.5**

Description and scale of key monetised costs by 'main affected groups'

Equity weighted value of hidden costs associated with installing Warm Front measures: PV £2.5m.
The monetised costs of delivering Warm Front are included in the Do Nothing baseline, which are detailed in the evidence base.

Other key non-monetised costs by 'main affected groups'

Small increase in menu costs for Warm Front delivery contractor.
All other costs are the same as the Do Nothing baseline.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			2.9	**91**
High			3.6	**113**
Best Estimate	None		3.3	**104**

Description and scale of key monetised benefits by 'main affected groups'

Equity weighted bill savings to recipient households net of foregone savings for households no longer eligible - PV £100m;
Equity weighted value of comfort taking from improved energy efficiency of homes - PV £4m.
The monetised benefits of Warm Front are included in the Do Nothing baseline, which detailed in the evidence base.

Other key non-monetised benefits by 'main affected groups'

Greater reduction of fuel poverty through better targeting of Warm Front Assistance at vulnerable households; Greater reduction of negative health impacts of fuel poverty, and subsequent improvement in quality of life.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

The same number of measures are delivered to the same number of households as in the Do Nothing baseline option; Bill savings for each measure installed are calculated based on the estimated lifetime of each measure; For installations of new boilers/central heating, it is assumed that these are replacing non-central electric heating, and net energy/bill savings are the net result of a reduction in electricity use and an increase in the fuel that the new boiler/heating system uses (i.e. gas, oil, LPG, electricity);
For installations of insulation, it is assumed that no previous insulation of that type exists in the home already (i.e. if cavity wall insulation is installed, it is assumed no previous insulation existed in the wall);
A reduced discount rate of 3% is used after 30 years.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: 0	**Benefits:** 0	**Net:** 0	No	NA

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			England		
From what date will the policy be implemented?			06/04/2011		
Which organisation(s) will enforce the policy?			DECC		
What is the annual change in enforcement cost (£m)?			N/A		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			N/A		
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0	**Non-traded:** 0	
Does the proposal have an impact on competition?			No		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			**Costs:** 0%	**Benefits:** 0%	
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	**Micro** 0%	**< 20** 0%	**Small** 0%	**Medium** 0%	**Large** 0%
Are any of these organisations exempt?	Yes	Yes	Yes	Yes	Yes

Specific Impact Tests: Checklist

Does your policy option/proposal have an impact on…?	**Impact**	**Page ref within IA**
Statutory equality duties[1] Statutory Equality Duties Impact Test guidance	Yes	25
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	Yes	26
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	No	

[1] Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Summary: Analysis and Evidence

Policy Option 5

Description:

Introduce eligibility criteria in line with Pension Credit Guarantee or Child Tax Credit and under an income threshold of £5,200, for homes below an energy efficiency threshold.

Price Base Year 2009	PV Base Year 2010	Time Period Years 42	Net Benefit (Present Value (PV)) (£m)		
			Low: 232	High: 284	Best Estimate: **264**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			0.10	**4.0**
High			0.23	**9.1**
Best Estimate	None		0.16	**6.5**

Description and scale of key monetised costs by 'main affected groups'

Equity weighted value of hidden costs associated with installing Warm Front measures: PV £6.5m.
The monetised costs of delivering Warm Front are included in the Do Nothing baseline, which are detailed in the evidence base.

Other key non-monetised costs by 'main affected groups'

Small increase in menu costs for Warm Front delivery contractor.
All other costs are the same as the Do Nothing baseline.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			7.5	**236**
High			9.3	**292**
Best Estimate	None		8.6	**270**

Description and scale of key monetised benefits by 'main affected groups'

Equity weighted bill savings to recipient households net of foregone savings for households no longer eligible - PV £260m;
Equity weighted value of comfort taking from improved energy efficiency of homes - PV £10m.
The monetised benefits of Warm Front are included in the Do Nothing baseline, which detailed in the evidence base.

Other key non-monetised benefits by 'main affected groups'

Greater reduction of fuel poverty through better targeting of Warm Front Assistance at vulnerable households; Greater reduction of negative health impacts of fuel poverty, and subsequent improvement in quality of life.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

The same number of measures are delivered to the same number of households as in the Do Nothing baseline option; Bill savings for each measure installed are calculated based on the estimated lifetime of each measure; For installations of new boilers/central heating, it is assumed that these are replacing non-central electric heating, and net energy/bill savings are the net result of a reduction in electricity use and an increase in the fuel that the new boiler/heating system uses (i.e. gas, oil, LPG, electricity);
For installations of insulation, it is assumed that no previous insulation of that type exists in the home already (i.e. if cavity wall insulation is installed, it is assumed no previous insulation existed in the wall);
A reduced discount rate of 3% is used after 30 years.

Direct impact on business (Equivalent Annual) £m):			In scope of OIOO?	Measure qualifies as
Costs: 0	**Benefits:** 0	**Net:** 0	No	NA

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			England		
From what date will the policy be implemented?			06/04/2011		
Which organisation(s) will enforce the policy?			DECC		
What is the annual change in enforcement cost (£m)?			N/A		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			N/A		
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0	**Non-traded:** 0	
Does the proposal have an impact on competition?			No		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			**Costs:** 0%	**Benefits:** 0%	
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	**Micro** 0%	**< 20** 0%	**Small** 0%	**Medium** 0%	**Large** 0%
Are any of these organisations exempt?	Yes	Yes	Yes	Yes	Yes

Specific Impact Tests: Checklist

Does your policy option/proposal have an impact on…?	**Impact**	**Page ref within IA**
Statutory equality duties[1] Statutory Equality Duties Impact Test guidance	Yes	25
Economic impacts		
Competition Competition Assessment Impact Test guidance	No	
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	Yes	26
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	No	

[1] Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Evidence Base (for summary sheets) – Notes

References

No.	Legislation or publication
1	UK Fuel Poverty Strategy 2001: Amending Reference to the Warm Front Scheme Consultation Document and Response: http://www.decc.gov.uk/en/content/cms/consultations/warm_front/warm_front.aspx
2	DECC Fuel Poverty Strategy 2001: http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/fuel_poverty/strategy/strategy.aspx
3	DECC Fuel Poverty Statistics Report 2010: http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/fuelpov_stats.aspx
4	DECC Fuel Poverty Strategy Annual Progress Report 2009: http://www.decc.gov.uk/assets/decc/Statistics/fuelpoverty/1_20091021091505_e_@@_UKFuelPovertyStrategy7AnnReport09.pdf
5	Changes to the Warm Front Eligibility Criteria Consultation Document: http://decc.gov.uk/en/content/cms/consultations/warm_front/warm_front.aspx

Evidence Base

Annual profile costs and benefits - (£m) constant prices

	Y_0	Y_1	Y_2	Y_3	Y_4	Y_5	Y_6	Y_7	Y_8	Y_9	Y_{10}	Y_{11}	Y_{12}	Y_{13}	Y_{14}
Transition costs															
Annual recurring cost	0.0	118.5	112.8	12.4	12.6	12.8	9.6	6.4	6.5	6.6	6.7	5.8	4.9	4.0	1.5
Total annual costs	0.0	118.5	112.8	12.4	12.6	12.8	9.6	6.4	6.5	6.6	6.7	5.8	4.9	4.0	1.5
Transition benefits															
Annual recurring benefits	0.0	0.0	72.9	136.5	140.4	144.8	108.9	71.8	73.8	75.0	75.3	78.8	81.4	86.0	47.3
Total annual benefits	0.0	0.0	72.9	136.5	140.4	144.8	108.9	71.8	73.8	75.0	75.3	78.8	81.4	86.0	47.3

	Y_{15}	Y_{16}	Y_{17}	Y_{18}	Y_{19}	Y_{20}	Y_{21}	Y_{22}	Y_{23}	Y_{24}	Y_{25}	Y_{26}	Y_{27}	Y_{28}	Y_{29}
Transition costs															
Annual recurring cost	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total annual costs	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transition benefits															
Annual recurring benefits	4.9	5.0	5.1	5.2	5.2	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4
Total annual benefits	4.9	5.0	5.1	5.2	5.2	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4

	Y_{30}	Y_{31}	Y_{32}	Y_{33}	Y_{34}	Y_{35}	Y_{36}	Y_{37}	Y_{38}	Y_{39}	Y_{40}	Y_{41}	Y_{42}
Transition costs													
Annual recurring cost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total annual costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transition benefits													
Annual recurring benefits	5.5	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.7	5.7	5.7	5.7	2.8
Total annual benefits	5.5	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.7	5.7	5.7	5.7	2.8

Greenhouse Gas Emissions Reporting

Version of GHG guidance used:	Jun-2010

Sector		Emission Changes* (MtCO2e) - By Budget Period			Emission Changes (MtCO2e) - Annual Projections									
		CB I; 2008-2012	CB II; 2013-2017	CB III; 2018-2022	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Power sector	Traded	0	0	0										
	Non-traded	0	0	0										
Transport	Traded	0	0	0										
	Non-traded	0	0	0										
Workplaces & Industry	Traded	0	0	0										
	Non-traded	0	0	0										
Homes	Traded	0.220681084	1.819612998	1.011828809					0.221	0.434	0.434	0.434	0.316	0.202
	Non-traded	-0.177039746	-1.465868852	-0.832384668					-0.18	-0.35	-0.35	-0.35	-0.26	-0.17
Waste	Traded	0	0	0										
	Non-traded	0	0	0										
Agriculture	Traded	0	0	0										
	Non-traded	0	0	0										
Public	Traded	0	0	0										
	Non-traded	0	0	0										
Total	Traded	0.220681084	1.819612998	1.011828809	0	0	0	0	0.221	0.434	0.434	0.434	0.316	0.202
	Non-traded	-0.177039746	-1.465868852	-0.832384668	0	0	0	0	-0.18	-0.35	-0.35	-0.35	-0.26	-0.17

Cost effectiveness	% of lifetime emissions below traded cost comparator	100%
	% of lifetime emissions below non-traded cost comparator	N/A

2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
0.202	0.202	0.202	0.202	0.202	0.202	0.099	5E-04	5E-04	4E-04	4E-04	4E-04	3E-04	3E-04	3E-04	3E-04	2E-04	2E-04	2E-04	1E-04
-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.08	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
0.202	0.202	0.202	0.202	0.202	0.202	0.099	5E-04	5E-04	4E-04	4E-04	4E-04	3E-04	3E-04	3E-04	3E-04	2E-04	2E-04	2E-04	1E-04
-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.08	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004

2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
1E-04	7E-05	4E-05	4E-05	4E-05	4E-05	4E-05	4E-05	3E-05	3E-05	3E-05	3E-05	3E-05
0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
1E-04	7E-05	4E-05	4E-05	4E-05	4E-05	4E-05	4E-05	3E-05	3E-05	3E-05	3E-05	3E-05
0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004

Evidence Base (for summary sheets)

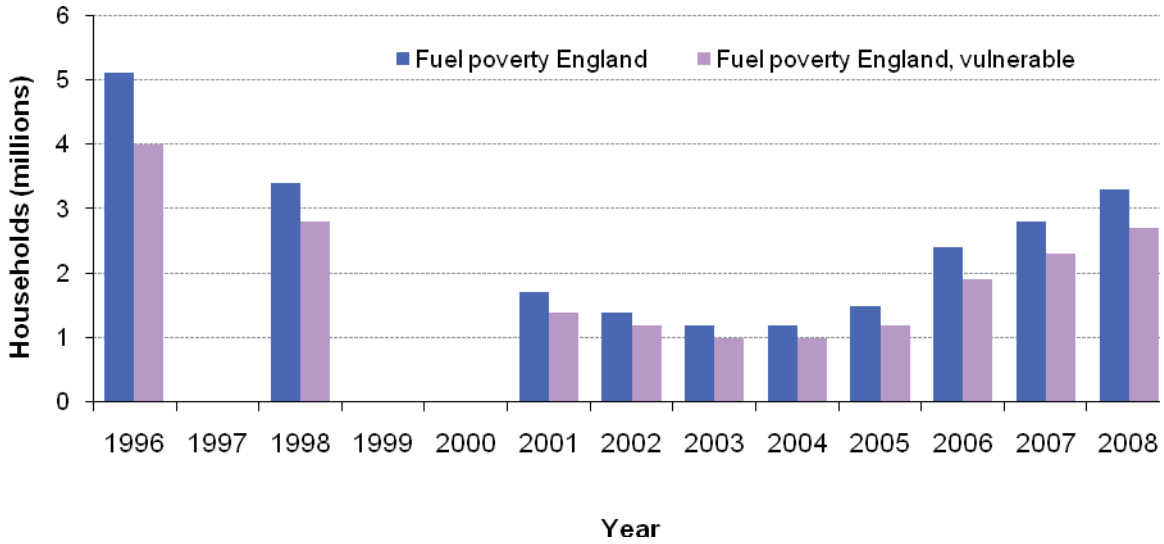
A small number of changes and updates have been reflected in this final Impact Assessment (IA) relative to the consultation stage IA.[1] These are noted throughout the following evidence base, and are summarised in Annex 6.

Problem Under Consideration

What is fuel poverty?

