Department for Energy Security & Net Zero

Ministry of Housing, Communities & Local Government

Consultation on Minimum Energy Efficiency Standards in the Social Rented Sector

Consultation-Stage Impact Assessment

Title:
Improving the Energy Performance of Social Rented Homes

IA No: n/a

RPC Reference No: n/a

Lead department or agency:
Ministry for Housing, Communities & Local Government
Department for Energy, Security and Net Zero

Impact Assessment (IA)

Date: 02 July 2025

Stage: Consultation Stage

Source of intervention: Domestic

Type of measure: Regulatory/Legislative

Contact for enquiries:

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Summary: Intervention and Options

RPC Opinion: n/a

Cost of Preferred (or more likely) Option (in 2025 prices, 2025 present value)

Total Net Present Social Value	Net cost to business per year	Business Impact Target Status
(£519m[1]) - £815m	£232m - £246m	IN

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

Improving energy efficiency through setting Minimum Energy Efficiency Standards (MEES) will be included in the Decent Homes Standard (DHS) as part of Criterion D on thermal comfort, on which the government is also currently consulting, and is necessary to help to ensure registered providers of social housing (providers) are supplying homes that are warm, dry, and free of dangerous damp and mould. The residential sector is also responsible for a significant share of the UK's greenhouse gas emissions and primary energy consumption. As such, improving the energy performance of homes in the social rented sector (SRS) is critical in meeting the government's legally binding carbon targets and improving the security of the UK's energy supply. The SRS faces a number of market failures that prevent optimal deployment (from the perspective of societal welfare) of energy efficiency measures in the absence of government intervention. These include positive externalities of energy efficiency improvements and equity considerations. Without government intervention, these market failures prevent the improvement of the energy performance of social rented homes.

What are the policy objectives of the action or intervention and the intended effects?

The policy is intended to introduce MEES in the SRS in England to ensure that action is taken to upgrade the energy efficiency of the sector. The regulatory proposal is intended to: make progress against the government's statutory fuel poverty and climate change commitments; reduce energy demand in the social rented sector, thereby lowering energy bills and improving energy security; improve thermal comfort and associated health benefits; and support green jobs and supply chain growth.

[1] All negative numbers in the IA are presented in parentheses.

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

The options considered in the consultation document are:
Option 1 (Government preferred option) - Dual metric approach: fabric performance with provider choice of heating system or smart readiness
Option 2 - Single metric approach: fabric performance
Option 3 - A requirement to meet a standard set against specified dual metrics
Options 4A and 4B - Allowing providers maximum flexibility in which standards they meet.

Four modelling scenarios are being considered in this impact assessment in addition to the counterfactual option of 'Do Nothing'. Two modelling scenarios directly relate to options considered in the consultation document. Policy options 1 and 2 are modelled fully in this IA through modelling scenarios 1 and 2. Two modelling scenarios are provided to show the upper and lower bound a different modelling scenario. Modelling scenarios 3 and 4 provide analysis for the upper and lower bound of modelling scenario 1. Option 3, and Option 4A and Option 4B that are considered in the consultation document have not been modelled in this IA due to uncertainty in the precise definitions of future EPC metrics and uncertainty over how providers would meet MEES under these two options.

The options considered in this IA are based on the new Energy Performance Certificate (EPC) metrics that the Government is currently consulting on. To note, since this consultation is being published ahead of the Government reaching its final position on how reformed EPC metrics should be constructed and properties assessed, the modelling in this IA is based on proxy definitions of the new EPC metrics and illustrative targets, in line with approach taken in the Private Rented Sector (PRS) MEES consultation.[2]
Modelling Scenario 0: Do nothing - do not introduce MEES in the SRS.
Modelling Scenario 1: Meet a primary Fabric Performance metric and a secondary Smart Readiness or Heating System metric by 2030, with a £10,000 spend exemption.
Modelling Scenario 2: Meet a standard set against a Fabric Performance metric by 2030, with a £10,000 spend exemption.
Modelling Scenario 3: Meet a primary Fabric Performance metric and a secondary Smart Readiness metric by 2030, with a £10,000 spend exemption.
Modelling Scenario 4: Meet a primary Fabric Performance metric and a secondary Heating System metric by 2030, with a £10,000 spend exemption.
Alternative spend exemption levels and compliance dates are considered in the sensitivity analysis section. Modelling Scenario 1 is the preferred option – to meet a standard for fabric performance first and then meet either the smart readiness or heating system standard, with a £10,000 time-limited spend exemption. The proposed target metric is in line with the government's proposal for the PRS MEES consultation launched earlier this year. This option strikes the best balance between key policy objectives by prioritising improvement in thermal comfort and overall decency, while also supporting the transition to net zero through incentivising measures such as solar PV installation or clean heat, which will move us forward to our net zero ambition and drive potential energy bill reductions for tenants. It also offers flexibility through a choice of secondary metrics, enabling tailored, and cost-effective solutions that reflect the specific needs of each home.

Is this measure likely to impact on international trade and investment?		No		
Are any of these organisations in scope?	**Micro** Yes	**Small** Yes	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)		**Non-traded:** 3.60 - 24.84 (total across appraisal period)		

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** TBC - the policy will be reviewed alongside any future changes to EPCs.

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister: _____ Date: 02nd July 2025

[2] PRS MEES Consultation (2025): https://www.gov.uk/government/consultations/improving-the-energy-performance-of-privately-rented-homes-2025-update/improving-the-energy-performance-of-privately-rented-homes-options-assessment-oa-html#annex-a-current-exemptions-under-the-prs-regulations

Summary: Analysis & Evidence — Modelling Scenario 1 (Preferred)

Description: Meet a primary Fabric Performance metric and a secondary Smart Readiness or Heating System metric by 2030, with a £10,000 spend exemption.

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low:	High:	Best Estimate:
2025	2025	47	(519)	815	N/A[3]

COSTS (£m)[4]	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	219	183	**8,841**
High	219	195	**9,383**
Best Estimate	-	-	**-**

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

The largest societal costs monetised in this impact assessment are installation and reinstallation costs (PV[5], £7,826m - £8,204m), admin costs (PV, £334m - £416m), survey costs (PV, £214m), hassle costs to providers associated with installations (PV, £389m - £460m) and familiarisation costs associated with understanding new regulation (PV, £5m). There will also be a cost incurred by energy providers given lesser revenue due to energy savings (PV, £4,472m - £8,594m), though this is offset by the benefit to social tenants. These costs are incurred by providers (across the entire policy appraisal period of 47 years). Costs faced by social housing residents include hassle costs associated with installations (PV, £73m - £84m).

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

There will be some costs to the Regulator of Social Housing (RSH) who will be regulating adherence to the scheme, including familiarisation, admin, monitoring and compliance costs, which have not been monetised at this stage. There may be some passthrough of RSH costs to social housing landlords through fees, this will be assessed in the final-stage IA.

BENEFITS (£m)	Total Transition (Constant Price)	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	-	177	**8,322**
High	-	217	**10,199**
Best Estimate	-	-	**-**

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

Social housing residents that have measures installed are the main affected group benefiting from MEES. They are expected to benefit from energy savings (PV, £5,258m - £10,356m), health benefits (PV, £715m - £800m), increased comfort from warmer homes (PV, £178 - £181 million). Society will also benefit from improved air quality (PV, £90m - £192m) and reduced traded (PV, £193m - £569m) and non-traded (PV, £1,272m - £4,380m) greenhouse gas emissions. There is a negative benefit to society of providers spending money on retrofits instead of building new supply (PV, (£1,737m) - (£1,660m)).

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

There are wider benefits of this proposal, that include supporting jobs in the retrofit sector, increasing investment in energy efficiency and clean heat measures, improving quality of life and health outcomes such as from reducing cold-related cardiovascular and respiratory illnesses, and reducing the strain on the NHS. In addition, there may also be benefits from lower energy imports and lower costs of meeting peak energy demand.

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

BUSINESS ASSESSMENT (Modelling Scenario 1)

Direct impact on business (Equivalent Annual) £m (2025 prices, 2025 present value):			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 232 - 246	Benefits:	Net: (246) – (232)	1,231 – 1,161

[3] A best estimate is not provided at this stage due to uncertainty regarding providers' choice of a secondary metric. This will be explored further in the final-stage IA, in light of responses to the consultation.

[4] High scenario relates to all PRPs choosing a secondary metric of smart readiness. While low scenario relates to 50% PRPs choosing a secondary metric of smart readiness and the other 50% choosing heating system.

[5] Impacts on this page are presented in discounted present value terms.

Summary: Analysis & Evidence

Modelling Scenario 2

Description: Meet a primary Fabric Performance metric by 2030, with a £10,000 spend exemption.

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)
2025	2025	47	Best Estimate: 71

COSTS (£m)	Total Transition (Constant Price)	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Best Estimate	£219	£63	**3,194**

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

The largest societal costs monetised in this impact assessment are installation and reinstallation costs (PV[6], £2,606 million), admin costs (PV, £113 million), survey costs (PV, £214 million), hassle costs to providers associated with installations (PV, £216 million) and familiarisation costs associated with understanding new regulation (PV, £5 million). There will also be a cost incurred by energy providers given lesser revenue due to energy savings (PV, £2,380 million), though this is offset by the benefit to social tenants. These costs are incurred by providers (across the entire policy appraisal period of 47 years). Costs faced by social housing residents include hassle costs associated with installations (PV, £40 million).

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

There will be some costs to the Regulator of Social Housing (RSH) who will be regulating adherence to the scheme, including familiarisation, admin, monitoring and compliance costs, which have not been monetised at this stage. There may be some passthrough of RSH costs to social housing landlords through fees, this will be assessed in the final-stage IA.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Best Estimate	-	69	**3,265**

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

Social housing residents that have measures installed are the main affected group benefiting from MEES. They are expected to benefit from energy savings (PV, £2,110 million), health benefits (PV, £216 million), increased comfort from warmer homes (PV, £223 million). Society will also benefit from improved air quality (PV, £81 million) and reduced traded (PV, £116 million) and non-traded (PV, £1,423 million) greenhouse gas emissions. There is a negative benefit to society of providers spending money on

fits instead of building new supply (PV, (£509 million)).