1. Households are classed as being in fuel poverty if they would have to spend more than 10% of their income to sufficiently heat their home – defined as 21°C for the main living area, and 18°C for other occupied rooms. The Government has a target to eradicate fuel poverty in England by 2016 as far as is reasonably practicable.
2. Fuel poverty has three main drivers[2]:
   a. *Energy prices* – rising energy bills increase the risk of fuel poverty for all households, as a greater proportion of income is required to adequately heat homes;
   b. *Household income* – households on lower income are typically more likely to be in fuel poverty than those on higher incomes, such that an estimated 90% of fuel poor households are in the bottom three income deciles; and
   c. *Energy performance of the home* – households with relatively inefficient homes will need to spend more of their income to adequately heat them than households in more efficient buildings.
3. The latest estimates for England show there were 3.3m households in fuel poverty in 2008, a 0.5m increase on 2007, and close to three times higher than in 2003 (see Figure 1). Upward pressure on energy prices has been the main driver behind the increases in fuel poverty over recent years, while growth in average household incomes and improvements in the thermal efficiency of homes have had a smaller counter effect.

Figure 1: Number of fuel poor households in England, 1996 – 2008



Source: DECC Annual Report on Fuel Poverty Statistics 2010[3]

[1] Available at: http://www.decc.gov.uk/en/content/cms/consultations/warm_front/warm_front.aspx

[2] A summary of which factors are included in calculations of fuel poverty can be found in Annex 2.

Why is fuel poverty an issue?

The Fuel Poverty Strategy (2001)[4] identified that fuel poverty damages people's quality of life and can impose wider costs on the community. To be considered fuel poor, a household *would* need to spend a significant proportion of its income to heat the home adequately. This does not mean that households actually do so, and under-heating can result in a number of negative outcomes including: increased risk of illness – diseases including heart disease and strokes are exacerbated by the cold; absence from work due to illness, and social exclusion.

What is the Government doing to reduce fuel poverty?

4. The most sustainable strategy for reducing fuel poverty is to improve the heating and energy performance of homes. This helps enable households to heat their homes adequately and mitigate vulnerability to increases in energy prices and/or reductions in income.

5. The Government has a number of policies in place to support vulnerable and low-income households. On household thermal efficiency, policies include those aimed at reducing household emissions such as the Carbon Emissions Reduction Target (CERT) and the Community Energy Saving Programme (CESP). On incomes, Winter Fuel Payments and Cold Weather Payments help households to pay their energy bills. On prices, the Government is launching the Warm Home Discount scheme from April 2011, where energy suppliers will be required to provide direct financial support on energy bills to vulnerable and fuel poor households.

6. Warm Front complements these programmes by providing heating and insulation measures directly to vulnerable households to improve the warmth and energy efficiency of their homes, which yield both short term and long run benefits. The scheme delivers a number of measures to households where it is possible, and issues grants to contribute to or completely cover the cost. Around 2m households in England have received Warm Front assistance since 2000. In 2009/10, the average Standard Assessment Procedure (SAP) score – a standardised measure of building thermal performance – of households that received support through the Warm Front scheme increased from 38 to 62.[5]

Rationale for Intervention

7. Warm Front provides grants for packages of home heating and insulation improvements, including central heating systems, to a significant number of households. The level of funding available to the programme is set to decrease significantly from £1.1bn in the 2008-11 spending review period, to £220m in the spending period 2011-15.

8. Current eligibility for Warm Front grants is based on age thresholds and/or entitlement to a range of both means tested and non-means tested state benefits. Because fuel poverty is highly correlated with low income, and only a proportion of the benefits that underpin Warm Front eligibility are means tested, an estimated 53% of Warm Front eligible households in England are fuel poor.[6] Against a backdrop of a reduced funding envelope, and in order to ensure that the scheme can continue to effectively support the needs of vulnerable and fuel poor households, the Government has reviewed the scheme's eligibility criteria, and intends to amend them.

Policy Objective

9. The aim of the policy change is to improve the targeting of funding for heating and insulation measures through Warm Front so that the scheme continues to provide support to vulnerable and fuel poor households against a backdrop of reduced resources. A more focused use of Warm Front

---

[3] Available here: http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/fuelpov_stats.aspx

[4] Available here: http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/fuel_poverty/strategy/strategy.aspx

[5] DECC Fuel Poverty Strategy Annual Progress Report 2009, available from: http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/fuel_poverty/strategy/strategy.aspx

[6] Note that this figure is different to that published in the Annual Report on Fuel Poverty Statistics 2010. For an explanation please see Annex 3.

resources will be achieved if eligibility for the scheme is more focused on identifying low-income households that we already know to be most susceptible to fuel poverty – the elderly, families with young children, and disabled or long-term ill.

10. The intended effect of this is to reduce the number of households in and at risk of fuel poverty in a way that best uses the limited resources available, while ensuring that support can be practically and proportionately delivered to those vulnerable groups identified in the Fuel Poverty Strategy 2001.

Options Considered

11. Eligibility criteria for Warm Front should perform well against a number of principles:
    a. **Fuel Poverty 'Hit Rate'** – defined as the estimated proportion of households eligible for Warm Front that are fuel poor. This should be higher than the average for recipients of particular means-tested benefits;
    b. **Coverage of vulnerable groups** – the UK Fuel Poverty Strategy (2001) identifies that while all health risks associated with fuel poverty apply to all people, the elderly, families with children, and householders who are disabled or suffering from a long-term illness are especially vulnerable;
    c. **Availability of suitable proxies** – finding fuel poor households is challenging as fuel poverty is dynamic – a household could be fuel poor one year and not the next, and given the multiple drivers of fuel poverty it is difficult to identify which households are fuel poor. As a result it is necessary to have access to suitable proxies to use in order to target support effectively;
    d. **Flexibility and practicability** – it is important to ensure that eligibility criteria are flexible enough to allow cost-effective delivery of Warm Front measures. For example, placing very stringent restrictions on eligibility for support through the scheme could make it more challenging for the scheme manager to deliver the measures as a greater proportion of the scheme budget would need to be spent targeting and engaging with eligible households. It is important also to ensure that the criteria are easily understood and that the application process is not overly burdensome – stringent or difficult to understand may discourage some households (including some of the most vulnerable) from applying for support under the scheme.
12. A number of options have been considered and were consulted on in late 2010. They are set out below. These options are analysed as part of the **Costs and Benefits of Options** section.
13. An additional factor considered was the introduction of a household **energy efficiency performance** threshold as an additional criterion for eligibility. This would mean a household would need to live in a home with a Standard Assessment Procedure (SAP) score below a certain level, *in addition* to meeting the criteria set out under each option. This criterion was considered as the thermal efficiency of a home is static and likely to increase the vulnerability of a household to fuel poverty over time, whereas other factors such as energy prices and income are dynamic. Therefore targeting households below an efficiency threshold should lead to greater reductions in the risk to households of being in fuel poverty.

Do Nothing – Maintain the current eligibility criteria, and introduce an energy efficiency performance threshold

14. Households are currently eligible for apply for Warm Front assistance under the following criteria:
    a. Householders aged 60 or over in receipt of one or more of the following benefits:
        - Income Support
        - Council Tax Benefit
        - Housing Benefit
        - Job Seekers Allowance (income-based)
        - Pension Credit
        - Income-related Employment and Support Allowance

b. Householders with a child under 16, or pregnant women with maternity certificate MAT-B1, in receipt of one or more of the following benefits:

- Income Support
- Council Tax Benefit
- Housing Benefit
- Job Seekers Allowance (income-based)
- Pension Credit
- Income-related Employment and Support Allowance

c. Householders in receipt of one or more of the following benefits:

- Working Tax Credit (with an income of less than £16,040, which must include a disability element)
- Disability Living Allowance
- Child Tax Credit (with an income of less than £16,040)
- Housing Benefit (which must include a disability premium)
- Income Support (which must include a disability premium)
- Council Tax Benefit (which must include a disability premium)
- War Disablement Pension (Which must include a mobility supplement or Constant Attendance Allowance)
- Industrial Injuries Disablement Benefit (which must include a Constant Attendance Allowance)
- Attendance Allowance

15. This option would maintain the current situation where around 53% of eligible households are fuel poor.

Policy Option 1 – Maintain current Warm Front eligibility criteria minus Attendance Allowance and Disability Living Allowance, for homes under an energy efficiency performance threshold

16. Under this option the current Warm Front eligibility criteria would be retained, excluding the two non-means tested benefits of Attendance Allowance and Disability Living Allowance. This would create a stronger link between eligibility and low income, which is highly correlated with fuel poverty.

Policy Option 2 – Cold Weather Payment criteria only, for homes under an energy efficiency performance threshold

17. This option would revise the current eligibility criteria and align them with those that determine qualification for Cold Weather Payments. This would mean that Warm Front assistance would be provided exclusively based on means tested benefits, but still target support at the main fuel poverty vulnerable groups.

18. Cold Weather Payments (CWPs) are targeted at those most vulnerable to the cold i.e. disabled adults and children, the elderly and families with young children who are in receipt of an income related benefit. These are groups who spend more time in doors and often have restricted mobility because of age or disability.

19. Eligible customers are all those awarded**:**

- Pension Credit, or
- Income-related Employment and Support Allowance that includes a work-related activity or support component;

and those awarded**:**

- Income Support, or
- Income-based Jobseeker's Allowance, or
- Income-related Employment and Support Allowance in the assessment phase (first 13 weeks of the claim),

who **must also** have one of the following:

- a pensioner premium, or
- a disability or severe disability premium, or
- an award of child tax credit that also includes an element for a disabled, or severely disabled, child or young person, or
- a child under the age of five.

Policy Option 3 – Cold Weather Payment criteria plus those households receiving Child Tax Credit and under an income threshold of £16,190, for homes under an energy efficiency performance threshold

20. This option is identical to Policy Option 2 but adds an additional criterion for households receiving Child Tax Credit and are under an income threshold of £16,190. It would be based almost exclusively on means tested benefits, with attached conditions that target support at vulnerable groups including the disabled, the elderly and young children.

21. Households are eligible for Child Tax Credit (CTC) if they are responsible for a child under the age of 16 (under 20 if in full time education or approved training).

Policy Option 4 – Pension Credit criteria and Child Tax Credit criteria for households under an income threshold of £16,190, and below an energy efficiency performance threshold

22. This option would revise the current eligibility criteria and align them with those that underpin Pension Credit and CTC with an income of under £16,190. Pension Credit is a means tested benefit for householders of pensionable age, but do not necessarily have to qualify for a state pension. There are two components:

    a. To qualify for Pension Credit Guarantee eligible householders must:

        - Meet the minimum qualifying age (60 – 65, gradually increasing up to 2020); and
        - Have a weekly income below £132.60 (if single, £202.40 if a couple).

    b. To qualify for Savings Credit eligible householders must:

        - Meet the minimum qualifying age (65); and
        - Have made some provision for their retirement (e.g. a second pension).

23. This option would be exclusively means tested, and specifically targets the elderly and young children, but does not explicitly account for the long term sick and disabled.

Policy Option 5 – Pension Credit Guarantee criteria and Child Tax Credit criteria for households under an income threshold of £5,200, and under an energy efficiency performance threshold

24. This option mirrors Policy Option 4 but restricts eligibility to those elderly households and homes with young children that are on very low incomes only.

Costs and Benefits of Options

25. This section analyses the identified costs and benefits of each option. These are divided into **monetised** and **non-monetised** costs and benefits. The methodology for estimating monetised costs and benefits is outlined in Annex 5.

26. The funding profile for the spending period 2011-15 is, in nominal prices, £110m in 2011/12, £100m in 2012/13 and no further funding for installation of measures in 2013/14 and 2014/15. Going forward, the Green Deal will be the key element of the Government's policy to improve household energy efficiency.

27. The estimated number of households assisted under all options is approximately 47,000 in 2011/12, and 45,000 in 2012/13 (details on how these estimates are calculated are in Annex 5).[7]

Equity Weighting

28. Certain monetised costs and benefits considered in this impact assessment are adjusted to reflect that Warm Front assistance will be worth more to some households than others. This adjustment is called 'equity weighting' (see *Monetised Costs* and *Monetised Benefits* sections for details of which costs and benefits are equity weighted).

29. In line with the methodology outlined in the *Green Book*[8], the equity weighting used in this impact assessment is undertaken on the basis of income, whereby assistance given to households in lower income groups is judged to be more valuable to society than assistance given to households in high income groups.

30. Equity weighting based on income is appropriate for assessing the costs and benefits of changing the Warm Front eligibility criteria, as fuel poverty is highly correlated with low income. However, the selection of a preferred Policy Option should not focus only on the targeting of measures at poor households, but also on the other important factors outlined in the principles found in paragraph 11, such as coverage of vulnerable groups. In order to ensure that each Policy Option is assessed these principles as well as equity weighted costs and benefits, a multi-criteria analysis is undertaken in the *Analysis of Policy Options* section below.

Monetised Costs

31. The monetised costs for each option consist of four components:

    a. **Direct costs of measures** – this is the material cost of the heating and insulation measures that Warm Front delivers, and the cost of their installation;

    b. **Hidden costs of measures** – in order to have measures installed in their homes householders will need to research if they are eligible, spend time supervising installers and/or spend time and money re-decorating post-installation. These costs are adjusted to reflect that an extra £1 spent on hidden costs will be worth more in value terms to a household in a low income group, than it will be to a household in a high income group (called 'equity weighting' – see Annex 5 for details);

    c. **Administration costs** – administrative costs of delivering Warm Front measures through a delivery partner contractor. Administrative costs of verifying eligibility under Policy Options 1 – 4 are not expected to vary with the nature of the criteria used. This is because households are in the first instance required to phone the delivery contractor to verify eligibility, and reducing or increasing the number of qualifying benefits is not likely to save a significant amount of time. There are non-monetised administrative costs associated with Policy Option 5 outlined in *Non-Monetised Costs* below, which also details costs associated with the introduction of an energy efficiency performance threshold for all Policy Options;

    d. **Increase in the value of CO_2 emissions** – while overall carbon emissions are estimated to decrease as a result of the measures installed under Warm Front, the majority of these savings are from reductions in electricity use, the carbon price of which is determined by the EU Emissions Trading System (ETS). The increases in emissions are from gas, oil, solid fuels and LPG, the shadow carbon prices for which are determined independently of the EU ETS. For a significant proportion of the lifetime of Warm Front measures, the traded (EU ETS) carbon price is forecasted to be significantly lower than the non-traded price. This means that the increase in emissions from gas, oil and LPG has a higher value overall than the reduction in emissions from electricity. Overall this results in an estimated net carbon cost to society.