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

There are wider benefits of this proposal, that include supporting jobs in the retrofit sector, increasing investment in energy efficiency and clean heat measures, improving quality of life and health outcomes such as from reducing cold-related cardiovascular and respiratory illnesses, and reducing the strain on the NHS. In addition, there may also be benefits from lower energy imports and lower costs of meeting peak energy demand.

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

BUSINESS ASSESSMENT (Modelling Scenario 2)

Direct impact on business (Equivalent Annual) £m (2025 prices, 2025 present value):			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 84	Benefits:	Net: (84)	418

[6] Impacts on this page are presented in discounted present value terms.

Summary: Analysis & Evidence — Modelling Scenario 3

Description: Meet a primary Fabric Performance metric and a secondary Smart Readiness metric by 2030, with a £10,000 spend exemption.

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)
2025	**2025**	**47**	**Best Estimate: 815**

COSTS (£m)	**Total Transition** (Constant Price)	**Average Annual** (excl. Transition) (Constant Price)	**Total Cost** (Present Value)
Best Estimate	219	195	**9,383**

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

The largest societal costs monetised in this impact assessment are installation and reinstallation costs (PV[7], £8,204 million), admin costs (PV, £416 million), survey costs (PV, £214million), hassle costs to providers associated with installations (PV, £460 million) and familiarisation costs associated with understanding new regulation (PV, £5 million). There will also be a cost incurred by energy providers given lesser revenue due to energy savings (PV, £8,594 million), though this is offset by the benefit to social tenants. These costs are incurred by providers (across the entire policy appraisal period of 47 years). Costs faced by social housing residents include hassle costs associated with installations (PV, £84 million).

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

There will be some costs to the Regulator of Social Housing (RSH) who will be regulating adherence to the scheme, including familiarisation, admin, monitoring and compliance costs, which have not been monetised at this stage. There may be some passthrough of RSH costs to social housing landlords through fees, this will be assessed in the final-stage IA.

BENEFITS (£m)	**Total Transition** (Constant Price)	**Average Annual** (excl. Transition) (Constant Price)	**Total Benefit** (Present Value)
Best Estimate	-	217	10,199

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

Social housing residents that have measures installed are the main affected group benefiting from MEES. They are expected to benefit from energy savings (PV, £10,356 million), health benefits (PV, £715 million), increased comfort from warmer homes (PV, £181 million). Society will also benefit from improved air quality (PV, £90 million) and reduced traded (PV, £569 million) and non-traded (PV, £1,272 million) greenhouse gas emissions. There is a negative benefit to society of providers spending money on retrofits instead of building new supply (PV, -£1,737 million).

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

There are wider benefits of this proposal, that include supporting jobs in the retrofit sector, increasing investment in energy efficiency and clean heat measures, improving quality of life and health outcomes such as from reducing cold-related cardiovascular and respiratory illnesses, and reducing the strain on the NHS. In addition, there may also be benefits from lower energy imports and lower costs of meeting peak energy demand.

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

BUSINESS ASSESSMENT (Modelling Scenario 3)

Direct impact on business (Equivalent Annual) £m (2025 prices, 2025 present value):			**Score for Business Impact Target (qualifying provisions only) £m:**
Costs: 246	**Benefits:**	**Net: (246)**	**1,231**

[7] Impacts on this page are presented in discounted present value terms.

Summary: Analysis & Evidence — Modelling Scenario 4

Description: Meet a primary Fabric Performance metric and a secondary Heating System metric by 2030, with a £10,000 spend exemption.

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)
2025	**2025**	**47**	**Best Estimate: (1,750)**

COSTS (£m)	Total Transition (Constant Price)	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Best Estimate	219	172	**8,303**

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

The largest societal costs monetised in this impact assessment are installation and reinstallation costs (PV[8], £7,447 million), admin costs (PV, £255 million), survey costs (PV, £214 million), hassle costs to providers associated with installations (PV, £321 million) and familiarisation costs associated with understanding new regulation (PV, £5 million). There will also be a cost incurred by energy providers given lesser revenue due to energy savings (PV, £517 million), though this is offset by the benefit to social tenants. These costs are incurred by providers (across the entire policy appraisal period of 47 years). Costs faced by social housing residents include hassle costs associated with installations (PV, £61 million).

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

There will be some costs to the Regulator of Social Housing (RSH) who will be regulating adherence to the scheme, including familiarisation, admin, monitoring and compliance costs, which have not been monetised at this stage. There may be some passthrough of RSH costs to social housing landlords through fees, this will be assessed in the final-stage IA.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Best Estimate	-	139	**6,553**

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

Social housing residents that have measures installed are the main affected group benefiting from MEES. They are expected to benefit from energy savings (PV, £336 million), health benefits (PV, £876 million), increased comfort from warmer homes (PV, £175 million). Society will also benefit from improved air quality (PV, £293 million) and, while traded greenhouse gas emissions will increase (PV, (£128 million)), non-traded will reduce substantially (PV, £7,392 million). There is a negative benefit to society of providers spending money on retrofits instead of building new supply (PV, (£1,584 million)).

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

There are wider benefits of this proposal, that include supporting jobs in the retrofit sector, increasing investment in energy efficiency and clean heat measures, improving quality of life and health outcomes such as from reducing cold-related cardiovascular and respiratory illnesses, and reducing the strain on the NHS. In addition, there may also be benefits from lower energy imports and lower costs of meeting peak energy demand.

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

BUSINESS ASSESSMENT (Modelling Scenario 4)

Direct impact on business (Equivalent Annual) £m (2025 prices, 2025 present value):			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 218	**Benefits:**	**Net: (218)**	**1,091**

1. Executive Summary

[8] Impacts on this page are presented in discounted present value terms.

1. This impact assessment (IA) provides analysis for the consultation on setting Minimum Energy Efficiency Standards (MEES) in the Social Rented Sector (SRS), forming part of the existing Criterion D of the Decent Homes Standard (DHS). This is the first time MEES will be implemented in the SRS and will require registered providers of social housing (providers) to bring their social housing stock[9] up to a standard of EPC C or equivalent based on new proposed Energy Performance Certificate (EPC) ratings. This will be based on new metrics that are proposed to be introduced following EPC reform.[10] The new metrics will assess the energy performance of buildings based on fabric performance, smart readiness, and the efficiency and emissions of the heating system.

2. Four modelled scenarios are considered in this IA in addition to the Business As Usual option:
   - Modelling Scenario 0: Business As Usual - do not introduce MEES in the SRS.
   - Modelling Scenario 1 (Preferred Option): Meet a primary Fabric Performance metric and a secondary Smart Readiness or Heating System metric by 2030, with a £10,000 spend exemption.
   - Modelling Scenario 2: Meet a standard set against a Fabric Performance metric by 2030, with a £10,000 spend exemption.
   - Modelling Scenario 3: Meet a primary Fabric Performance metric and a secondary Smart Readiness metric by 2030, with a £10,000 spend exemption.
   - Modelling Scenario 4: Meet a primary Fabric Performance metric and a secondary Heating System metric by 2030, with a £10,000 spend exemption.

   Table 2 sets out the proxy definitions of new EPC metrics and SRS standards using in the modelling. Note that the IA is based on calendar years, with a policy start date of June 2025 and compliance by end of 2029. However, the proposed policy will likely operate on a financial year basis (i.e. a policy start date during FY 2025/26 and compliance by 1 April 2030), this is not expected to have a substantial impact on the analysis.

3. An additional option: 'Meet an average standard against the fabric performance, smart readiness and heating system metric, by 2030, with a £10,000 spend exemption' is also considered in the consultation document. However, due to insufficient information on how an averaging would work in practice across the new Home Energy Model (HEM) metrics, this option has not been quantified in this IA.[11]

4. Scenarios 1 and 2 are considered in the consultation document as Option 1 (government preferred option) and Option 2, respectively. Option 3 (a requirement to meet a standard set against specified dual metrics examples), Option 4A (a requirement to meet an average standard, set at EPC C or equivalent, across three metrics: fabric, smart and heat) and Option 4B (a requirement to meet a standard equivalent to band C against any two of the three metrics: fabric, smart and heat) that are considered in the consultation document have not been modelled in this IA due to uncertainty in the precise definitions of future EPC metrics and uncertainty over how providers would meet MEES under Options 4A and 4B. However, Scenarios 3 and 4 are provided in this IA and give an indication of the impacts of two dual

[9] SRS MEES will apply to both private registered providers and local authority registered providers of social housing where those providers are a landlord but does not include properties owned under Low Cost Home Ownership Schemes (LCHO) such as shared Ownership properties.

[10] Government is committed to reforming the Energy Performance of Buildings regime to provide a system that gives accurate and useful information about the energy performance of homes. The 'Reforms to the Energy Performance of Buildings Regime' consultation can be found here: https://www.gov.uk/government/consultations/reforms-to-the-energy-performance-of-buildings-regime

[11] Government intends to consult later in 2025 on aspects of HEM and its application to EPCs. Final confirmation of the grades that social rented homes will be required to meet under MEES will follow once the HEM consultation response is published and the design of the EPC metrics is finalised.

metric options: a Primary Fabric Performance and Secondary Smart Readiness metric, and a Primary Fabric Performance and Secondary Heating system metric.

5. Whilst many providers are taking positive steps to improve the energy efficiency of their existing housing stocks, other providers may prioritise other discretionary spending instead. Without new regulatory requirements, we cannot ensure that energy efficiency is a priority or that statutory fuel poverty or carbon budget targets would be met in time. Market failures and barriers are discussed in further detail in Section 3 of this IA.

6. Publishing this IA and Consultation demonstrates the government's commitment to improving the energy efficiency of the SRS as well as providing certainty to providers, residents, and the energy efficiency supply chain.

7. The cost-benefit analysis (CBA) for the policy options is summarised below. The equity-weighted values take into account the relative impacts of the costs and benefits on different subsets of society: their ability to afford the policy costs, and the additional utility received from the monetised policy benefits. An equity weighting has been applied to the benefit that social residents receive from reduced energy bills to reflect the greater relative value of bill savings for lower-income households.

*Table 1: Summary of the cost-benefit analysis for modelled scenarios**

	Modelled Scenario 1	Modelled Scenario 2	Modelled Scenario 3	Modelled Scenario 4
Net Present Value (NPV) £m	(519) - 815	71	815	(1,750)
Equity-weighted NPV £m	1,359 - 4,425	1,071	4,425	(1,532)
Benefit Cost Ratio (BCR)	0.94 - 1.09	1.02	1.09	0.79
Equity-weighted BCR	1.15 - 1.47	1.34	1.47	0.82

**Parentheses in this table and throughout the IA reflect negative values.*

2. Introduction and Problem Under Consideration

Introduction

8. The policy is intended to introduce MEES in the SRS in England to ensure that action is taken to upgrade the energy efficiency of the sector. The regulatory proposal is intended to: make progress against the government's statutory fuel poverty and climate change commitments; reduce energy demand in the social rented sector, thereby lowering energy bills and improving energy security; improve thermal comfort and associated health benefits; and support green jobs and supply chain growth.

9. There are currently no minimum energy efficiency requirements in the SRS. Since 2017, the share of social homes with an EPC rating A-C has increased from 52% to 72%[12] and most private registered providers of social housing (PRPs) have plans in place to upgrade the remainder of their stock to at least EPC (EER) C by 2030. Setting a MEES for the SRS for the first time at EPC C or equivalent will build on this momentum and provide certainty to registered

[12] DA7101: energy performance – dwellings from MHCLG: https://www.gov.uk/government/statistical-data-sets/energy-performance

providers on requirements so that they can plan and invest in current homes and in building new homes. There are several key outcomes from improving the energy efficiency of socially rented homes.

Reasons for intervention: Energy Performance, Fuel Poverty and Improving the Decency of Homes

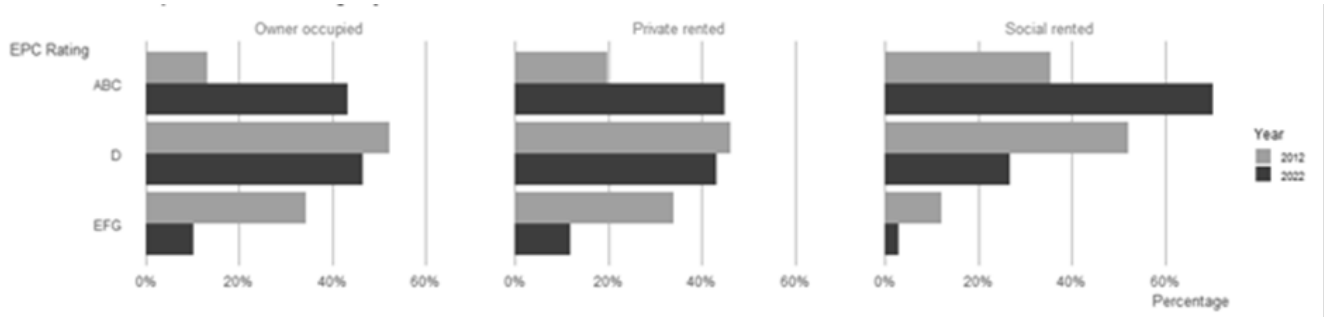
Energy Performance

10. The SRS provides housing for around 4 million households in England, representing 16% of England's housing stock.[13]

11. The government currently uses the Standard Assessment Procedure (SAP)[14] to assess and compare the energy and environmental performance of dwellings, which rates domestic properties on a scale from 1 (very high energy costs or emissions, when using EER[15] or EIR[16], respectively) to 100 (very low energy costs or emissions). This scale is in turn banded on a scale from 'G' (very high energy costs or emissions) to 'A' (very low energy costs or emissions).

12. Figure 1 shows that the SRS has a higher proportion of dwellings in EER bands A-C than other tenure types in England. Given that, we can infer there is a correlation between homes we've identified as having lower energy performance (current EPC bands D-G) and that would be classified as having low energy performance under the new EPC system.[17] However, the extent to which these homes would be considered low energy performing remains uncertain until the HEM metrics are fully defined. In addition, since 2017, while the share of social homes with an EPC rating A-C has increased from 52% to 72%.[18] There are still around 1.2 million social homes (equating to around 2.6 million tenants)[19] below EPC band C that require energy performance improvements.

Figure 1: EER bands of homes in England by tenure type[6].



[13] EHS 23-22 English Housing Survey 2023 to 2024: headline findings on demographics and household resilience: https://www.gov.uk/government/collections/english-housing-survey-2023-to-2024-headline-findings-on-demographics-and-household-resilience

[14] SAP guidance: https://www.gov.uk/guidance/standard-assessment-procedure

[15] Energy Efficiency Rating – this is measured in terms of energy costs

[16] Environmental Impact Rating – this is measured in terms of carbon emissions

[17] The correlation between low EER and low actual performance under the new EPC system is fuel-dependent, electrically heated properties are over-represented in lower EER bands under the current system due to the fuel price assumptions. Therefore, the relationship between current performance bands in the current and new EPC systems is a correlation rather than a causal link.

[18] DA7101: energy performance – dwellings from MHCLG: https://www.gov.uk/government/statistical-data-sets/energy-performance

[19] https://www.gov.uk/government/collections/english-housing-survey#2023-to-2024

13. Government is proposing to set MEES against new metrics planned to be introduced to EPCs following EPC reform in 2026. The planned new metrics would assess the energy performance of buildings based on fabric performance, smart readiness, and the efficiency and emissions of the heating system. Further details on these planned metrics and other proposals relating to EPC reform can be found in the consultation on 'Reforms to the Energy Performance of Buildings Regime' published on 4 December 2024. Depending on the final definitions of EPC metrics, whether this leads to further investment for existing EER C properties and the final policy design of SRS MEES, setting MEES for the SRS could increase the energy performance of buildings and reduce total lifetime carbon emissions by 10.57 – 48.87 MtCO2e across the appraisal period (Option 1: preferred option).

14. There is also significant government support to improve the energy performance of social housing. The main scheme supporting this improvement, is the Warm Homes: Social Housing Fund (WH:SHF). Since 2021, the Social Housing Decarbonisation Fund (SHDF), the predecessor of WH:SHF, has focused on improving the energy performance of homes in the social rented sector.[20] In the latest round of funding, WH:SHF Wave 3, the government has committed £1.29 billion across 3 years to improve the energy performance of social housing. WH:SHF Wave 3 will upgrade a significant amount of the social housing stock currently below EPC C up to that standard, delivering warm homes, tackling fuel poverty, and reducing carbon emissions. There are other schemes participating in the improvement of energy efficiency in social housing; the details of these schemes can be found in Annex A.

Improving the decency of homes

15. Energy efficient homes are more comfortable to live in. They retain their internal temperatures more effectively, wasting less heat in cold weather and staying cooler in the summer. This results in homes that are warmer and more comfortable for tenants.

16. Improved energy efficiency is crucial to tackling damp and mould; an adequately heated, ventilated and insulated home prevents condensation which causes damp and mould. There is a marked correlation between energy inefficient homes and the presence of damp and mould, with 20% of social renters in the least energy efficient homes suffering from damp problems, in comparison with only 3% of social renters in the most efficient homes.[21]

17. This means energy efficient homes that are warmer and more comfortable for tenants are also likely to have additional health benefits for the most vulnerable such as the elderly, disabled tenants, and young children. Warmer homes are expected to ease the symptoms of several medical conditions and promote healthy development of children. The Building Research Establishment (BRE) estimate that the potential savings to the NHS resulting from fixing a category 1 level damp and mould hazard is nearly £9.8m per year (2019 prices).[22] The tragic death of two-year old Awaab Ishak in 2020 highlights the devastating impact of damp and mould. To address this, alongside government's commitment to implement 'Awaab's Law' in the SRS, proposals in this consultation will play a part in reducing damp and mould caused by condensation.

Fuel poverty

[20] Social Housing Decarbonisation Fund statistics: https://www.gov.uk/government/collections/social-housing-decarbonisation-fund-statistics

[21] Chapter 3: annex tables from EHS 21-22 housing quality and condition: https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-housing-quality-and-condition/english-housing-survey-2021-to-2022-housing-quality-and-condition

[22] Buildings Research Establishment (BRE) (2023) *The cost of poor housing in England by tenure* https://files.bregroup.com/corporate/BRE_cost%20of%20poor%20housing%20tenure%20analysis%202023.pdf

18. Energy efficiency enables tenants to heat their homes more affordably. Our analysis estimates that, if government's preferred approach is taken forward, we would achieve average annual bill savings across all homes treated of between £96 and £165 for tenants by 2030 (in real terms). This shows how improved energy efficiency can support the finances of those living in social rented homes.

19. Bill savings are the best long-term method of tackling fuel poverty.[23] Whilst the average EPC scores across homes in the SRS compare favourably to other sectors, there remain significant levels of fuel poverty in homes below EPC C. In 2023, 56% of social homes in England below the Fuel Poverty Energy Efficiency Rating (FPEER) B and C (broadly equivalent to EPC C) were classified as fuel poor.[24]

20. Since 2020, the rise in energy prices has impacted the ability of many households to heat their homes adequately, with fuel poor households disproportionately affected. The statutory fuel poverty target is to upgrade as many fuel poor homes as reasonably practicable to a minimum energy efficiency rating of Band C by 2030. Government has published a review of the 2021 fuel poverty strategy alongside a consultation seeking views on proposals for a new fuel poverty strategy for England. The full Fuel Poverty Strategy consultation, which closed on 4th April 2025, can be found here: fuel poverty strategy consultation 2025.

Net Zero

21. Homes currently make up 20% of total greenhouse gas emissions in the UK.[25] Achieving net zero requires the housing stock to transition to improved energy efficiency and low carbon heating. Government recognises that to meet our net zero target, we need to have largely eliminated emissions from our housing stock by 2050, and to have made significant progress this decade in order to meet our Carbon Budgets.