32. All of these costs, excluding hidden costs, are only considered in the baseline Do Nothing option (see Tables 2.1 and 2.2), as adjusting the eligibility criteria does not incur any incremental changes

[7] The estimated number of households assisted under the scheme has decreased compared to the consultation stage impact assessment. This is primarily due to the inclusion of updated information on the value of the average grant to households under the scheme. For more details see Annex 6.

[8] Available at: http://www.hm-treasury.gov.uk/data_greenbook_index.htm

in these. Because the hidden costs are equity weighted, and each Policy Option targets a different mix of households with different incomes, the hidden costs vary between options.

33. Under each option we assume that the Warm Front budget is spent, the same number of households receive measures under each option, incurring the same (monetised) administrative costs, therefore apart from hidden costs, altering the eligibility criteria does change incur any additional monetised cost relative to the Do Nothing baseline.

Non-Monetised Costs

Administration Costs

34. At present, households that receive Warm Front measures are provided with an energy performance assessment of their home, which results in a SAP score, before and after measures are installed. It is not expected that these costs will increase with the introduction of a SAP threshold for any of the Policy Options considered. However, the introduction of a SAP threshold increases the likelihood of a household potentially being denied Warm Front assistance if, post-assessment, their home receives a score above the threshold. In these instances there will be an additional administration cost in terms of the time cost to the delivery contractor of conducting the SAP assessment and time cost to the household of supervising the assessment.

Menu Costs

35. Changing the eligibility criteria for Warm Front will require the delivery organisation to update this information on their website and in any communication with households. This cost is expected to be small, and consistent across Policy Options 1 – 5, and therefore will not affect the net benefit of one Policy Option relative to other options.

Search Costs

36. Households are required to contact the Warm Front scheme to verify eligibility if they fit the criteria displayed on the Warm Front website. If the eligibility criteria are overly restrictive, the risk arises of an insufficient number eligible households applying for assistance. This would lead to search costs for the delivery contractor, as households would have to be identified to receive assistance. This is not considered to be a risk for Policy Options 1 – 4, but is a risk for Policy Option 5 (see *Analysis of Policy Options*).

Monetised Benefits

37. The monetised benefits for each option consist of two components:

    a. **Energy savings** – the installation of insulation and heating measures, such as boilers and central heating systems to replace electric heaters, reduces the estimated amount of energy consumed by recipient households. The lifetimes of each measure installed are taken into account, and therefore the savings reflect the total reduction in energy demand that each measure will deliver throughout its lifetime. These energy savings benefit society by reducing the amount of energy resources consumed overall.

    b. **Welfare increase due to reduction in household energy bills** – as a result of Warm Front measures, overall energy bills for recipient households are estimated to decrease, which results in savings to these households. These are private benefits – the social benefit of reduced energy demand is accounted for under *Energy Savings* – which are not counted as a benefit society. However, because the beneficiaries of these bill savings are predominantly those on relatively lower incomes, there is a wider benefit to society of the private bill reductions these households receive. The societal benefit is included in the benefit calculations by including the difference between equity weighted and non-equity weighted bill savings for all recipient households – the net welfare gain (see Annex 5 for more details).

    c. **Improvement in air quality** – the installation of energy efficiency measures and switching to heating appliances that use cleaner fuels (e.g. gas boiler instead of solid fuel fire) result in an improvement in air quality.

d. **Comfort taking** – as a result of improvements in household energy efficiency (e.g. through cavity wall insulation), some households are likely to increase their energy consumption as it will cost less to heat their homes – this is referred to as 'comfort taking'. The value of the energy consumed through comfort taking is equity weighted to reflect that an extra £1 spent on an energy will be worth more in value terms to a household in a low income group, than it will be to a household in a higher income group.

38. Similarly to most of the monetised costs, the air quality benefits are constant across all options, including the baseline Do Nothing case, and therefore are not counted as an incremental benefit of any of Policy Options 1-5.

39. The reduction in household bills varies significantly between different options. This is because each option targets a different combination of income groups, and the equity weighted benefit therefore varies according to the mix of income groups under each Policy Option (Annex 5 gives further detail on equity weighting). Table 1 displays the modelled distributions of households across income deciles under the Do Nothing baseline and Policy Options 1 – 5.

40. These figures show that changing the current eligibility criteria would exclude all households in the top income decile (10), i.e. those that are among the richest 10% of all households. Furthermore, all of Policy Options 1 – 5 focus eligibility towards those in the lower income deciles, suggesting that changing the eligibility will tend to exclude relatively wealthier households on average.

Table 1: Modelled Distributions of Eligible Households by Income Decile

Income Decile	Do Nothing	Option 1	Option 2	Option 3	Option 4	Option 5
1	18%	22%	18%	15%	18%	27%
2	17%	21%	26%	23%	25%	39%
3	17%	19%	21%	22%	22%	30%
4	14%	15%	15%	20%	19%	4%
5	10%	10%	9%	11%	11%	-
6	8%	6%	6%	5%	3%	-
7	6%	3%	2%	2%	1%	-
8	5%	3%	2%	1%	1%	-
9	3%	1%	1%	1%	1%	-
10	2%	-	-	-	-	-

41. Tables 2.1 and 2.2 display the estimated costs and benefits of the Do Nothing baseline case (maintain the current Warm Front eligibility criteria) relative to a scenario where no Warm Front scheme exists.[9] 'Central'/'High'/'Low' scenarios are shown to demonstrate the sensitivity around assumptions relating to the level of future energy prices and the scale of hidden costs.

42. Table 2.1 demonstrates that under the central estimate the benefits of the Do Nothing option itself outweigh the costs of delivering Warm Front across the range of uncertainty associated with energy prices and hidden costs. Table 2.2 shows that when equity weighting is applied to capture the increase in social welfare from bill savings, the additional social benefit from comfort taking, and the additional social cost associated with hidden costs, the benefits of having a Warm Front scheme significantly outweigh the costs of delivering it, under all scenarios.

[9] The estimates of the costs and benefits detailed in Tables 2.1 and 2.2 differ from those outlined in the consultation stage impact assessment. This is primarily a result of developments in the agreed range of measures that Warm Front will deliver from 2011/12 onwards, where some measures have been removed. See Annex 6 for details.

Table 2.1: Monetised Costs and Benefits of the Do Nothing Baseline, excluding Equity Weighting (£m, Net Present Value, 2009 prices)

Benefits	Central	High	Low
Total Energy Saving	£290.3	£339.4	£209.4
Comfort Taking	£17.2	£19.9	£12.9
Improvement in Air Quality	£1.9	£1.9	£1.9
Total Benefits	*£309.4*	*£361.2*	*£224.2*
Costs			
Direct Costs of Measures	-£143.1	-£143.1	-£143.1
Hidden Costs of Measures	-£10.8	-£15.0	-£6.6
Administration Costs	-£43.6	-£43.6	-£43.6
Value of change in Carbon Emissions	-£71.1	-£115.8	-£34.8
Total Costs	*-£268.5*	*-£317.4*	*-£228.0*
Net Present Value	***£40.9***	***£43.7***	***-£3.8***

Table 2.2: Monetised Costs and Benefits of the Do Nothing Baseline, including Equity Weighting (£m, Net Present Value, 2009 prices)

Benefits	Central	High	Low
Total Energy Savings	£290.3	£339.4	£209.4
Equity Weighted Welfare Increase from Bill Savings	£397.4	£428.6	£348.1
Equity Weighted Comfort Taking	£33.0	£38.4	£24.9
Improvement in Air Quality	£1.9	£1.9	£1.9
Total Benefits	*£722.7*	*£808.2*	*£584.3*
Costs			
Direct Costs of Measures	-£143.1	-£143.1	-£143.1
Equity Weighted Hidden Costs of Measures	-£20.8	-£28.9	-£12.7
Administration Costs	-£43.6	-£43.6	-£43.6
Value of change in Carbon Emissions	-£71.1	-£115.8	-£34.8
Total Costs	*-£278.5*	*-£331.3*	*-£234.1*
Net Present Value	***£444.2***	***£476.9***	***£350.2***

43. The targeting of Warm Front assistance differs for each Policy Option compared to the Do Nothing baseline, and therefore any difference relative to the baseline are counted as benefits of each option. These are summarised in Table 3.

44. The monetised benefits displayed in Table 3 measure the net benefit of each option **in addition** to those outlined in Table 2.2. Because the social welfare gain from energy bill savings, benefits of comfort taking and loss from hidden costs of measures are all equity weighted, they vary in accordance with the income distribution of the households eligible under different Warm Front criteria. Table 3 should therefore be interpreted as the **additional** net benefits relative to the Do Nothing baseline of each set of eligibility criteria. All options are found to be beneficial compared to the Do Nothing case, indicating that adjusting the Warm Front eligibility criteria is an improvement for society.

Table 3: Net Benefits of policy options relative to Do Nothing Baseline including Equity Weighting (£m, Net Present Value, 2009 Prices)

Policy Option	Central	High	Low
1	£89.6	£96.2	£78.6
2	£86.4	£92.9	£75.9
3	£55.5	£59.6	£48.7
4	£101.6	£109.1	£89.2
5	£263.4	£282.9	£231.2

45. Table 3 shows Policy Option 5 to have significantly higher additional net benefits compared to the other options. This is primarily due the highly restrictive criteria under Option 5 that mean only those on very low incomes (below £5,200) are eligible – Table 1 shows that more than 95% of eligible households under this option are in the bottom three income deciles. Welfare gains from savings on bills for the poorest groups are given more weight in our analysis than savings for those households higher up the income distribution. As such this result is driven by how poor eligible households are, and not necessarily how vulnerable or fuel poor they are. Consideration is given to the eligibility of fuel poor households and coverage of vulnerable groups in the *Non-Monetised Benefits* section below.

46. In relation to Option 1, removing the non-means tested elements of the current Warm Front eligibility criteria results in a significantly higher net benefit than the Do Nothing baseline. Policy Option 2 is significantly more beneficial relative to Option 3, despite the only difference in eligibility relating to the inclusion of CTC in the former. This indicates that including CTC results in support being directed at fewer households at the bottom of the income distribution compared to using Cold Weather Payment criteria only, which is evident in Table 1. Option 4 performs strongly in NPV terms, as the targeting of recipients of pension credit and child tax credit below an income threshold of £16,190 focuses support on households in low income deciles.

Non-Monetised Benefits

Fuel Poverty Hit Rate

47. Table 4 displays the estimated proportion of eligible households that are fuel poor under each option – the fuel poverty hit rate.[10] The higher the hit rate, the more likely households that receive Warm Front assistance are to be vulnerable and/or fuel poor. The policy objective is to improve the targeting of Warm Front measures at vulnerable and fuel poor households, and therefore increasing the hit rate relative to the Do Nothing baseline is highly desirable.

48. The introduction of a SAP criterion (energy efficiency performance threshold) significantly improves the fuel poverty hit rates for every option. By way of illustration, for all Policy Options the introduction of a threshold of 55 SAP increases the hit rate while retaining a suitably large group of eligible households, whereas a threshold score of 38 would typically reduce the number of fuel poor eligible households by 66% or more compared to not including a SAP threshold.

49. Reducing the size of the eligible group may raise issues of flexibility, as discussed in the *Analysis of Policy Options* section below.

Table 4: Fuel Poverty Hit Rates for all Policy Options

	Overall			**SAP <= 38**			**SAP <= 55**		
	Number of Households			Number of Households			Number of Households		
Policy Option	All	Fuel Poor	% Fuel Poor	All	Fuel Poor	% Fuel Poor	All	Fuel Poor	%
Do Nothing	4,329	2,310	53%	979	790	81%	2,884	1,859	
1	3,592	2,203	61%	842	743	88%	2,427	1,769	
2	2,221	1,473	66%	537	468	87%	1,507	1,165	
3	2,818	1,715	61%	645	563	87%	1,861	1,373	
4	2,180	1,462	67%	502	472	94%	1,442	1,155	
5	1,392	1,120	80%	340	333	98%	943	854	

Reduction in Fuel Poverty

50. Estimated reductions in the number of households in fuel poverty are displayed in Table 5. These numbers are rounded to the nearest 5,000 households to reflect significant uncertainty in the modelling of household level impacts of Warm Front measures (see Annex 3).

[10] Note that the figure for the Do Nothing option is different to that published in the Fuel Poverty 2008 – Detailed Tables publication (available at: http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/fuelpov_stats.aspx). For an explanation please see Annex 3.

Table 5: Estimated reduction in the number of households in fuel poverty due to Warm Front Assistance

	Estimated Reduction in Number of Households in Fuel Poverty			
Policy Option	2012/13	2013/14	Total	Relative to Baseline
Do Nothing	25,000	20,000	45,000	-
1	30,000	20,000	50,000	5,000
2	25,000	25,000	50,000	5,000
3	25,000	20,000	45,000	-
4	30,000	30,000	60,000	15,000
5	30,000	30,000	60,000	15,000

51. The broad estimates in Table 5 illustrate that, assuming that all measures under Warm Front were delivered to the maximum number of households possible given the spending envelope, Policy Options 1 and 2 would remove around 5,000 additional households from fuel poverty than under the Do Nothing option. Options 4 and 5 would remove around 15,000 more than the Do Nothing option. These figures should be interpreted carefully, as the modelling contains a number of uncertainties, and it is not clear whether there are a larger proportion of households close to the fuel poverty threshold (i.e. households who would need to spend little more than 10% of their income to adequately heat their home) under Policy Options 4 and 5 relative to options 2 and 3.

Coverage of Vulnerable Groups

52. Table 6 shows estimates of the proportion of members of vulnerable groups present in eligible households under each Policy Option. These should be interpreted carefully, as there is overlap between vulnerable groups (e.g. a household member being over 60 years of age *and* being long term sick or disabled), therefore the proportions do not add up to 100%. The final column of the table illustrates the proportion of households that contain a member of *at least one* of the vulnerable groups. It should be noted that a higher percentage for a particular vulnerable group does not mean that more households from that group will be eligible in absolute terms.

Table 6: Estimated proportions vulnerable groups under Policy Options

Policy Option	Under 16 years	Aged 60 and over	Long Term Sick or Disabled	Under 16 or over 60 or Sick/Disabled
Do Nothing	16%	51%	51%	98%
1	17%	83%	44%	99%
2	9%	78%	52%	96%
3	22%	76%	38%	98%
4	24%	63%	45%	95%
5	8%	91%	43%	99%

53. Table 6 shows that varying the eligibility criteria significantly alters the proportions of eligible households that belong to each vulnerable group. Coverage of vulnerable groups is considered alongside other criteria to assess each option in the *Analysis of Policy Options* section below.

Health Impacts

54. All options are expected to have similar health benefits, although better targeting of measures at vulnerable groups may improve health outcomes to a greater degree for those most susceptible to the negative health impacts of fuel poverty. The greater ability of households to adequately heat their homes, while also reducing the amount of energy needed to do so, is likely to result in a number of households increasing the average temperature in their homes. This is likely to reduce

the risk of negative physical and mental health impacts associated with cold homes, such as respiratory diseases, flu, heart disease and strokes (Fuel Poverty Strategy, 2001).

55. At present there is no robust methodology with which to quantify such benefits, however a qualitative discussion of the likely health impacts is included in the Health Specific Impact Test below.

Administration Savings

56. It is expected that there could be some changes to administration costs of changing the Warm Front eligibility criteria.

57. In summary, Policy Options 1 – 4 are expected to reduce the administration costs of delivering Warm Front by a small amount through the simplification of the eligibility criteria. However, Policy Option 5 has the potential to increase administration costs through introducing a restrictive income threshold and introducing the risk of introducing search costs for the Warm Front delivery organisation due to the relatively small number of households eligible under this option. This is discussed further in the analysis of Option 5 below.

Analysis of Policy Options

58. Table 7 summarises the strengths and weaknesses of each option in relation to the cost-benefit analysis and principles outlined above. Boxes in red indicate the worst Policy Option in relation to each criterion. The analysis suggests that, while there are a number of plausible options for new scheme eligibility criteria, we believe that **Option 2 strikes the best balance** between having a large and positive net benefit, and performing strongly against the principles outlined above.

- **Policy Option 1** – this option has a high net benefit but has the poorest fuel poverty hit rate of all the options considered (although it still represents an improvement on the 'Do Nothing' scenario). The removal of DLA/AA from the list of qualifying benefits would restrict the level of support that is offered to long-term sick and disabled households.

- **Policy Option 2** – this option has a large and positive net benefit and a good fuel poverty hit rate. By setting criteria that target the elderly, the disabled and families with young children, this option provides good coverage in relation to the set of vulnerable fuel poor households as set out in the Fuel Poverty Strategy.

- **Policy Option 3** – this option performs strongly in terms of coverage of vulnerable groups. However, the addition of the Child Tax Credit (with an income threshold) lowers the net benefit and fuel poverty hit rate relative to Policy Option 2, as the eligible group of households contains a higher proportion of relatively wealthier households.

- **Policy Option 4** – has a high net benefit as it restricts eligibility to those on the relatively lower incomes, and has a high fuel poverty hit rate. However, as this option restricts access to support for a significant proportion of long term sick and disabled households, it performs less well in terms of coverage of vulnerable groups.

- **Policy Option 5** – this option has a significantly larger net benefit than any other option, and a high fuel poverty hit rate (as eligibility is restricted to households on very low incomes and fuel poverty is highly correlated with low income). However, this option raises the same issues as Policy Option 4 in relation to coverage of vulnerable groups, with restricted eligibility for the long term sick and disabled. In addition, the criteria restrict the size of eligible households that are fuel poor to around 850,000, which is significantly lower than all other options. Limiting eligibility to a relatively small number of households could potentially result in the scheme delivery partners incurring higher search costs to find eligible households.

Table 7: Analysis of Policy Options

Policy Option	Net Benefit (NPV)	Fuel Poverty Hit Rate (SAP <= 55)	Coverage of Vulnerable Groups	Flexibility and practicability
1	£89.6	73%	✓✓	✓✓
2	£86.4	77%	✓✓	✓✓
3	£55.5	74%	✓✓✓	✓✓
4	£101.6	80%	✓	✓✓
5	£263.4	91%	✓	✓

Risks and Assumptions

59. The key assumptions that underpin the costs and benefits of the Do Nothing and Policy Options 1 – 5 relates to estimates of energy savings for each measure. These are detailed in Table A5.1 (Annex 5), but the key aspects are summarised as:

    a. All boilers that are installed are assumed to be replacing non-central electric heating (i.e. electric heaters, and not storage heaters/electric central heating). As a result, the net energy savings of these measures are the savings in electricity use less the increase in energy use of the fuel used by the boiler installed (e.g. gas, oil, LPG);

    b. All central heating installations use the same assumption as (a); and

    c. For all insulation measures installed it is assumed that no insulation of that type was installed previously. For example, if cavity wall insulation is installed, it is assumed that no previous insulation existed in the cavity.

60. The remaining assumptions relate to uncertainty around future energy prices, as outlined in the Interdepartmental Analysts Group guidance on valuing changes in energy and greenhouse gas emissions. More detail is provided in Annex 5.

Specific Impact Tests

Equality

61. All Policy Options considered in this impact assessment are found to have both positive, negative, and potential impacts on the protected equality characteristics of age, disability, gender, race, religion or belief, sexual orientation, gender reassignment, marriage and civil partnership, and pregnancy and maternity. These are summarised in Table 8. More details on the approach taken and findings can be found in Annex 4.

Table 8: Summary of Equality Impact Assessment Findings

Equality Duty	Policy Option 1	Policy Option 2	Policy Option 3	Policy Option 4	Policy Option 5
Age	Positive + Negative	Positive	Positive	Positive + Negative	Positive + Negative
Disability	Negative	Positive + Negative	Positive + Negative	Positive + Negative	Positive + Negative
Gender	Negative	No Impact	No Impact	No Impact	No Impact
Race	Potential	Potential	Potential	Potential	Potential
Religion or Belief	No Impact	No Impact	No Impact	No Impact	No Impact
Sexual Orientation	No Impact	No Impact	No Impact	No Impact	No Impact
Gender Reassignment	No Impact	No Impact	No Impact	No Impact	No Impact
Marriage/Civil Partnerships	No Impact	No Impact	No Impact	No Impact	No Impact
Pregnancy/Maternity	No Impact	Positive + Negative	Positive + Negative	Positive + Negative	Positive + Negative

Positive	= Does not discriminate against group, and only has positive impacts on group
Positive + Negative	= Does not discriminate against group, has positive impacts for some within group and negative impacts for others
Negative	= Does not discriminate against group, but has negative impacts on the group
Potential	= Does not discriminate against group, has potential impacts on the group, but no evidence for them
Discriminates	= Discriminates against group under Equality Act 2010

Health

62. Living in cold conditions is linked to a number of detrimental physical and mental health impacts. A recent study concluded that inadequate levels of heating and fuel poverty are linked, in particular, to respiratory problems in children and an increased risk of mortality in older adults.[11] Other sources also highlight the risk of respiratory problems among adults and the potential development of influenza, pneumonia and asthma, alongside an increased risk of arthritis and accidents at home linked to poorly heated housing.[12]

63. The provision of grants for Warm Front measures for those households vulnerable to fuel poverty aims to allow households to heat their home sufficiently in an efficient and affordable way. Increasing indoor temperatures would have a positive impact on the health of household members, removing to some extent the potential health risks associated with living in poorly heated homes. The changes in eligibility criteria are likely to better target these measures at households that are more vulnerable to the health impacts of fuel poverty than under the Do Nothing case.

[11] Green, G. and Gilbertson, J. (2008); 'Warm Front *Better Health*: Health Impact Evaluation of the Warm Front Scheme', CRESR

[12] Liddell, C. and Morris, C. (2010):' Fuel Poverty and Human Health: A Review of Recent Evidence'; Energy Policy, Vol. 38, Issue 6, p. 2987-2997

Annexes

Annex 1: Post Implementation Review (PIR) Plan

Basis of the review: The Warm Front delivery contractor, Eaga, produce an annual report detailing the types of measures installed under the scheme and the types of households that have received assistance.
Review objective: To identify whether any changes to the eligibility criteria have a significant impact on the type of measures installed under the scheme, or the types of households that receive assistance.
Review approach and rationale: The review will gather household level information from recipients of assistance, including SAP scores before and after measures are installed, the types of measures installed, the number of households assisted and some associated characteristics. These will be summarised to provide an overview of the how the scheme has been delivered and to which households.
Baseline: We assume that without changes to the eligibility criteria, Warm Front measures will be delivered in a similar manner and to a similar mix of households as in previous years. We therefore take the 2010/11 annual report as a baseline.
Success criteria: The primary success criterion will be a notable increase in the targeting of measures at households that have characteristics that indicate that they are likely to be vulnerable to fuel poverty.
Monitoring information arrangements: The delivery contractor collects information as measures are installed, and therefore are able to collate data systematically for every household assisted.
Reasons for not planning a review: N/A

Annex 2: Summary of Fuel Poverty Methodology[1]

1. A household is said to be in fuel poverty if it needs to spend more than 10% of its income on fuel to maintain an adequate level of warmth (usually defined as 21 degrees for the main living area, and 18 degrees for other occupied rooms).

2. The Fuel Poverty Ratio is defined as:

$$\textit{Fuel Poverty Ratio} = \frac{\textit{Fuel Costs (Modelled Usage x Price)}}{\textit{Income}}$$

   If this ratio is greater than 0.1 then the household is Fuel Poor.

3. The fuel poverty ratio shows that fuel poverty can be considered to be an interaction of three main factors:
   - The energy efficiency of the dwelling (affecting the numerator);
   - The cost of energy (affecting the numerator); and
   - Household income (affecting the denominator).

4. The cost of energy is modelled rather than based on actual spending, as fuel poor households may be under-heating their homes. The energy cost is calculated by combining the fuel requirements of the household with corresponding fuel prices. These costs capture four areas of fuel consumption:
   - Space heating;
   - Water heating;
   - Lights and appliances; and
   - Cooking.

5. Income data are collected as part of the English Housing Survey (EHS). Energy price data are collected from the DECC publication *Quarterly Energy Prices*, the *Retail Price Index* (compiled by the Office for National Statistics) and the independent *Sutherland Tables* publication. The modelled usage to achieve an adequate level of warmth in the household is dependent on a range of characteristics concerning the dwelling and its occupants, collected from the EHS.

6. Typically, the majority of the fuel bill is accounted for by space heating. In England in 2008, on average, around 57% of a modelled household bill was from space heating costs, 28% from lighting and appliance usage, 10% from water heating and 5% from cooking costs. The household fuel consumption requirements are modelled based on a number of factors including:
   - The size of the property;
   - The number of people who live in the dwelling;
   - The energy efficiency of the household;
   - The heating regime of the household – based on location and assumed duration of occupancy;
   - Water heating requirements – based on the number of occupants in each dwelling;
   - Demand for heating and lighting in each dwelling – based on number of occupants and size of each dwelling;
   - Cooking energy requirements – based on the number of occupants in each dwelling.