22. A transition to low carbon heating methods, such as air source and ground source heat pumps and connection to low carbon heat networks, is vital in the mission to deliver against our climate goals and reduce energy bills for tenants. Alongside fabric upgrades and smart measures to improve flexibility, low carbon heating options typically operate much more efficiently than their fossil fuel heating counterparts.

23. Government is exploring ways to further bring down the running costs of low-carbon heating, so that future households see the efficiency of their low-carbon heating systems translated into even greater bill savings.

3. Rationale for intervention

24. There are a range of market failures and barriers to energy efficiency improvements in the SRS, which provide the rationale for introducing MEES in this market:

[23] Fuel poverty in England is measured using the Low Income Low Energy Efficiency (LILEE) indicator. Under this indicator, a household is considered to be fuel poor if: they are living in a property with a fuel poverty energy efficiency rating of band D or below and when they spend the required amount to heat their home, they are left with a residual income below the official poverty line. www.gov.uk/government/collections/fuel-poverty-statistics

[24] Annual Fuel Poverty Statistics in England, 2024 (2023 data): https://www.gov.uk/government/statistics/annual-fuel-poverty-statistics-report-2024

[25] Department for Energy Security and Net Zero (2023), Final UK greenhouse gas emissions national statistics: 1990 to 2023, available at: https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-statistics-1990-to-2023

Misaligned Incentives

25. There is a misalignment between the bearers of the costs – the providers – and the primary beneficiaries – the residents. The most direct benefits of such investments are energy savings, which translate to increased comfort and financial savings for the residents, with the provider not able to capture the benefits or recoup back the money spent. However, it is reasonable to assume that providers consider the impact to residents when making changes to their housing stock.

Externalities and Health Impacts

26. A large part of the benefits are positive externalities going beyond the interests of individual providers – these are wider social benefits that are not internalised by the market: reductions in greenhouse gas emissions, better air quality, supporting green jobs and wider health benefits.

27. Living at low temperatures poses a risk to health, with a range of negative morbidity and mortality impacts associated with exposure to the cold. The Marmot review on cold homes and health[26], in addition to the Hills Fuel Poverty Review[27], set out the strong body of evidence[28] linking low temperatures to these poor health outcomes. The market failures and additional considerations listed above mean that without introducing SRS MEES, it will be very difficult to meet the government's objectives set out in the section below.

Equity considerations

28. According to the 2023-24 EHS data, around half of social rented households are within the lowest income quintile.[29] Without intervention, there are limited means for social residents to either make upgrades themselves (the terms of tenancy agreement would prevent most significant upgrades being made directly by residents), move to a more efficient home, or move out of social housing.

Competing objectives

29. The upfront cost of energy performance improvement measures mean providers must choose between investing in them or using the same money for other purposes (the 'opportunity cost'). providers have competing calls on their limited resource. These include investment objectives related to legal requirements, or which enable new income streams to be generated, for example in building safety and new supply. Without introducing SRS MEES, there is a risk that energy efficiency will be deprioritised over competing objectives. This would lead to an underinvestment in energy efficiency improvement due to the market failures listed above.

4. Policy Objectives

[26] Marmot Review on cold homes and health: https://www.instituteofhealthequity.org/resources-reports/the-health-impacts-of-cold-homes-and-fuel-poverty

[27] Fuel Poverty Review: https://www.gov.uk/government/publications/final-report-of-the-fuel-poverty-review

[28] Heath Energy Efficiency, Smart technologies and Health review: https://www.gov.uk/government/publications/heat-energy-efficiency-smart-technology-and-health-review

[29] EHS 23-24 headline report: https://www.gov.uk/government/statistics/chapters-for-english-housing-survey-2023-to-2024-headline-findings-on-demographics-and-household-resilience https://www.gov.uk/government/statistics/chapters-for-english-housing-survey-2022-to-2023-headline-report/chapter-1-profile-of-households-and-dwellings

Improve the decency of homes

The effective operation of the SRS MEES requirement will support three of the government's existing objectives:

Policy Objectives

30. Energy efficient homes are more comfortable to live in. They retain their internal temperatures more effectively, wasting less heat in cold weather and staying cooler in the summer. This results in homes that are less prone to damp and more comfortable for tenants.

31. Improved energy efficiency is crucial to tackling damp and mould, an adequately heated, ventilated and insulated home prevents condensation which causes damp and mould. There is a marked correlation between energy inefficient homes and the presence of damp and mould, with 20% of social renters in the least energy efficient homes suffering from damp problems, in comparison with only 3% of social renters in the most efficient homes.[30]

32. This means energy efficient homes that are warmer and more comfortable for tenants are also likely to have additional health benefits for the most vulnerable such as the elderly, disabled tenants, and young children. Warmer homes are expected to ease the symptoms of several medical conditions and promote healthy development of children. The Building Research Establishment (BRE) estimate that the potential savings to the NHS resulting from a fixing a category 1 level damp and mould hazard is nearly £9.8m per year (2019 prices).[31] The tragic death of two-year old Awaab Ishak in 2020 highlights the potentially devastating impact of damp and mould.

Achieve bill savings and reduce fuel consumption

33. Greater energy efficiency enables tenants to heat their homes more affordably. Our analysis predicts that, if government's preferred approach is taken forward, tenants would achieve average annual bill savings across all homes treated of between £96 and £165 for tenants by 2030, showing how improved energy efficiency can support the finances of those living in social rented homes.

34. Since 2020, the rise in energy prices has impacted the ability of many households to heat their homes adequately, with fuel poor households disproportionately affected. Bill savings are the best long-term method to tackle fuel poverty. The statutory fuel poverty target is to upgrade as many fuel poor homes as reasonably practicable to a minimum energy efficiency rating of Band C by 2030.

Net zero and the energy performance of social rented homes

35. Homes currently make up 20% of total greenhouse gas emissions in the UK.[32] Achieving net zero requires the housing stock to improve energy efficiency and transition to low carbon

30 Chapter 3: annex tables from EHS 21-22 housing quality and condition: https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-housing-quality-and-condition/english-housing-survey-2021-to-2022-housing-quality-and-condition

31 Buildings Research Establishment (BRE) (2023) *The cost of poor housing in England by tenure* https://files.bregroup.com/corporate/BRE_cost%20of%20poor%20housing%20tenure%20analysis%202023.pdf

32 Department for Energy Security and Net Zero (2023), Final UK greenhouse gas emissions national statistics: 1990 to 2021, available at: https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2021

heating. We need to have mostly eliminated emissions from our housing stock by 2050 and to have made significant progress this decade to meet our Carbon Budgets. There are 4 million households in the SRS in England, equating to 16% of all households.[33] In 2023-24, just under 30% of social rented homes in England were below EPC C.[34] Introducing MEES would support progress towards making social rented homes carbon neutral.

36. Moving to low carbon heating methods, such as air source and ground source heat pumps and connection to low carbon heat networks, will support our climate goals and reduce energy bills for tenants. Alongside fabric upgrades and smart measures to improve flexibility, low carbon heating options typically operate much more efficiently than their fossil fuel heating counterparts.
Government is exploring ways to further bring down the running costs of low-carbon heating, so that future households see the efficiency of their low-carbon heating systems translated into greater bill savings.

Policy intent

37. Since 2001, the DHS has provided a minimum quality standard that social homes should meet. It was last updated in 2006 and is regulated by the Regulator of Social Housing (RSH). The DHS is currently under review to bring it more up to date. SRS MEES will be integrated into the 'thermal comfort' criterion of the DHS (criterion D). Government is currently consulting on other specific changes needed to the DHS.

38. Providers' compliance with MEES will be regulated alongside the rest of the DHS by the RSH. The Social Housing (Regulation) Act 2023 (SHRA) has already made energy efficiency a core objective of the RSH. The SHRA also gave the RSH additional enforcement powers to tackle poor performing registered providers. The SHRA enables the RSH to implement a new integrated regulatory approach which proactively regulates the consumer standards from April 2024, including those related to the safety and quality of the provider's homes, and services to residents.

5. Policy options

Rationale for regulation and alternatives considered

39. A longlist of options has been considered to overcome the market failures identified in section 3. The primary rationale continues to be that regulation is necessary to overcome the misaligned market incentives between resident and provider. Please see Annex D for the critical success factors for SRS MEES and how these relate to the policy long-list in order to determine regulation as the most appropriate option forward.

40. A number of alternative approaches to regulation have been considered and either assessed as being unlikely to drive energy efficiency improvements, or evidence has been found which demonstrates that they have insufficient impact. For this reason, they have not been appraised as options as part of this IA. These include:

[33] Source: English Housing Survey 2023-2024 English Housing Survey 2023 to 2024: headline findings on housing quality and energy efficiency - GOV.UK

[34] https://assets.publishing.service.gov.uk/media/6799e38c1c041dcc469dae78/2023-24_EHS_Headline_Report_Energy_Efficiency_Annex_Tables.ods

'Business As Usual'

41. Providers are generally in favour of work to support energy efficiency in social housing and most providers already have energy performance targets of at least EPC C by 2030 in their business plans. Providers have finite budgets and multiple competing spending priorities (e.g., increasing housing supply) as well as other regulatory requirements to meet (e.g., building safety regulations). As a result, if the government does not deliver on expectations to introduce an EPC C standard (or equivalent), providers are less likely to take voluntary action and may rework business plans to delay energy efficiency improvements. This means that not introducing MEES will result in fewer energy efficiency gains, as well as potentially damage the credibility of future government commitments with providers. In addition, the current thermal comfort requirements in the DHS are not fit for purpose and are considered insufficient to meet government targets and ensure appropriate levels of energy efficiency in the social housing stock; the current policy landscape for the SRS is explained in Annex A.

Grant funding

42. There is grant funding available for social housing retrofit through the existing WH:SHF. However, delivery of the £1.29 billion that has been committed for WH:SHF Wave 3 for 2025-2028 would not be sufficient to improve all social housing stock to EPC C or equivalent and meet the Fuel Poverty Target to improve as many homes to band C where reasonably practicable by 2030. MEES will be introduced to build on the progress of the WH:SHF as part of a package of policies to improve the energy performance of the sector. WH:SHF grant funding (and the co-funding invested in WH:SHF projects) will enable some providers to go further and faster than MEES, for example by improving properties to EPC C before SRS MEES comes into effect.