[1] The full Fuel Poverty methodology is available from: http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/fuelpov_stats.aspx

Annex 3: Explanation of Fuel Poverty Hit Rate Calculations

1. The 2007 combined year EHCS and 2007 fuel poverty data set has been the main source used for modelling the figures around the new Warm Front eligibility. In places, this has been supplemented by DWP data on benefit caseloads. This is particularly the case for **pension credit**, where reported numbers of recipients in the EHCS are currently well below the number of households known to receive the benefit. This is not unique to the EHCS, and most surveys of income show the same trend – in part because households receiving pension credit often classify it as an addition to their existing (state) pension when providing their responses to the survey. As a result, the reporting of pension credit is understated by around a half.
2. To overcome this, a similar approach has been used to that in modelling the CERT super priority group – that is, pension credit receipt has been modelled for each household based on their theoretical entitlement to the benefit, and numbers have been fixed to keep them in line with DWP reported caseloads (by income band). This is an imperfect perfect solution, as it subsequent analysis will be affected – for example, the average income of these households is likely to be lower than actual pension credit recipients. As a consequence, the propensity to fuel poverty of this group is also likely to be higher. However, it is impossible to accurately proxy pension credit in the data, and this is a reasonable approximation.
3. As a result of the pension credit approximating, the number of households eligible for the current warm front scheme will be different from those published by DECC as part of their fuel poverty statistics. This is because using the proxy method leads to many more households being "theoretically" eligible for Warm Front on the basis of their modelled pension credit receipt.
4. There are also some interactions with other benefits that present challenges when measuring eligibility by combined benefit groups – this is because of the interaction between existing benefit data and the proxy measure for pension credit. For example, a household eligible for cold weather payments but not reported to be in receipt of pension credit may be included in the new approximated pension credit group. This can present difficulties when weighting individual households together to national levels, in particular when attempting to fix for the overall levels of benefit receipt. For example, it is likely that a small element of double counting will exist in some of the eligibility groups (mainly the groups that combine cold weather payments and a variation of pension credit).
5. Finally, the levels of the fuel poverty hit rates identified in this IA will be overstated. As mentioned above, the approximated pension credit flag yields a pension credit group with lower income than in reality. This suggests that results on the absolute fuel poverty hit rates in particular should be treated as approximate, and care should be taken when interpreting these. Consistency is likely to be preserved in the ordering of each of the proposed eligibility groups, but inferences absolute differences between the groups should be avoided.
6. In addition, the data used for this work was old projection data for 2009, when prices were higher than they are now, and a revised projection of fuel poverty for 2009 published in the 2010 Annual Report on Fuel Poverty Statistics (using latest prices and observed or updated projections of income) suggests that fuel poverty will be lower. The timing of producing analysis of his report has meant that newer data was only available mid-way through the work, so to preserve consistency, the original data source has been used throughout.

Annex 4: Detailed Equality Impact Assessment

1. This Annex outlines the approach taken and the finding of the Equality Impact Assessment undertaken for the proposed changes to the eligibility criteria for Warm Front.

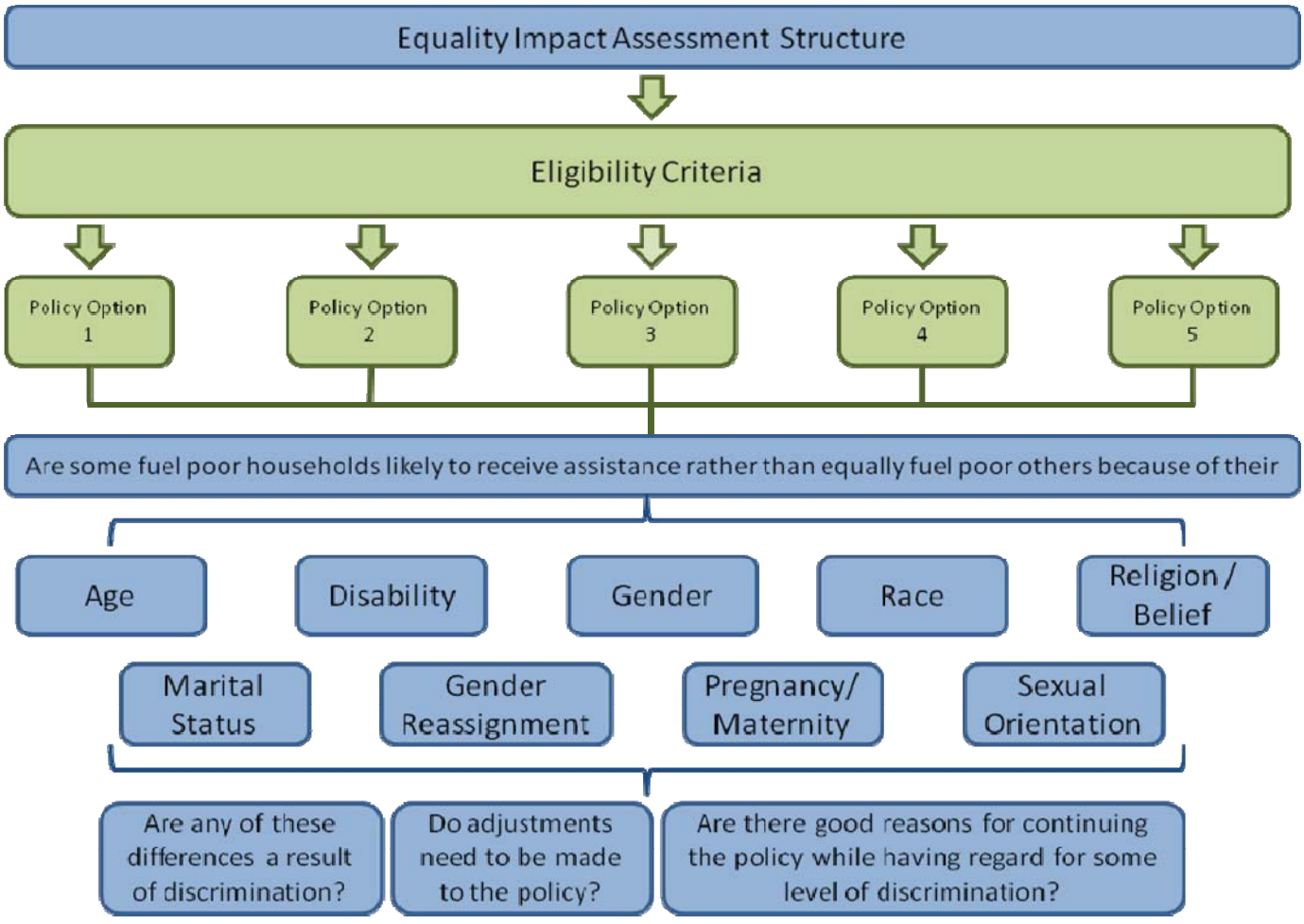
Approach

2. The purpose of the Equality Impact Assessment is to identify possible positive and negative effects of the proposed changes to the Warm Front eligibility criteria on different equality groups, and gather evidence to support the assessment of impacts and, where necessary, plan action to address them. This Equality Impact Assessment focuses on the protected characteristics that will be in place from April 2011 under the Equality Act 2010.[2] The protected characteristics are:

   - Age
   - Disability
   - Gender reassignment
   - Marriage and civil partnership
   - Pregnancy and maternity
   - Race
   - Religion or belief
   - Sex/Gender
   - Sexual Orientation.

3. The approach taken in conducting this assessment is summarised in Figure A4.1. Each of the five Policy Options are considered in turn, are assessed as to whether they are likely to have positive or negative impacts on certain households compared to others, based on the protected equality characteristics. It is also determined whether any of these differences are a result of discrimination under the Equality Act 2010.

Figure A4.1: Summary Approach to Conducting this Equality Impact Assessment



[2] Equality Act 2010, http://www.legislation.gov.uk/ukpga/2010/15/contents

4. Each Policy Option is assessed through the following process:

    a. Consider two households that are equally fuel poor, and identical in all aspects other than in terms of one or more of the equality categories shown in Figure A4.1;

    b. Determine whether this difference(s) is likely to result in one household being more likely to be eligible for Warm Front assistance compared to the other;

    c. If the difference(s) is *unlikely* to favour one household over the other, then conclude that the Policy Option will not discriminate on the grounds outlined in Figure A4.1. If the difference is considered to favour certain groups over others, move on to step (d);

    d. Determine whether the identified impacts on different equalities groups are the result of direct or indirect discrimination as set out in the Equality Act 2010. If discrimination is identified, consider adjusting, changing or stopping the policy. If not, move on to step (e).

    e. Consider if there are any additional provisions that could be made in the proposed changes that would reduce the likelihood of negative impacts, and increase positive impacts. Where impacts are not equal across groups, determine if there are good reasons for continuing with the policy while having regard for the issues identified, and whether the policy is a proportionate means of achieving a legitimate aim.Any impacts identified are separated into *direct* impacts – which are a directly attributable to the proposed changes; and *indirect* impacts – which occur not as a direct result of the proposed changes, but may be due to underlying population trends or existing differences between equalities groups. Potential impacts for which there is insufficient evidence to draw a conclusion on are also identified. Where no impact is anticipated, this is noted as 'None identified'.

<u>Summary of Results</u>

6. The findings of the assessment are summarised in matrix form in Table 8 above. Detailed findings for each of the options are described in Tables A4.1 – A4.5 below. The proposals for changing the eligibility criteria for Warm Front are predominantly focused on the receipt of benefits associated with low income, some of which are also associated with vulnerable groups such as the elderly, families with young children and the long term sick and disabled. As such, the positive and negative impacts identified in this assessment are limited to a small number of equalities groups.

7. Overall, none of the five options are found to discriminate against any of the groups defined by the protected characteristics under the Equality Act 2010. The types of impact the options have on each of the equality groups are broadly similar. Each of the options, have a negative impact on the individuals within multiple equality groups including age, disability and in some cases pregnancy and maternity, and gender. However, these are accompanied by positive impacts on a substantial proportion of these equality groups.

8. For Policy Option 1, there are both positive and negative impacts on age and negative impacts on the disability and gender groups. There are no impacts on any of the other groups under the Equality Act 2010.

9. For Policy Options 2 and 3 there are positive impacts on age, both positive and negative impacts on disability and pregnancy and maternity, with no other impacts identified on any of the other equality groups.

10. For Policy Options 4 and 5 there are both positive and negative impacts on age, disability and pregnancy and maternity, and no impacts are identified on any of the other equality groups.

11. The negative impacts identified typically relate to age, disability and pregnancy and maternity. However, Policy Option 1 is also found to have an *indirect* negative impact in relation to gender. This is a result of removing Attendance Allowance as an eligibility criterion, which although relates to disability and age, the higher number of females in the over 65 population, and among claimants of Attendance Allowances implies that men will be less likely to be affected than women (see Figures A4.2 and A4.3 respectively).

12. Each of the proposed Policy Options also have positive impacts on a number of the equality groups including age, disability and pregnancy and maternity. More detail can be founded in Tables A4.1 – A4.5 below.

Table A4.1: Equality Impact Assessment for Policy Option 1

Protected Characteristic	Groups Affected	Positive Impacts	Negative Impacts
Age	Households above the age threshold for Attendance Allowance (AA)	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing AA criterion decreases the potential number of people in this group receiving assistance, and limits scope to reduce the risk of fuel poverty within this group.
	Households below the age threshold for AA, and below the age limit for Disability Living Allowance (DLA)	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing AA and DLA criteria decreases the potential number of people in this group receiving assistance, and limits scope to reduce the risk of fuel poverty within this group.
Disability	Households eligible for AA and DLA	None identified	*Direct impact* Households in this group are no longer eligible as a direct consequence of claiming this benefit. Therefore they are unable to benefit from Warm Front assistance (unless they meet other means tested criteria).
Gender	Females	None identified	*Indirect impact* Receipt of AA does not depend on gender, but in the wider population and among claimants of AA there are more females than males over 65 due to differences in life expectancy and underlying population trends. This decreases potential number of women receiving Warm Front assistance if they claim AA (see figures A4.2 and A4.3).
Race	Groups of a White ethnic origin	None identified	***Potential** Indirect Impact* Eligibility for Warm Front is not specified in terms of race or ethnic origin. No evidence has been identified to imply that some ethnic groups may be disproportionately affected by the removal of AA and DLA from the eligibility criteria. However, AA has an age eligibility threshold, and the proportion of the over 60s that are of White ethnic origin is disproportionately high compared to the rest of the population (see Table A4.6). This does not necessarily mean that this translates into a disproportionate number of individuals of White ethnic origin claiming AA, and therefore being negatively impacted by the proposed change, but is a *potential* impact.

Religion or Belief	None identified	None identified	None identified
Sexual Orientation	None identified	None identified	None identified
Gender Reassignment	None identified	None identified	None identified
Marriage and Civil Partnerships	None identified	None identified	None identified
Pregnancy and Maternity	None identified	None identified	None identified

Table A4.2: Equality Impact Assessment for Policy Option 2

Protected Characteristic	Groups Affected	Positive Impacts	Negative Impacts
Age	Households receiving income related Employment and Support Allowance under 60 years old, and without children under 16 years	*Direct impact* Change in eligibility criteria means this group would be able to receive Warm Front assistance, and the associated benefits of a reduction in risk of fuel poverty.	None identified
	Households receiving income support with children under 16 (under 20 if in full time education).	*Direct impact* Change in eligibility criteria means this group would be able to receive Warm Front assistance, and the associated benefits of a reduction in risk of fuel poverty.	None identified
Disability	Households receiving non-means tested disability benefit including: Attendance Allowance, Disability Living Allowance, War Disablement Pension, or Industrial Injuries Disablement Benefit	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing these disability benefit criteria decreases the potential number of household receiving Warm Front assistance and limits the scope to reduce risk of fuel poverty within this group.
	Households receiving on Council Tax benefit, Housing Benefit or Working Tax Credit with a disability premium	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing these criteria related to benefits with a disability element decreases the potential number of household receiving Warm Front assistance and limits the scope to reduce risk of fuel poverty within this group.
Gender	Females	None identified	*Indirect impact* Receipt of AA does not depend on gender, but in the wider population and among claimants of AA there are more females than males over 65 due to differences in life expectancy and underlying population trends. This decreases potential number of women receiving Warm Front assistance if they claim AA (see figures A4.2 and A4.3). Data for the gender split of other benefits received by this group is unavailable,

			however as they are typically not age specific a gender bias is not expected.
Race	Groups of a White ethnic origin	None identified	***Potential*** *Indirect Impact* Eligibility for Warm Front is not specified in terms of race or ethnic origin. No evidence has been identified to imply that some ethnic groups may be disproportionately affected by the removal of AA and DLA from the eligibility criteria. However, AA has an age eligibility threshold, and the proportion of the over 60s that are of White ethnic origin is disproportionately high compared to the rest of the population (see Table A4.6). This does not necessarily mean that this translates into a disproportionate number of individuals of White ethnic origin claiming AA, and therefore being negatively impacted by the proposed change, but is a *potential* impact.
Religion or Belief	None identified	None identified	None identified
Sexual Orientation	None identified	None identified	None identified
Gender Reassignment	None identified	None identified	None identified
Marriage and Civil Partnerships	None identified	None identified	None identified
Pregnancy and Maternity	Households with pregnant member and on Council Tax benefit, Housing Benefit, Income based Job Seekers Allowance, or income based Employment and Support Allowance	*Direct impact* Low income households in this group who claim a means tested benefit will be eligible for Warm Front assistance and receive the associated benefits of a reduction in risk of fuel poverty once child is born.	*Direct impact* Reduction in the potential number of people in this group receiving Warm Front assistance, and limits scope to reduce the risk of fuel poverty within this group.