Tax incentives

43. While the use of preferential tax rates or rebates upon undertaking energy efficiency improvements could incentivise providers to undertake more energy efficiency improvements, this approach faces several limitations Firstly, many energy efficiency products are already zero-rated for VAT, further tax incentives would effectively constitute a negative tax – an approach that would not be fiscally sustainable. Secondly, given current public finance constraints, the scale of tax incentives required to drive the desired level of energy efficiency improvement would be too large for government to accommodate.

44. The use of preferential lending rates for energy efficiency installations could incentivise providers to undertake more energy efficiency improvements. However, while base rates have recently started to decrease from a high of 5.25% in July 2024 to 4.5% in February 2025[35], providers' leverage remains constrained, which could limit the extent to which they can capitalise on the improved lending conditions.

45. The Affordable Homes Guarantee Scheme 2020 provides low-cost, flexible and long-term loans to help fund investment in new and existing affordable homes across England, including those for social rent, affordable rent and shared ownership. The scheme can also be used to upgrade existing properties, making them warm and decent for tenants. It supports private registered providers of social housing to deliver energy performance and housing quality measures whilst continuing to support new development and increasing total guarantee capacity from a maximum of £3 billion to a new maximum of £6 billion. The

[35] Bank of England Interest Rates and Bank Rates: https://www.bankofengland.co.uk/monetary-policy/the-interest-rate-bank-rate

expanded scheme went live in early 2024 and the application window is open until April 2026.

46. The National Wealth Fund (NWF) announced in October that it will provide financial guarantees that will see Barclays UK Corporate Bank and Lloyds Banking Group deliver £1 billion of funding to accelerate the retrofit of social housing in the UK. In April 2025, the NWF announced a financial guarantee of up to £400 million to cover a series of new loans provided by NatWest Group to registered providers for the retrofit of social housing stock in the UK. In June, the NWF guaranteed an initial £150 million for The Housing Finance Corporation. This brings NWF's total support for social housing retrofit to £1.3 billion. By enabling £1.65 billion of lending through these guarantees, the NWF is ensuring that attractively priced financing is available to every aspect of the social housing market and caters to all needs. We expect that loans from the NWF will support providers to improve the energy efficiency of social homes.

Policy options

47. To inform the analysis in this consultation stage IA, the following key design elements were considered in designing the policy options for SRS MEES:

Proxy definitions of new EPC metrics

48. Government's consultation on reforming EPCs went live on 4 December 2024 and closed on 25 February 2025.[36] The government response to this consultation will be published in due course. New EPC metrics may be produced using the HEM metrics and we plan to consult on aspects the HEM methodology in 2025. The intention is to transition to reformed EPCs, based on HEM and RdHEM (the reduced form of HEM used by EPC assessors), in the second half of 2026.

49. The key proposed headline metrics considered in the EPC consultation are as defined below:
    - **The fabric performance metric** – This metric assesses energy performance based on the fabric efficiency of the building, providing recommendations to improve thermal comfort, reduce space heating demand, and improve heating system efficiency. Furthermore, appropriate fabric interventions support a home becoming 'heat pump ready', providing optimal conditions for heat pumps to work more effectively
    - **The heating system metric** – This metric assesses energy performance based on the efficiency and emissions of the building's hot water and heating systems. Possible measures driven by this metric would include low-carbon options, such as heat pumps, over inefficient or carbon-intensive systems. Recommendations may include heating controls, heat emitters, and solar water heating.
    - **The smart readiness metric** – This metric assesses energy performance based on the optimisation of the building's energy usage and its ability to integrate with a flexible energy system. Possible measures driven by this metric would include solar panels, batteries and other load shifting appliances, and smart meters to enable tenants to access smart tariffs and services.
50. The approach taken in this IA to assess policy outcomes has been to focus on the high-level implications of basing new SRS standards on different elements of property performance. Ahead of the Government reaching its final position on how reformed EPC

[36] MHCLG (2024) Consultation on reforms to the Energy Performance of Building Regime https://www.gov.uk/government/consultations/reforms-to-the-energy-performance-of-buildings-regime

metrics should be constructed and properties assessed, the Government cannot at this time define or propose specific targets for the SRS on the new metrics.

51. To make salient the trade-offs between the options considered in this IA, modelling has been carried out with proxy definitions of the new EPC metrics and illustrative targets. These definitions and targets should not be taken as an indication of how the new EPC metrics or the higher standards for the SRS will ultimately be defined. Their use is solely to throw light on what can be achieved by basing SRS standards on the different elements of property performance (fabric performance, adoption of smart and energy generation technologies and heating performance) and to give a sense of the number of properties affected and the magnitudes of costs.

52. Table 2 describes the proxy metrics and targets used in the modelling. Note that the proxy metric for 'fabric' is continuous in nature, as it is measured by the rate of heat loss from a dwelling, allowing for more calibrated targets to be used. However, the proxy metrics for 'smart' and 'heating' are binary with targets based on whether a property has solar PV or a heat pump, respectively. Consequently, the modelled outcomes for 'smart' and 'heating' are potentially more polarised than what may occur if SRS standards are based on the final HEM versions of these metrics. The proxy metrics and targets used in this IA are in line with the PRS MEES options assessment.[37]

53. For the purpose of this IA, decisions on the proxy metrics and standards to use were influenced by what it is currently possible to model using the Department's National Buildings Model (NBM).[38] At the time of analysis, the NBM did not feature some measures, e.g., batteries, that may feature as part of the final HEM versions of the metrics. Following development of HEM and ahead of the final-stage SRS MEES IA the Department's modelling will be updated to account for the key measures that feature in the final HEM metrics.

Table 2: Proxy definitions of new EPC metrics and SRS standards used in modelling

Metric	**Proxy definitions**
Fabric	Proxy metric: SAP dwelling heat loss (W/m2K)[39]. Proxy SRS standards: • Heat pump ready standard: 4 W/m2K – this aligns with a threshold of fabric performance used in DESNZ modelling to determine when a property is "heat pump ready" for a low temperature heat pump[40].

[37] MHCLG and DESNZ (2024) Reforms to the Energy Performance of Buildings regime https://www.gov.uk/government/consultations/improving-the-energy-performance-of-privately-rented-homes-2025-update

[38] DESNZ (2022) BEIS Business Critical Models https://www.gov.uk/government/publications/beis-business-critical-analytical-models-2022/beis-business-critical-models-2022

[39] Heat lost from the dwelling (W) per m2 floor area of the dwelling (m2) for each degree temperature difference between internal and external temperature (K).

[40] 4 W/m2K is approximately equivalent to the 100 W/m2 peak heat loss on the coldest day threshold that we use as a proxy for 'low temperature ASHP ready'.

Smart	Proxy metric: We proxy for smart properties according to whether or not they have a solar PV system. There are other possible components to a smart property, including smart meters and batteries, which are not accounted for. However, note smart meters are assumed to be in place / installed where properties get solar PV as this enables households to take full advantage of the system, including selling excess electricity to the grid[41]. Proxy SRS standard: Property must have at least a 1kW solar PV system.
Heating	Proxy metric: We proxy for properties having good heating system performance according to whether or not they have a heat pump. Proxy SRS standard: Property must have a heat pump. Note this is an ambitious standard. Lower ambition standards based on properties being heat-pump ready (e.g., having suitable emitters and pipework) may be possible. Finally, some providers may be able to achieve the equivalent of a heat pump by connecting to a heat network (not modelled).

54. The outcomes presented in this IA are based on simplified, optimistic scenarios of how many properties will be upgraded, the impacts should be viewed as 'maximal outcomes'. The analysis is included to support consultees in answering the consultation questions, rather than to provide definitive impacts of the proposed SRS MEES options. We will be gathering evidence during the consultation stage to improve the robustness of our assumptions for the final-stage IA that will inform the final SRS MEES policy design and will be published alongside the Government Response to the SRS MEES consultation. After this, the standard will be implemented following a direction to the RSH. Once the Regulator is directed on the new requirements, we expect that the Regulator will undertake a consultation on its revised Safety and Quality standard. Government will publish guidance for providers on SRS MEES following the publication of government responses to the EPC reform and HEM consultations, to support the implementation of MEES.

Homes in scope

55. SRS MEES will apply to both private registered providers and local authority registered providers of social housing where those providers are a landlord but does not include properties owned under Low Cost Home Ownership Schemes (LCHO) such as shared Ownership properties. All social homes covered by the DHS will be in scope of SRS MEES. The DHS applies to all social housing except leasehold and shared ownership properties. Social housing includes sheltered housing and non-self-contained or supported housing. The homes in scope will be those covered by the DHS that fall below the MEES requirements.

Spend exemption

[41] It has not been possible to fully account for additional smart meter installations in the modelling that occur where solar PV is installed. Our modelling implicitly assumes that households getting solar PV already have a smart meter, thereby allowing them to benefit from selling excess electricity generation to the grid. This income is added into the estimated average energy bill savings for households. Should households get a smart meter for the first time alongside their solar PV, they may benefit from even higher energy bill savings due to the ability to monitor their energy use.

56. A spend exemption is a threshold set on the level of investment required per property. Once this level has been reached, a provider would be exempt from reaching the metric target. The exemption would only be valid for a set time period, proposed as ten years in the consultation. Spend exemptions are implemented to limit the impact on provider budgets and avoid excessive costs in the short-medium term on the hardest-to-treat homes, while still reaching the metric standard for most homes. Options with and without a spend exemption are considered in this IA. The central scenarios focus on a spend exemption of £10,000 in nominal prices to allow comparison across metrics, but alternative spend exemption levels are considered in sensitivity analysis.

Other exemptions

57. The current DHS sets out circumstances when compliance with the standard is not possible for individual dwellings - these are sometimes referred to as 'exemptions'. Large PRPs declare annually through the Statistical Data Return to the Regulator of Social Housing the number of their properties which do not meet the DHS and the number of their properties which they assess are exempt from meeting the DHS requirements. This is outlined in the accompanying consultation on reforming the DHS here: [x]

58. Section 7 of the DHS consultation outlines the proposals for the SRS to include the following specific circumstances in which it may be acceptable to not meet the standard:
    - Tenant refusal of access (with enhanced guidance): We recognise that there will be some situations where access to properties may pose issues, however, exempting providers from meeting the DHS where tenants refuse access for remedial works is a complex issue that requires careful consideration. Therefore, the consultation proposes encouraging providers to engage proactively with tenants to address concerns and laying the steps required through clear and robust guidance.
    - Physical or planning factors preventing compliance: In certain cases, structural limitations or planning restrictions may make it impractical or impossible to carry out necessary improvements. For instance, heritage buildings may be subject to listing constraints that restrict the extent of possible works. In such a case, we would expect providers to demonstrate they have carried out the maximum amount of energy efficiency upgrades possible before an exemption applies.
    - Exemptions due to sale, demolition, or planned regeneration of properties: In such scenarios, investing in extensive repairs or upgrades may be impractical and economically challenging, and we acknowledge the reality that resources are better allocated towards long-term solutions rather than temporary fixes.

Compliance date

59. The date at which social homes must have reached the metric standard. The central scenarios focus on a compliance date of 2030, in line with meeting the Fuel Poverty Target, but alternative compliance dates are considered in sensitivity analysis.

Transition period

Approach for homes already at EER C

60. Homes already at EER C by 2028 (end of financial year 27/28) will be compliant with MEES for the duration of the EPC's validity period. When the EPC expires, the home must comply with the new HEM metrics. Around 70% of social homes are already at EER C and are assumed to be compliant with MEES by 2030 (end of financial year 29/30) under this approach. Homes complying with SRS MEES using pre-reformed EPCs obtained by the end of 2026 will be considered compliant with MEES. The validity period for the pre-reformed EPCs is 10-years. These homes must then be compliant with the new EPC metrics (in line with HEM) when the EPC expires, which will be no later than the end of 2037. Associated costs have been spread between the modelled EPC expiries and 2037. Note the IA is based on calendar years, with a policy start date of June 2025 and compliance by end of 2029. However, the proposed policy will likely operate on a financial year basis (i.e. a policy start date during FY 2025/26 and compliance by 1 April 2030), this is not expected to have a substantial impact on the analysis.

Approach for homes currently below EER C

61. Homes currently below EER C are assumed to either comply with SRS MEES through EER C for a period of time under the proposed transition arrangements or the new EPC metrics. The modelling assumes two routes for compliance:
    - Existing EER C – a proportion of social housing providers with stock below EER C will comply with SRS MEES through the existing EPC and obtain a post-reform EPC before 2028. The validity period for the post-reformed EPCs is assumed to be 5-years. These homes must then be compliant with the new MEES standard (using HEM) when the EPC expires, which will be no later than the end of 2033.
    - New HEM metrics – a proportion of social housing providers with stock below EER C will comply with SRS MEES through the new HEM C standard and obtain a post-reform EPC up to 2029. These homes will be considered compliant with SRS MEES.

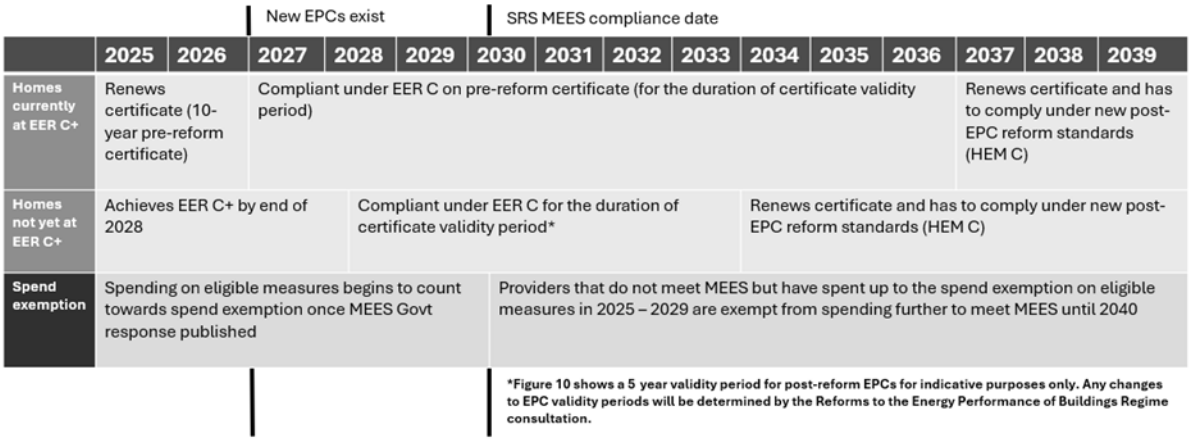
62. For modelling purposes, the following proportions have been assumed for homes below EER C:

Table 3: Proportion of social homes below EER C working towards each target.

Proportion of social homes currently below EER C working towards:	2025	2026	2027	2028	2029
EER	20%	20%	10%	10%	0%
HEM metrics	0%	0%	10%	10%	20%

63. The table below summarises how the proposed transition plan for SRS MEES impact SRS homes already at EER C and those below that level.

Table 4: Timeline for transition between targets.



64. This IA assesses the following policy options:

Modelling Scenario 0: SRS MEES is not implemented ('Business As Usual').

65. Under this option, MEES will not be introduced in the SRS. Although some energy performance improvements are still expected in the SRS from SHDF/WH:SHF funding, this is considered insufficient to reach the government's objectives. The counterfactual accounts for homes treated by SHDF/WH:SHF waves that have been implemented. It is assumed that homes treated by the SHDF demonstrator, Wave 1, Wave 2.1, Wave 2.2 and WH:SHF Wave 3 will reach EER C regardless of SRS MEES, and so these homes are excluded in the counterfactual. We expect that if SRS MEES is not introduced, many providers will delay or stop work towards EPC C as providers have finite budgets and multiple competing spending priorities (e.g., increasing housing supply) as well as other regulatory requirements to meet (e.g., building safety regulations). As a result, if the government does not deliver on expectations to introduce an EPC C standard, providers are less likely to take voluntary action and may rework business plans to delay energy efficiency improvements. In addition, providers could be vulnerable to changes in priorities. However, it is not possible to quantify or model these behavioural impacts. The counterfactual is described in more detail in Section 6.

Modelling Scenario 1: Meet a primary Fabric Performance metric and a secondary Smart Readiness or Heating System metric by 2030, with a time-limited £10,000 spend exemption.

66. This option would require providers to first upgrade their properties to reach at least 4 W/m2K to meet the primary Fabric Performance metric and then install measures towards either meeting the secondary Smart Readiness or Heating System metric. For the purpose of the IA, the Smart Readiness metric is proxied by the installation of at least a 1kW solar PV system and the Heating System metric is proxied by the installation of a heat pump. After £10,000 has been spent on a property to improve it towards MEES, a provider would be eligible to apply for a 10-year spend exemption, regardless of the rating achieved.

67. Due to uncertainty in providers' decision-making regarding the choice of the secondary metric, a range of outcomes is presented in this assessment. In general, the upper bound of the range assumes all providers choose to meet the Smart Readiness metric, as this better aligns with

current trends in energy efficiency measures in the sector, while the lower bound assumes an even split, with 50% of providers selecting the Smart Readiness metric and 50% choosing the Heating System metric. The lower bound estimate is derived by the average of the outcomes of Modelling Scenarios 3 and 4.

Modelling Scenario 2: Meet a standard set against a Fabric Performance metric by 2030, with a time-limited spend exemption of £10,000

68. This option would require providers to upgrade their properties to reach at least 4 W/m2K, aligning with the threshold of fabric performance used in DESNZ modelling to determine when a property is "heat pump ready" for a low temperature heat pump. After £10,000 has been spent on a property, or if further spending would exceed this amount, a provider would be eligible to apply for a 10-year spend exemption, regardless of the rating achieved.

Modelling Scenario 3: Meet a primary Fabric Performance metric and a secondary Smart Readiness metric by 2030, with a time-limited spend exemption of £10,000.

69. This option would require providers to first upgrade their properties to reach at least 4 W/m2K to meet the primary Fabric Performance metric and then install measures towards meeting the secondary Smart Readiness metric. For the purpose of the IA, the Smart Readiness metric is proxied by the installation of at least a 1kW solar PV system. After £10,000 has been spent on a property, or if further spending would exceed this amount, a provider would be eligible to apply for a 10-year spend exemption, regardless of the rating achieved.

Modelling Scenario 4: Meet a primary Fabric Performance metric and a secondary Heating System metric by 2030, with a time-limited £10,000 spend exemption.

70. This option would require providers to first upgrade their properties to reach at least 4 W/m2K to meet the primary Fabric Performance metric and then install measures towards meeting the secondary Heating System metric. For the purpose of the IA, the Heating System metric is proxied by the installation of a heat pump. After £10,000 has been spent on a property, or if further spending would exceed this amount, a provider would be eligible to apply for a 10-year spend exemption, regardless of the rating achieved.