Table A4.3: Equality Impact Assessment for Policy Option 3

Protected Characteristic	Groups Affected	Positive Impacts	Negative Impacts
Age	Households receiving income related Employment and Support Allowance under 60 years old, and without children under 16 years	*Direct impact* Change in eligibility criteria means this group would be able to receive Warm Front assistance, and the associated benefits of a reduction in risk of fuel poverty.	None identified
	Household receiving income support with children between 5-16 years old	Change in eligibility criteria means this group would be able to receive Warm Front assistance, and the associated benefits of a reduction in risk of fuel poverty.	None identified.
Disability	Households receiving non-means tested disability benefit including: Attendance Allowance, Disability Living Allowance, War Disablement Pension, or Industrial Injuries Disablement Benefit	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing these disability benefit criteria decreases the potential number of household receiving Warm Front assistance and limits the scope to reduce risk of fuel poverty within this group.
	Households receiving on Council Tax benefit, Housing Benefit or Working Tax Credit with a disability premium	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing these criteria related to benefits with a disability element decreases the potential number of household receiving Warm Front assistance and limits the scope to reduce risk of fuel poverty within this group.
Gender	Females	None identified	*Indirect impact* Receipt of AA does not depend on gender, but in the wider population and among claimants of AA there are more females than males over 65 due to differences in life expectancy and underlying population trends. This decreases potential number of women receiving Warm Front assistance if they claim AA (see figures A4.2 and A4.3). Data for the gender split of other benefits received by this group is unavailable, however as they are typically not age specific a gender bias is not

			expected.
Race	Groups of a White ethnic origin	None identified	***Potential*** *Indirect Impact* Eligibility for Warm Front is not specified in terms of race or ethnic origin. No evidence has been identified to imply that some ethnic groups may be disproportionately affected by the removal of AA and DLA from the eligibility criteria. However, AA has an age eligibility threshold, and the proportion of the over 60s that are of White ethnic origin is disproportionately high compared to the rest of the population (see Table A4.6). This does not necessarily mean that this translates into a disproportionate number of individuals of White ethnic origin claiming AA, and therefore being negatively impacted by the proposed change, but is a *potential* impact.
Religion or Belief	None identified	None identified	None identified
Sexual Orientation	None identified	None identified	None identified
Gender Reassignment	None identified	None identified	None identified
Marriage and Civil Partnerships	None identified	None identified	None identified
Pregnancy and Maternity	Households with pregnant member and on Council Tax benefit, Housing Benefit, Income based Job Seekers Allowance, or income based Employment and Support Allowance	*Direct impact* Low income households in this group who claim a means tested benefit will be eligible for Warm Front assistance and receive the associated benefits of a reduction in risk of fuel poverty once child is born.	*Direct impact* Reduction in the potential number of people in this group receiving Warm Front assistance, and limits scope to reduce the risk of fuel poverty within this group.

Table A4.4: Equality Impact Assessment for Policy Option 4

Protected Characteristic	Groups Affected	Positive Impacts	Negative Impacts
Age	Households above the age threshold for Attendance Allowance (AA)	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing AA criterion decreases the potential number of people in this group receiving assistance, and limits scope to reduce the risk of fuel poverty within this group.
Disability	Households receiving non-means tested disability benefit including: Attendance Allowance, Disability Living Allowance, War Disablement Pension, or Industrial Injuries Disablement Benefit	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing these disability benefit criteria decreases the potential number of household receiving Warm Front assistance and limits the scope to reduce risk of fuel poverty within this group.
	Households receiving on Council Tax benefit, Housing Benefit or Working Tax Credit with a disability premium	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing these criteria related to benefits with a disability element decreases the potential number of household receiving Warm Front assistance and limits the scope to reduce risk of fuel poverty within this group.
Gender	Females	None identified	*Indirect impact* Receipt of AA does not depend on gender, but in the wider population and among claimants of AA there are more females than males over 65 due to differences in life expectancy and underlying population trends. This decreases potential number of women receiving Warm Front assistance if they claim AA (see figures A4.2 and A4.3). Data for the gender split of other benefits received by this group is unavailable, however as they are typically not age specific a gender bias is not expected.
Race	Groups of a White ethnic origin	None identified	***Potential*** *Indirect Impact* Eligibility for Warm Front is not specified in terms of race or ethnic origin. No evidence has been identified to imply that some ethnic groups may be disproportionately affected by the removal of AA and DLA from the eligibility criteria.

			However, AA has an age eligibility threshold, and the proportion of the over 60s that are of White ethnic origin is disproportionately high compared to the rest of the population (see Table A4.6). This does not necessarily mean that this translates into a disproportionate number of individuals of White ethnic origin claiming AA, and therefore being negatively impacted by the proposed change, but is a *potential* impact.
Religion or Belief	None identified	None identified	None identified
Sexual Orientation	None identified	None identified	None identified
Gender Reassignment	None identified	None identified	None identified
Marriage and Civil Partnerships	None identified	None identified	None identified
Pregnancy and Maternity	Households with pregnant member and on Council Tax benefit, Housing Benefit, Income based Job Seekers Allowance, or income based Employment and Support Allowance	*Direct impact* Low income households in this group who claim a means tested benefit will be eligible for Warm Front assistance and receive the associated benefits of a reduction in risk of fuel poverty once child is born.	*Direct impact* Reduction in the potential number of people in this group receiving Warm Front assistance, and limits scope to reduce the risk of fuel poverty within this group.

Table A4.5: Equality Impact Assessment for Policy Option 5

Protected Characteristic	Groups Affected	Positive Impacts	Negative Impacts
Age	Households above the age threshold for Attendance Allowance (AA)	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing AA criterion decreases the potential number of people in this group receiving assistance, and limits scope to reduce the risk of fuel poverty within this group.
Disability	Households receiving non-means tested disability benefit including: Attendance Allowance, Disability Living Allowance, War Disablement Pension, or Industrial Injuries Disablement Benefit	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing these disability benefit criteria decreases the potential number of household receiving Warm Front assistance and limits the scope to reduce risk of fuel poverty within this group.
	Households receiving on Council Tax benefit, Housing Benefit or Working Tax Credit with a disability premium	*Direct impact* Removal of non-means tested benefits means that vulnerable and fuel poor households in this group are likely to be better targeted in terms of receiving Warm Front measures, as there is high correlation between low income and fuel poverty.	*Direct impact* Removing these criteria related to benefits with a disability element decreases the potential number of household receiving Warm Front assistance and limits the scope to reduce risk of fuel poverty within this group.
Gender	Females	None identified	*Indirect impact* Receipt of AA does not depend on gender, but in the wider population and among claimants of AA there are more females than males over 65 due to differences in life expectancy and underlying population trends. This decreases potential number of women receiving Warm Front assistance if they claim AA (see figures A4.2 and A4.3). Data for the gender split of other benefits received by this group is unavailable, however as they are typically not age specific a gender bias is not expected.
Race	Households with an eligible member of white ethnic origin	None identified	***Potential*** *Indirect Impact* Eligibility for Warm Front is not specified in terms of race or ethnic origin. No evidence has been identified to imply that some ethnic groups may be disproportionately affected by the removal of AA and DLA from the eligibility criteria.

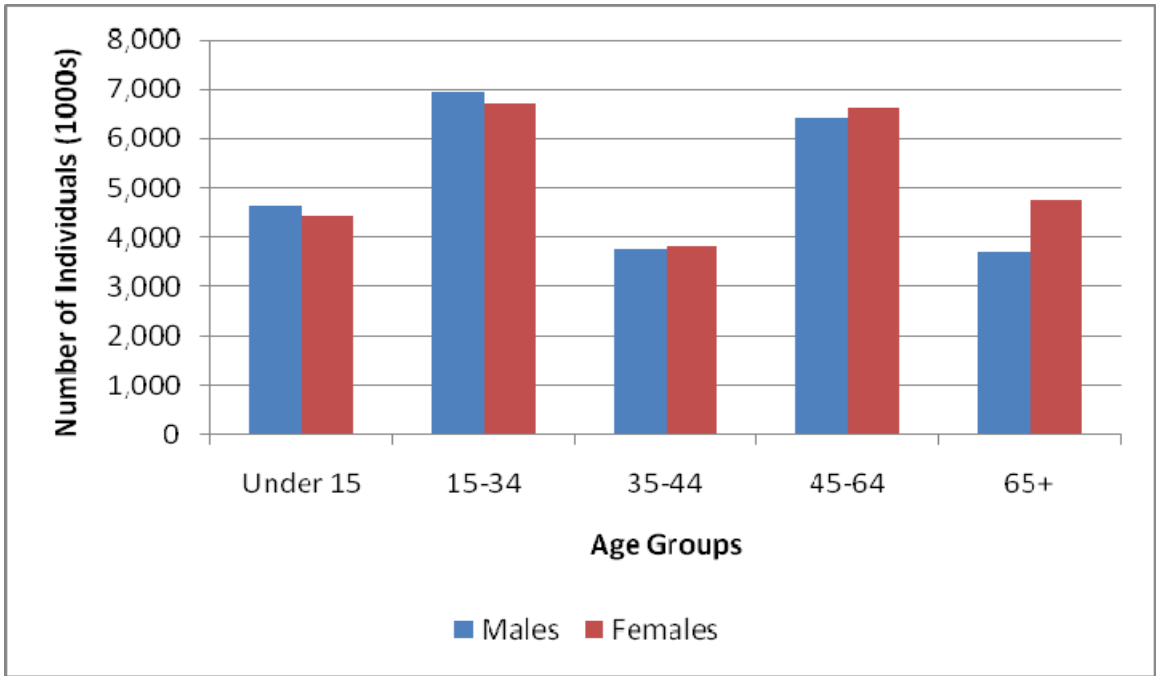
			However, AA has an age eligibility threshold, and the proportion of the over 60s that are of white ethnic origin is disproportionately high compared to the rest of the population (see Table A4.6). This does not necessarily mean that this translates into a disproportionate number of individuals of white ethnic origin claiming AA, and therefore being negatively impacted by the proposed change, but is a *potential* impact.
Religion or Belief	None identified	None identified	None identified
Sexual Orientation	None identified	None identified	None identified
Gender Reassignment	None identified	None identified	None identified
Marriage and Civil Partnerships	None identified	None identified	None identified
Pregnancy and Maternity	Households with pregnant member and on Council Tax benefit, Housing Benefit, Income based Job Seekers Allowance, or income based Employment and Support Allowance	*Direct impact* Low income households in this group who claim a means tested benefit will be eligible for Warm Front assistance and receive the associated benefits of a reduction in risk of fuel poverty once child is born.	*Direct impact* Reduction in the potential number of people in this group receiving Warm Front assistance, and limits scope to reduce the risk of fuel poverty within this group.

Supporting Evidence

13. This section details the evidence that supports the conclusions detailed in Tables A4.1 – A4.5.

14. Figure A4.2 shows the population distribution of households by age and gender for 2009, the latest year for which figures have been released by the Office for National Statistics. The figure shows that the population split between males and females are broadly similar until the over 65s category, where there are more females than males. This reflects the higher average life expectancy in females relative to males.

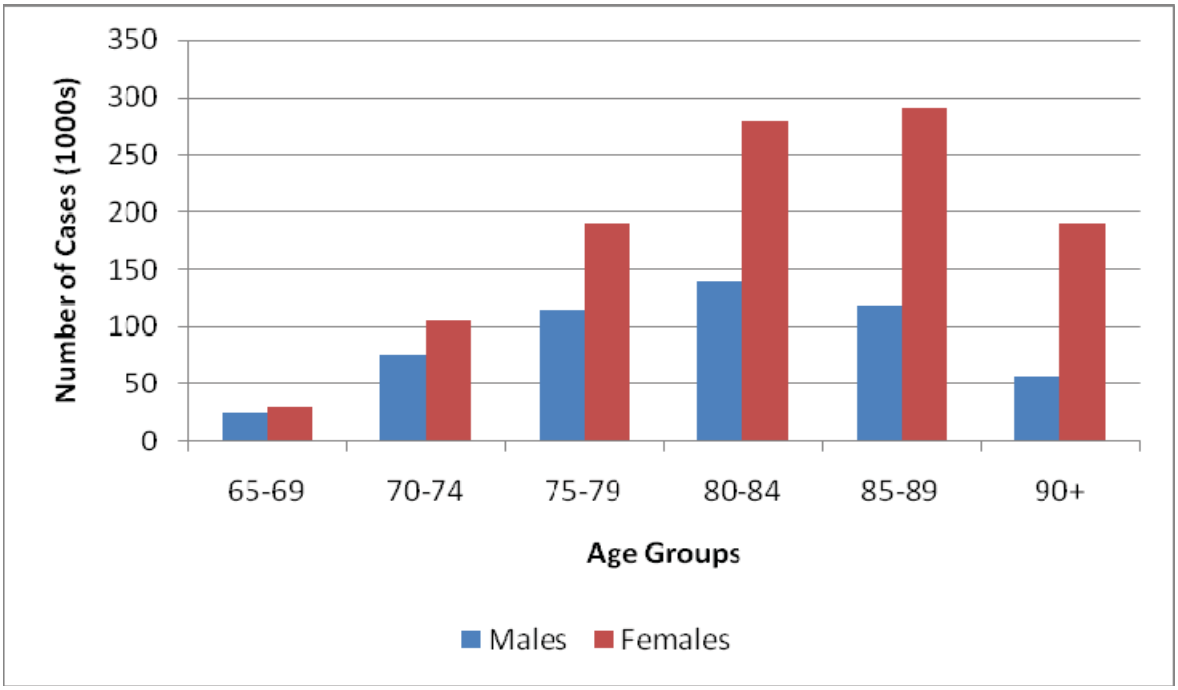
Figure A4.2: Population Distribution of England by Age and Gender, 2009



Source: Office for National Statistics

15. Figure A4.3 shows the distribution of claims in payment for Attendance Allowance by age and gender, as of February 2010. All claims are made by individuals over 65 as this is the qualifying age threshold for this benefit. The figure shows that the number of females is higher than for males, particularly as the age groups approach 90+. Again this reflects the greater life expectancy of women relative to men.

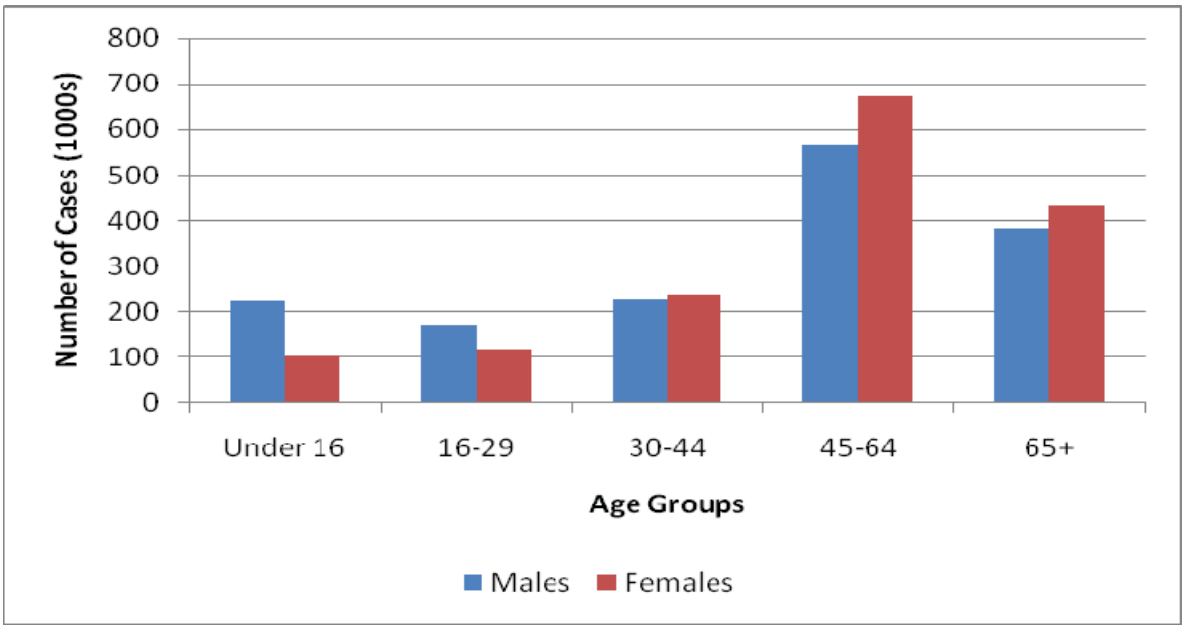
Figure A4.3: Distribution of Attendance Allowance Claims by Age and Gender



Source: Department for Work and Pensions. Figures are current number of claims as of February 2010.

16. Figure A4.4 shows the distribution of claims in payment for Disability Living Allowance by age and gender, as of February 2010. The figure shows that the number of males to females is greater among younger age groups, but this trend is reversed in older age groups. Overall the split between male and female claimants is relatively equal across age groups.

Figure A4.4: Distribution of Disability Living Allowance Claims by Age and Gender



Source: Department for Work and Pensions. Figures are current number of claims as of February 2010.

17. Table A4.6 shows the population distribution of individuals in under 60 and over 60 age groups by ethnic group, for the latest year for which estimates are available. It shows that that the ratio of individuals from a White ethnic origin to those from mixed, Asian, Black, Chinese and Other ethnic origins is significantly higher in the over 60 age group compared to the under 60 age group.

Table A4.6: Distribution of population of England and Wales in under 60 and over 60 age groups by ethnic group, mid-year 2007

Ethnic Group	White	Mixed	Asian	Black	Chinese & Other
Under 60	86.7%	2.0%	6.4%	3.1%	1.8%
60 +	96.1%	0.3%	2.1%	1.2%	0.4%

Source: Office for National Statistics

Annex 5: Economic Methodology and Assumptions

Estimation Method

1. The methodology used to estimate the costs and benefits of options in this Impact Assessment is outlined in Figure A5.1. The assumptions outlined in this section are detailed further in the *Assumptions* section below.
2. This methodology predominantly explains the steps taken to estimate the Do Nothing option. The benefits of Policy Options 1 – 5 are the result of variations in the mix of households from different income deciles being eligible for assistance under each option, which affects the equity weighted benefit calculations (see *Equity Weighting* section below).

Direct, Administration and Hidden Costs

3. 2008/09 data from Eaga, the contractor that delivers Warm Front measures, provides details of the typical number of measures installed for a set amount of funding, with further information on the average cost per installation of different measures.
4. We assume that the distribution of measures (e.g. X cavity wall insulation installations for every Y boilers installed) is the same for 2011/12 – 2014/15 as in 2008/09, with some adjustments made to remove measures that will no longer be provided under the scheme from 2011/12.[3] The adjusted distribution of measures delivered in 2008/09 is therefore uniformly scaled down to match the measures budget within the spend profile outlined in paragraph 26 of the evidence base. This results in estimated numbers of measures to be installed in each year of funding for the period 2011/12 – 2014/15.
5. The average direct costs of each measure (i.e. the material costs and time costs of the installation engineer) provided by Eaga are then applied to the estimated number of measures in each year, to calculate total annual direct costs of measures.
6. Hidden costs for each different type of measure, adjusted from the ECOFYS report on domestic energy efficiency measures[4] are then applied to calculate the costs to households of factors such as having to supervise installations and redecorate afterwards. These hidden costs are equity weighted to reflect that the resources used are likely to be worth more to the poorer households receiving measures than households on higher incomes that receive them. The method for this is detailed in the *Equity Weighting* section below. The result is an estimate of the total annual hidden costs associated with the installation of Warm Front measures.

Value of change in energy demand

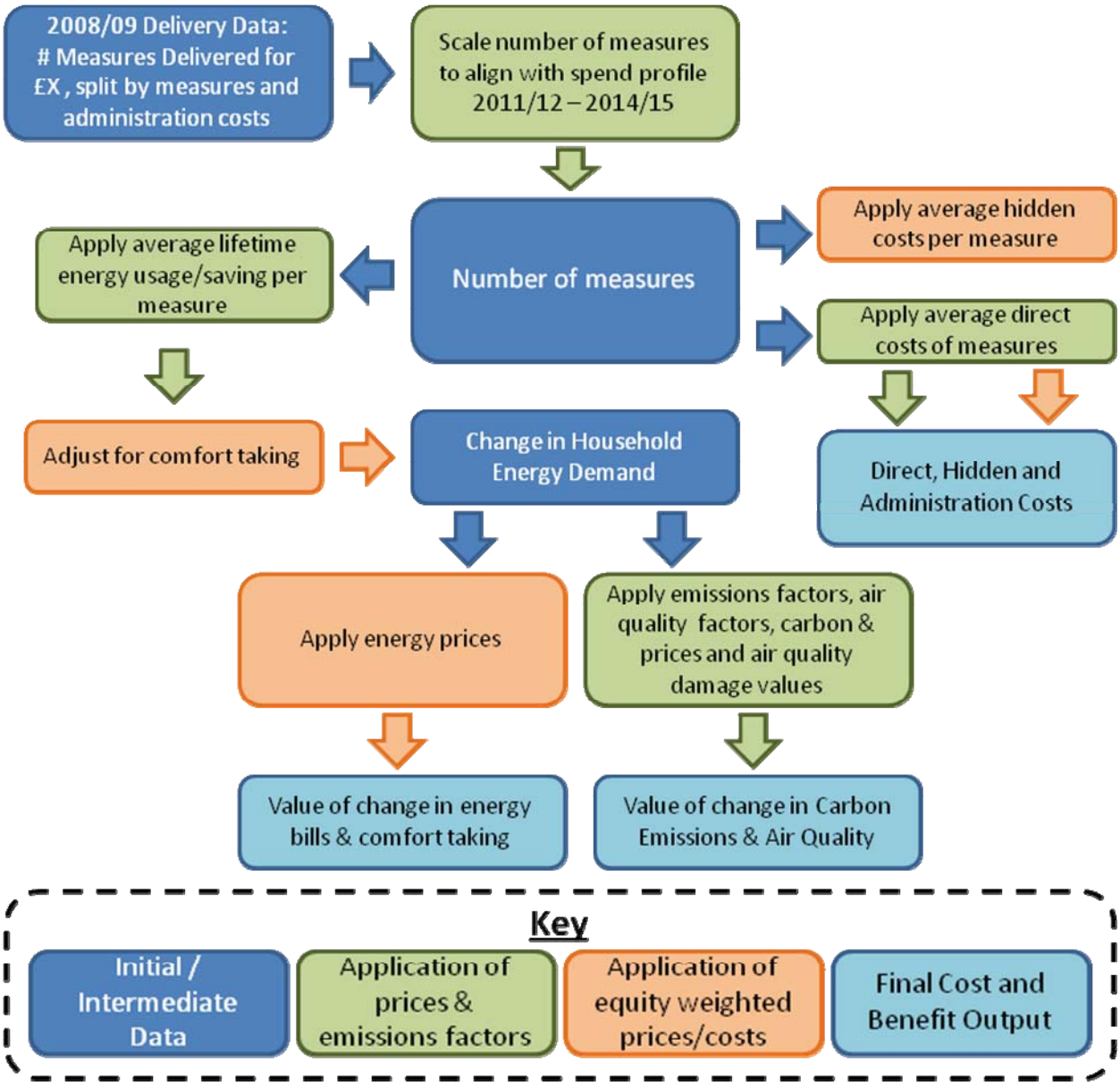
7. The estimated number of measures in each year are also used to estimate changes in energy demand. Based on underlying assumptions (detailed below) concerning the energy performance of the home before and after the installation of Warm Front measures, estimates of the average changes in energy use over the lifetime of each measure are applied to the number of measures in each year. These average energy savings and increase estimates are internal DECC estimates, and are consistent with those used in the analysis in the impact assessment of the extension of the Carbon Emissions Reduction Target (CERT) programme.[5] The result is an estimate of the changes in energy use as a result of Warm Front measures each year.

[3] Such measures include £300 vouchers under the Warm Front Rebate Scheme and compact fluorescent lamps. See Annex 6 for details.

[4] ECOFYS – *The Hidden Costs and Benefits of Domestic Energy Efficiency and Carbon Saving Measures.* http://www.decc.gov.uk/assets/decc/what%20we%20do/supporting%20consumers/saving_energy/analysis/1_20100111103046_e_@@_ecofyshiddencostandbenefitsdefrafinaldec2009.pdf

[5] Available from: http://www.decc.gov.uk/en/content/cms/consultations/cert_ext/cert_ext.aspx

Figure A5.1: Diagram of Method for Estimating Costs and Benefits of the Warm Front Scheme



8. These changes in energy use estimates are then adjusted for comfort taking, to reflect that once measures are installed under Warm Front, households can achieve the same temperature as before insulation was installed, but now using less energy. As such, it is expected that households will increase the temperature of their homes, and therefore offset some of the energy saved. This will partially offset the energy savings expected through the installation of efficiency measures such as loft insulation. Comfort taking is assumed to only occur for energy efficiency measures, such as insulation, and not heating measures such as central heating.

9. These changes in household energy use (net of comfort taking) result in a social benefit to society, as resources are saved. Variable (non-retail) prices for the relevant fuels are applied to value the benefit of these savings, rather than using retail prices. This is to reflect that retail prices include a share of the fixed costs of energy production (such as generation infrastructure), which wider society still pays for. Variable prices exclude this fixed cost element and therefore reflects that the energy saved does not imply a reduction in the fixed costs of energy production.