Preferred option

71. We have assessed the options against the main policy objectives as below, using analysis presented in Section 8. The assessment considers the relative ranking of each modelling scenarios against these objectives, with Green representing the option best supporting that objective:

Table 5: Modelling Scenarios

	Modelling Scenario 1: Fabric then Smart or Heat	Modelling Scenario 2: Fabric only metric	Modelling Scenario 3: Fabric then Smart Readiness	Modelling Scenario 4: Fabric then Heating System

Affordability				
Total Capex (until end of appraisal period)	Middle capex £7.8bn - £8.2bn	Lowest capex £2.6bn	Highest capex £8.2bn	Middle capex £7.4bn
Average cost per home	Middle average cost per home £4,488 - £5,292	Lowest average cost per home £3,653	Middle average cost per home £4,488	Highest average cost per home £6,642
Fuel poverty and bill savings				
Fuel Poverty target	Average homes out of FP 346,635 - 402,715	Fewest homes taken out of FP 268,698	Most homes taken out of FP 402,715	Average homes out of FP 290,554
Bill savings per homes	Moderate bill savings £96 - £165	Moderate bill savings £150	Highest bill savings £165	Lowest bill savings £4
Carbon savings				
Carbon savings - alignment with carbon budgets	High carbon savings 9.58 - 25.66 MtCO2e; lifetime carbon savings	Lowest carbon savings 8.32 MtCO2e; lifetime carbon savings	Low carbon savings 9.58 MtCO2e; lifetime carbon savings	Highest carbon savings 41.57 MtCO2e; lifetime carbon savings

72. The option appraisal matrix above shows that the preferred option (Modelling Scenario 1) performs well across all outcomes, balancing affordability for the sector, fuel poverty, comfort, and carbon saving. The preferred option would likely have greater carbon savings than Modelling Scenario 3, although the extent of this is hard to model due to the lack of information on provider intention. Capex on Modelling Scenario 3 is higher than Modelling Scenario 4 despite the lower average cost per home because more homes had measures installed by the model.

73. A fabric approach is recommended across all options as this will drive providers to prioritise the thermal comfort of tenants and ensure properties are ready for the installation of clean heat systems as existing heating systems come to the end of their life. However, offering providers a choice of how they comply with the secondary metric allows providers to assess the condition of their housing stock and implement according to a range of factors, including tenant preference, affordability, tenant outcome and more. Modelling Scenario 1 is likely to fall within the outcome range of Modelling Scenarios 3 and 4, depending on how providers choose to meet the secondary metric option. We expect that Modelling Scenario 1 will likely deliver similar bill savings to that of Modelling Scenario 3 as meeting the smart readiness metric could be the lower cost option for providers, depending on the precise definitions of EPC reform and the measures required to meet MEES. Modelling Scenario 1 is therefore delivering against the government's objective of delivering long-lasting and resilient bill savings for households.

74. A spend exemption of £10,000 (in 2022 price base year to align with the cost assessment in Annex B) per property on energy efficiency measures is considered for the central scenario. The impact of alternative spend exemption levels (£15,000 and no spend exemption) are considered in the sensitivity analysis section.

75. A compliance date of 2030 is considered for the central scenario as it aligns with the objectives set out in Section 4 and balances achievability for the sector with the need to deliver carbon savings and improve social housing quality as early as possible. The impact of the following compliance dates is considered in the sensitivity analysis section:

- **2030:** Based on engagement with the sector and the RSH this is the date the majority of providers are already targeting EER C in their business plan. It provides time for the sector to prepare for compliance and for supply chains to develop. It also aligns with the 2030 statutory fuel poverty target.

- **2032:** Gives the sector and supply chains slightly longer to prepare and aligns with the end of the fifth carbon budget period. This would delay benefits for some residents, including bill savings, and risks delaying households being brought out of fuel poverty until after 2030.

- **2035:** Gives the sector the most time to prepare. This would significantly delay improvements for residents and reductions in fuel poverty and poses a greater risk of the government missing its statutory 2030 target without other interventions.

76. The consultation asks questions related to the preferred policy option, including the target metric, compliance date and spend exemption level. The evidence gathered at this consultation stage will be used to inform the final stage policy design and IA.

6. Analytical approach

Modelling the stock

77. The National Buildings Model (NBM)[42] is a discrete event simulation model that was used to model provider actions under the proposed SRS MEES and estimate the impact from the installation of measures in the eligible social housing stock using a SAP-based energy calculation.[43] The domestic building population is represented using a sample of dwellings from the EHS. The EHS is an annual survey of over 12,000 households in England which, when taken together, represent all the different property types in the country.

78. The NBM installs measures into individual properties based on a series of key assumptions. For SRS MEES, the model assumes:

- As with the wider DHS, MEES will apply to all registered providers of social housing in England and will be regulated by the Regulator of Social Housing (RSH). This will apply to both private registered providers and local authority registered providers of social housing where those providers are a landlord but does not include properties owned

[42] The NBM is a new model based on the National Household Model (NHM), on which previous energy efficiency policies were modelled in DESNZ. The move to the NBM has enabled greater transparency and flexibility, brought model development in-house, facilitated updates to the underlying stock data, and improved SAP fidelity. There have also been updates to measure assumptions, improving the accuracy of modelling.

[43] The fuel poverty target for England and its interim milestones are measured using the Fuel Poverty Energy Efficiency Rating (FPEER), which is based on the same Standard Assessment Procedure methodology used to generate an EPC rating for domestic properties. More information is available here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/332236/fpeer_methodology.pdf

under Low Cost Home Ownership Schemes (LCHO) such as shared Ownership properties.

- The NBM model is based on 2016/17 EHS data as this was the latest full set of data available when the model was created. Adjustments have been made to the housing stock to account for the impact of other policies within the SRS, including the SHDF/WH:SHF, Energy Company Obligation (ECO) and private installations. This is discussed in more detail in the 'Counterfactual' section below. Measure costs in the NBM are based on more recent research and are represented in 2022 prices (see Annex B).
- A spend exemption has been applied in each scenario. For this IA, the central scenario uses a spend exemption of £10,000. However, other spend exemption levels are considered in the sensitivity analysis.
- Modelling for the different metrics is done based on the proxy definitions highlighted in Table 2 above. Note that the proxy metric for 'fabric' is continuous in nature, allowing for more calibrated targets to be used. However, the proxy metrics for 'smart' and 'heating' are binary with targets based on whether a property has solar PV or a heat pump, respectively. Consequently, the modelled outcomes for 'smart' and 'heating' are potentially more polarised than what may occur if SRS standards are based on the final HEM versions of these metrics. The proxy metrics and targets used in this IA is in line with the PRS MEES option assessment.
- Measures are installed until the property has reached the metric target, there are no further suitable measures, or the spend exemption has been reached.
- It is assumed that there is sufficient capacity in the supply chain to deliver the necessary installations without costs being driven up by increased demand.

79. In reality, the measure mix and impacts will depend on how the new EPC metrics are defined and calculated. The outcomes presented in this IA are based on simplified, optimistic scenarios of how many properties will be upgraded, the **impacts should be viewed as 'maximal outcomes'[44].** The analysis is included to support consultees in answering the consultation questions, rather than to provide definitive impacts of the proposed SRS MEES options.

80. A number of key assumptions were used in the NBM modelling, including full compliance from providers. A list of the key assumptions used in the analysis can be found in Annex B. The assumptions that are expected to have the most significant impact on the cost-benefit analysis and key economic outputs have been considered in the sensitivity analysis section. We will be gathering evidence during the consultation stage to improve the robustness of our assumptions for the final-stage IA which will inform the final policy design of SRS MEES and will be published alongside the Government Response to this consultation.

Counterfactual

81. The impacts of the proposed SRS MEES were assessed against a 'Business As Usual' baseline, the counterfactual. In the counterfactual option, no MEES are introduced for the SRS.

82. There are two main aspects to the counterfactual that affect the net costs and benefits (including the direct ones to business): Improvements that occur as a result of natural replacement, and those delivered from current government policies. Some measures may also be installed by providers in the absence of government intervention, although we have

[44] We must also assume full compliance according to the Better Regulation Framework.

assumed this number would be small due to the market failures and barriers explained in Section 3.

Natural replacement

83. The model assumes that existing lights and boilers will be replaced with more energy efficient equivalents at the end of their lifetime, regardless of government intervention, and so we have included these installations in the counterfactual. Replacement of existing lighting with low energy lighting is taken from the modelling underpinning Ecodesign requirement for lighting products.[45] Uptake of conventional heating measures assumes replacement with Ecodesign compliant condensing boilers as existing boilers reach the end of their lifetimes. In addition, the counterfactual assumes that when boilers are replaced, providers will install the appropriate heating controls as required by the Building Regulations.[46]

Overlap with the DHS

84. SRS MEES will form a part of the DHS for the SRS, which is currently being reviewed to bring it up to date. We are also consulting on specific changes needed to the DHS, including exemptions which would also apply to SRS MEES. Provider behaviour towards meeting MEES is likely to be contingent on the outcomes of the DHS consultation, and what actions are required to also meet the wider DHS. Government is also consulting on the overall DHS, which will consider the wider context providers are operating in to support decency and energy efficiency objectives. We expect the overlap between measures installed to meet DHS and SRS MEES to be minimal, however there may be overlap with the familiarisation and surveying costs. We will consider these overlaps further as part of the Final Stage IAs for MEES and the DHS.

SHDF/WH:SHF impacts

85. The modelling in this IA accounts for overlaps with other policies in this space. The main scheme currently supporting the improvement of energy performance in social housing is the SHDF. The SHDF has awarded grant funding to providers in several stages since 2021, as outlined above. This modelling assumes homes treated by funding already awarded by the SHDF (through the demonstrator, Wave 1, Wave 2.1, Wave 2.2 and WH:SHF Wave 3) reach EER C regardless of the regulation, and so are not reflected in the impacts of the regulation.[47] Table 6 below shows the number of homes assumed to be treated by SHDF/WH:SHF Wave 3.

Table 6: number of homes assumed to be treated by the SHDF/WH:SHF Wave 3, regardless of the regulation.

[45] Ecodesign for Sustainable Products Regulation: https://commission.europa.eu/energy-climate-change-environment/standards-tools-and-labels/products-labelling-rules-and-requirements/sustainable-products/ecodesign-sustainable-products-regulation_en

[46] Building Regulations: https://www.gov.uk/government/collections/approved-documents

[47] Wave 1 official stats (February 2025) show that of 16,056 properties treated as part of Wave 1, 92% reached EPC C or above post-installation. https://www.gov.uk/government/statistics/social-housing-decarbonisation-fund-statistics-february-2025

Starting EPC	Number of social homes reaching EER C through SHDF demo, W1, W2.1, W2.2 and WH:SHF W3.
D	207,300
E	21,000
F	3,600
G	1,300

86. There are other schemes in this space which are expected but not launched or in delivery yet, including future waves of the WH:SHF, as well as existing schemes that may be installing measures into social housing but have not yet concluded delivery, such as ECO4. To account for potential overlap between MEES and such schemes, we have reduced the costs and benefits of MEES by 10%. Given the most significant overlap is between SRS MEES and SHDF, and the fact that SHDF impacts have already been included in the counterfactual, a 10% overlap assumption has been selected. The exact overlap has a great deal of uncertainty at this stage, and we have cautiously selected 10% to reflect the fact that there is likely to be some overlap. However, we will consider this assumption further over time, including for the Final Stage Impact Assessment.