Welfare value of change in energy bills

10. The estimated changes in household energy demand from Warm Front measures also result in changes in household energy bills. These bill savings are private benefits, and not counted as benefits to wider society. However, as a proportion of these bill savings accrue to relatively poorer households, and a £1 reduction their bill is worth more to them than the same saving to a wealthier

household, there are gains in social welfare from reduced energy bills that should be captured as a benefit. This gain in social welfare is calculated as follows:

Social Gain from Bill Savings = [Equity Weighted Bill Savings] – [Non-Weighted Bill Savings]

11. Non-weighted bill savings are calculated by applying estimated retail energy prices for the lifetime of each measure listed in the Interdepartmental Analysts Group (IAG) guidance on valuing energy use and greenhouse gases.[6] Retail prices are used as this reflects the prices that households actually pay. Non-weighted bill savings will not vary between the Do Nothing and Policy Options 1 – 5 as it is assumed that same number and distribution of measures is installed under all options (see *Assumptions* below).
12. These non-weighted retail bill savings are then equity weighted to reflect that an extra £1 reduction in an energy bill is worth more to households on lower incomes than to relatively wealthier households, resulting in Equity Weighted Bill Savings. The different mix of households from each income decile varies under Policy Options 1 – 5, which drives the different net benefit figures for each option as displayed in Table 3 above.
13. Non-weighted Bill Savings are then subtracted from the Equity Weighted Bill Savings to capture only the social welfare gain from reduced bills, and not the private benefits to households.

Value of Comfort Taking

14. The value of the change in energy demand is adjusted to reflect that due to the increased energy efficiency of their home, householders may choose to increase the level of warmth in the home than was achieved prior to the installation of measures, and therefore increase their energy use. This increase in energy use (comfort taking) is a benefit to the household, and is valued by applying the retail price for the applicable fuel. These adjusted energy savings are assumed not to occur until the year following the installation, and are equity weighted to reflect that an extra £1's worth of heating is worth more to lower income households than relatively wealthier recipients of Warm Front measures.

Changes in the value of greenhouse gas emissions and air quality

15. The estimated changes in household energy demand will result in changes in the emissions of greenhouse gases and air quality. Emissions factors, carbon prices and air quality damage costs from the IAG guidance are applied to calculate the value of these changes. These costs do not vary under any of the options in this impact assessment, as the same number of measures (and therefore associated energy changes) are assumed to be made under all options (see *Assumptions* section below).

The number of households assisted

16. The number of households assisted annually under the Warm Front Scheme is calculated by dividing the anticipated spend on measures by the value of the average grant per household under the scheme. This results in estimated numbers of households helped of 46,657 in 2011/12 and 45,041 in 2012/13.[7]

Assumptions

17. *The same number of measures are installed regardless of the eligibility criteria used* – as there are always more households eligible than resources allow Warm Front assistance to, it is assumed that the maximum mix of measures possible under the funding for the period 2011/12 – 2014/15 is installed under the Do Nothing option, and Policy Options 1 – 5.

[6] Interdepartmental Analysts Group, *Valuation of energy use and Greenhouse Gas emissions for appraisal and evaluation*, http://www.decc.gov.uk/en/content/cms/statistics/analysts_group/analysts_group.aspx

[7] The estimated number of households assisted under the scheme has decreased compared to the consultation stage impact assessment. This is primarily due to the inclusion of updated information on the value of the average grant to households under the scheme. For more details see Annex 6.

18. *Uniform distribution of measures* – it is difficult to estimate what mix of measures households eligible for Warm Front will have installed in the period 2011/12 – 2014/15. As such, we assume the same distribution of measures are installed over this period as in 2008/09, but scaled down uniformly to match the measures funding for 2011/12 – 2014/15.

19. *Level of comfort taking* – consist with assumptions underlying the impact assessment for the Carbon Emissions Reduction Target (CERT), we apply a comfort taking proportion of 40% of energy savings for insulation measures.

20. *Changes in energy use associated with Warm Front measures* – in order to estimate the changes in energy use that result from the installation of Warm Front measures (e.g. increase in gas use from the installation of gas central heating, and the reduction in electricity use from no longer needing to use electric heaters), assumptions are made about the energy performance of the household before and after measures are installed. These are detailed in Table A5.2.

21. *Energy use does not change until the year after the installation is made* – if a household has measures installed towards the end of the year, it would be an overestimate to count changes in energy use for the entire proceeding year. Therefore to ensure we do not overestimate the benefits and costs of Warm Front measures, we assume that changes in energy demand do not materialise until the year after (i.e. if measures are installed in 2011/12, changes in energy demand are not counted until 2012/13 onwards).

Table A5.2: Assumptions underpinning changes in energy use resulting from installation of Warm Front Measures

Measure	Before installation of Warm Front Measures	After installation of Warm Front Measures
Cavity Wall Insulation	No insulation in cavity	Cavity Wall Insulation installed including under performance percentage
CIGA Guarantee	No additional impact	
Draught Proofing	No draught proofing	Draught Proofing
Loft Insulation Full (270mm)	No loft insulation	Full 270mm loft insulation
Loft Insulation Top-up (200mm)	70mm loft insulation	Full 270mm loft insulation
Central Heating Annual Visit	No additional impact	
Central Heating Insurance	No additional impact	
Electric Central Heating	Non-central, non-storage electric heating indefinitely	Use central storage electric heating
Foam Insulated Hot Water Tank	Average or low-efficiency, non-jacketed hot water tank	Factory foam insulated hot water tank
Gas Central Heating	Non-central, non-storage electric heating indefinitely	Full gas central heating system
Heating Repairs	Non-central, non-storage electric heating indefinitely – heating is not repaired if Warm Front grant is not given	Heating repaired. This extends life of existing system (average central heating type) by (25% of lifetime of average heating system) years
Hot Water Tank Jacket	No tank jacket	Install Tank Jacket
Multi Point Replacement	Non-central, non-storage electric heating indefinitely	Boiler is replaced by A-rated boiler in base year
New Gas supply	No additional impact as savings accounted for in 'gas central heating'	
Oil Replacement	Non-central, non-storage electric heating indefinitely	Boiler is replaced by A-rated boiler in base year
Replacement Boiler	Non-central, non-storage electric heating indefinitely	Boiler is replaced by A-rated boiler in base year
Solid Fuel Replacement	Non-central, non-storage electric heating indefinitely	Boiler is replaced by A-rated boiler in base year
Wall Heating	Non-central, non-storage electric heating indefinitely	Installation of gas wall heater (an alternative to gas central heating in smaller homes)
Asbestos Removal	No additional impact	
Warm Air Replacement	Non-central, non-storage electric heating indefinitely	Boiler is replaced by A-rated boiler in base year
LPG Replacement	Non-central, non-storage electric heating indefinitely	Boiler is replaced by A-rated boiler in base year
Solid Fuel Fire	Non-central, non-storage electric heating indefinitely	Solid fuel fire installed
Solar	Average or low-efficiency, non-jacketed hot water tank	Have solar thermal measure installed to heat water
Emergency Heaters	No additional impact on energy saving - used when boilers are replaced and there is no difference between before and after Warm Front installations over the period that they are used	
Scaffolding	No additional impact	

Equity Weighting

22. HM Treasury's *Green Book*[8] recommends a detailed analysis of the costs and benefits of proposals on different socio-economic groups. Warm Front aims to target households in fuel poverty, which is highly correlated with low incomes. We therefore follow the *Green Book* methodology for deriving equity weights to reflect the higher social value of certain costs and benefits of Warm Front measures for households in different income deciles.

23. The equity weighting associated with each income decile is calculated as the ratio between the marginal utility of consumption for that decile and the average marginal utility of consumption across all deciles. These are calculated in accordance with *Green Book* guidance using the median level of income in each income decile. The marginal utility of consumption for each income decile is calculated using the *Green Book* methodology; assuming that the elasticity of the marginal utility is 1, this implies that the utility function is $U = \log C$, where C is consumption. Consequently the marginal utility of consumption is $1/C$.

24. In addition it is also assumed that the marginal propensity to consume is 1, therefore all income is spent on consumption. So, for example, the marginal utility for the lowest income decile is 1/7500 = 0.000133. The equity weighting is calculated by dividing each income groups marginal utility by the average marginal utility of consumption.

25. Under this method, a higher weight is given to costs and benefits that fall on poorer houses, and a lower weight is attached to those that fall on households in higher deciles of the income distribution. The equity weights used are contained in the following table, and are based on the latest income data from the English Housing Survey.

Table A5.2: Equity weights used applied to certain costs and benefits of Warm Front measures

Income Deciles	Average Income	Number of Households	Total income	Marginal Utility of Consumption	Equity Weight
1	£7,500	2,529,000	£18,967,500,000	0.000133	**3.46**
2	£10,600	2,525,000	£26,765,000,000	0.000094	**2.45**
3	£13,400	2,530,000	£33,902,000,000	0.000075	**1.93**
4	£16,400	2,530,000	£41,492,000,000	0.000061	**1.58**
5	£19,800	2,529,000	£50,074,200,000	0.000051	**1.31**
6	£23,700	2,525,000	£59,842,500,000	0.000042	**1.09**
7	£28,300	2,531,000	£71,627,300,000	0.000035	**0.92**
8	£34,100	2,532,000	£86,341,200,000	0.000029	**0.76**
9	£42,900	2,526,000	£108,365,400,000	0.000023	**0.60**
10	£62,500	2,532,000	£158,250,000,000	0.000016	**0.41**
Total		25,289,000	£655,627,100,000		
Average Income	£25,925				
Average Marginal Utility of Consumption	0.00004				

26. Using these equity weights, an additional £1 for a household in the lowest income decile would be valued at £3.5, whereas an additional £1 to a household in the highest income decile would be valued at £0.4.

[8] HM Treasury, *The Green Book*, http://www.hm-treasury.gov.uk/data_greenbook_index.htm

Annex 6: Changes Relative to the Consultation Stage Impact Assessment

1. A number of changes and updates have been reflected in this final Impact Assessment (IA) relative to the consultation stage IA[9] that affect the Policy Options assessed. The net effect of all changes is an increase in the Net Present Value (NPV) of all Policy Options, including the Do Nothing baseline.

2. The positive net impact on the NPV of Policy Options 1 – 5 is greater than for the Do Nothing baseline, as they are estimated to better target support towards low-income households, which is reflected in a greater equity-weighted benefit for these options. As a result, the *additional* net benefit of Policy Options 1 – 5 compared to the Do Nothing baseline has also increased, and therefore the net effect on the NPV of Policy Options 1 – 5 *relative* to the baseline is also positive.

Anticipated Expenditure on Measures and Administering the Scheme

3. The consultation stage impact assessment assumed, based on historical data and pending finalisation of the scheme management contract, that the share of Warm Front funding in each year for administering the scheme would consist of a fixed annual management fee plus a variable fee that would scale with the size of the spend on measures (including items such as costs of surveying a property before measures are installed).

4. The split of annual expenditure between measures and administering the scheme has now been agreed for 2011/12 – 2012/13. The estimated split in the consultation stage impact assessment was a small overestimate, and as a result a small change has been made to the amount of funding available for measures. A reduced estimated envelope for measures will reduce the estimated number of measures that can be delivered under the Do Nothing baseline and Policy Options 1 – 5, and further slightly reduce the equity weighted benefits of each Policy Option. As a result, this change has a negative effect on the Net Present Value (NPV) of the Do Nothing baseline and Policy Options 1 – 5.

Updated Combination of Measures to be Delivered

5. The consultation stage impact assessment assumed that the same mix of measures would be delivered, relative the size of the overall spending envelope, as in 2008/09. Policy developments during consultation period led to decisions to cease funding the Warm Front Rebate Scheme and the delivery of Compact Fluorescent Lamps (CFLs). In addition, the combination of measures has been updated to include scaffolding – an enabling measure that permits the installation of other measures. These changes will affect all Policy Options in almost exactly the same way.

6. Due to the uncertainties around how the £300 vouchers under the Warm Front Rebate Scheme would be used, the cost-benefit analysis in the consultation stage impact assessment did not model any direct benefit of the spend on the rebate scheme. The discontinuation of the scheme from April 2011 frees up resources to be allocated to measures for which benefits can be modelled, which has a positive impact on the Net Present Value (NPV) of all options, including the Do Nothing baseline.

7. The discontinuation of delivering CFLs under the scheme reduces the benefits associated with their installation, but frees up resources to be allocated to other beneficial measures. The net effect of this is a small but negative impact on the NPV of all options, including the Do Nothing baseline.

[9] Available at: http://decc.gov.uk/en/content/cms/consultations/warm_front/warm_front.aspx

8. The inclusion of the cost of scaffolding in the spend on measures reduces the NPV of all options as no direct benefit (e.g. energy savings) can be attributed to it, and it reduces the resources available to spend on other measures with benefits that can be modelled.

9. The effect of the discontinuation of the Warm Front Rebate Scheme outweighs the other changes to the combination of measures, and therefore overall these changes have a positive effect on the Net Present Value (NPV) of the Do Nothing baseline and Policy Options 1 – 5.

Update to Average Value of a Grant and Estimated Number of Households Assisted

10. The estimated number of households under the scheme has been updated relative to those detailed in the consultation stage impact assessment. These figures have changed as a result of two factors:

    i. The change to the split of anticipated expenditure between measures and administering the scheme discussed above; and
    ii. Updated information from the scheme operator indicate that the value of the average grant to assisted households is expected to be higher than anticipated before the consultation was launched.

11. As a result, the average value of assistance per household is anticipated to be higher than in the consultation stage impact assessment, but given a fixed funding envelope the estimated number of households assisted under the scheme is anticipated to decrease.