87. This counterfactual was used as the baseline both for the cost-benefit analysis and also the Equivalent Annual Net Direct Cost to Business assessment (EANDCB).

Appraisal period and the re-installation of measures

88. The proposed SRS MEES is expected to be published as soon as possible along with the final stage IA. As a result, the impacts for 2025 in this IA have been halved to reflect a partial year. Properties in scope are expected to comply with the MEES requirements by 2030. For this IA, we assume that measures will be installed evenly between 2025 to 2029. This reflects the fact that retrofits are already undertaken through SHDF/WH:SHF and that providers are already factoring in retrofit into their business plans. However, in practice, some providers may choose to install measures closer to the compliance date.

89. The majority of impacts are expected to occur by 2030, with post-transition impacts only applying to the subset of social housing providers choosing to comply with SRS MEES through the existing EER C standard for a set period of time under the proposed transition arrangements for SRS MEES. The expected post-transition impacts for homes that meet the current EPC C, but require additional work to meet the higher HEM requirements once the current EPC expires have been captured in the IA analysis. The modelling of the spend exemption assumes a validity period of 5-years, subsequent costs required to meet the SRS MEES requirements have been included. Any further actions required have also been assumed to be evenly distributed.

90. The appraisal period runs from 2025 to 2071, reflecting the full lifetime of measures installed under the SRS MEES proposal. This timeframe is informed by the longest-lasting measures, such as loft and cavity wall insulation, which have a 42-year lifespan. Measures with shorter lifetimes are assumed to be reinstalled upon expiry, with the associated costs and benefits accounted for in the cost-benefit analysis (CBA) and prorated over the policy appraisal period.

This approach aligns with the PRS MEES IA. To allow comparison to other policy IAs, a policy appraisal period of 10 years has also been presented in section 10, setting out the costs and benefits occurring in the first 10 years only. The full list of assumptions used in the modelling, including measure lifetimes, is detailed in Annex B.

7. Costs and benefits categorisation and descriptions

91. A range of costs and benefits have been monetised for this IA. Table 7 summarises these costs and benefits.

Table 7: SRS MEES costs and benefits

Impacted groups	Type of cost/benefit	Monetised?	Included in social cost-benefit analysis?
Costs			
Providers	Familiarisation costs of understanding the new regulatory requirements	Yes	Yes
	Capital cost of installing measures (including material, labour and VAT)	Yes	Yes
	Hidden costs of installing measures, such as the time required to research measures and oversee installation	Yes	Yes
	Administration costs, including the costs in proving compliance with the regulations and consideration of an exemption when this is not possible	Yes	Yes
	Surveying costs to identify homes in scope of SRS MEES requirements	Yes	Yes
Residents	Hidden costs of installing measures, such as the time required to clear rooms or learn new systems	Yes	Yes
Regulator for Social Housing	Familiarisation costs of understanding the new regulatory requirement	No – described qualitatively	No
	Cost of enforcing SRS MEES	No - described qualitatively	No
Benefits			
Society	Lower energy use	Yes	Yes
	Improvement in air quality from lower fuel use	Yes	Yes
	Reductions in greenhouse gas emissions	Yes	Yes
	Negative benefit of using capital to achieve SRS MEES instead of building new supply (opportunity cost)	Yes	Yes
Residents	Lower energy costs	Yes	No, as this is a transfer from resident to energy providers. But, it is included in equity-weighting.

	Improved thermal comfort in homes (comfort taking)	Yes	Yes
	Improved health outcomes as a result of warmer homes	Yes	Yes

Description of Costs

92. This section provides a description of the monetised and non-monetised costs to providers, residents of social housing and the RSH from the SRS MEES proposal.

Providers

Familiarisation costs

93. Providers will incur familiarisation costs to read and understand the new regulatory requirements. These costs are transitionary and apply in the first year of policy implementation only. They are estimated to be around £5m for the preferred option. To note that these costs can be disaggregated to 1,592 providers, of which 391 are considered large (own >1,000 dwellings). A summary of the assumptions used to estimate the familiarisation cost can be found in Annex B. We expect the overlap between DHS and SRS MEES to be minimal, however there may be overlap with the familiarisation and surveying costs. We will consider these overlaps as part of the Final Stage IAs for MEES and the DHS.

Capital costs of installing measures

94. These are the costs to providers from the installation of measures to achieve the target metric, which are estimated at around £7.8bn - £8.2bn for the preferred option. This includes the material, labour, and VAT costs. The model accounts for the measure lifetime and assumes that if a measure reaches the end of its lifetime within the appraisal period, a like-for-like replacement will be made. Therefore, it is assumed that installation costs for measures with lifetimes shorter than the appraisal period will incur both initial installation cost and reinstallation(s); these costs have been included in the cost-benefit analysis. A summary of the measure assumptions used in the modelling can be found in Annex B.

Hassle costs of installing measures

95. These are the additional costs to providers not captured by capital and operational costs, which are estimated to be around £389m - £460m for the preferred option. The hassle costs of installing measures are drawn from the ECOFYS report and tailored to the characteristics of the whole SRS stock.[48] The ECOFYS report estimates the time requirement for providers to research suitable measures and oversee installations. The hidden costs assumptions are detailed in Annex B.

[48] See the ECOFYS (2009) "The hidden costs and benefits of domestic energy efficiency and carbon saving measures" report for further details http://webarchive.nationalarchives.gov.uk/20121217150421/http:/www.decc.gov.uk/assets/decc/what%20we%20do/supporting%20consumers/saving_energy/analysis/1_20100111103046_e_@@_ecofyshiddencostandbenefitsdefrafinaldec2009.pdf

Administration costs

96. These are the costs to providers to make the necessary changes to become compliant with the SRS MEES proposal, which are estimated to be around £334m - £416m for the preferred option. This includes the cost of assessing what improvements are necessary for the housing stock, potential IT updates, additional reporting requirement, dissemination and potential staff training, and the cost of proving compliance with or exemption from SRS MEES. The cost of surveying social housing stock has been calculated separately. The administration costs assumptions are detailed in Annex B.

Surveying costs

97. In order to identify which homes comply with MEES and which need upgrading, providers will need to carry out building surveys on all of their dwellings. The cost of carrying out these surveys is estimated to be around £214m. The survey cost assumptions can be found in Annex B. We expect the overlap between DHS and SRS MEES to be minimal, however there may be overlap with the familiarisation and surveying costs. We will consider these overlaps as part of the Final Stage IAs for MEES and the DHS.

Residents

Hassle costs of installing measures

98. These are the costs to residents from the installing measures to reach the target metric, which are estimated to be around £73m – £84m for the preferred option. The hassle costs of installing measures are drawn from the ECOFYS report tailored to the characteristics of the whole SRS stock.[49] This report details the additional time taken to install different measures into residents' homes. The value of resident time also follows the same value of free time as providers. The hidden costs assumptions are detailed in Annex B.

Regulator of Social Housing

99. There are currently no MEES requirements for the SRS. This consultation will present the proposal for introducing a new standard in this sector. It is proposed that the RSH will regulate the SRS MEES requirements as part of their work on regulating the DHS in the SRS. The RSH is expected to incur familiarisation and regulation costs from the proposal, however these costs have not been monetised in this IA as it will largely depend on the final policy design as the role of the regulator has not yet been fully defined. The Department for Energy Security and Net Zero (DESNZ) and the Ministry of Housing, Communities & Local Government (MHCLG) will work closely with the RSH to improve the evidence base in this area, including understanding the activities that need to be carried out by the RSH to regulate the proposed MEES and the implementation costs they will face.

[49] See the ECOFYS (2009) "The hidden costs and benefits of domestic energy efficiency and carbon saving measures" report for further details
http://webarchive.nationalarchives.gov.uk/20121217150421/http:/www.decc.gov.uk/assets/decc/what%20we%20do/supporting%20consumers/saving_energy/analysis/1_20100111103046_e_@@_ecofyshiddencostandbenefitsdefrafinaldec2009.pdf

Description of Benefits

100. This section provides a description of the monetised and non-monetised benefits to providers and residents due to the SRS MEES proposal.

Providers

Improved Decency

101. Improved energy efficiency is crucial to tackling damp and mould, an adequately heated, ventilated and insulated home prevents condensation which causes damp and mould. SRS MEES will be enforced through the DHS and, by driving up the energy efficiency and improving upon the thermal comfort of social homes, MEES will tackle other areas of non-decency, including Category 1 hazards for Excess Cold and Severe Damp. This will improve the overall quality of SRS homes and make social homes more comfortable for tenants.

Society

Lower energy use, air quality improvements and reduction in greenhouse gas emissions

102. This is a benefit to society from the installation of energy efficiency improvement measures and the total monetised benefit is estimated to be around £8,322m - £10,199m for the preferred option. The installation of these measures will reduce the total energy used, which will result in energy savings (£5,258m - £10,356m), air quality improvements (£90m - £192m), and reduce traded (£193m - £569m) and non-traded (£1,272m - £4,380m) carbon emissions. The social impact of lower energy use has been estimated using the HMT Green Book's long run variable costs (LRVC) series to avoid accounting of transfers (e.g., taxes and profits) that are included in retail energy prices, in line with guidance. Moreover, the reduction in carbon emissions will help meet the UK's legally binding carbon targets, while the improvement in air quality will reduce adverse health impacts and long-term environmental impacts. These benefits have been monetised in accordance with the HMT Green Book supplementary guidance on valuing energy and greenhouse gas emissions, which includes accounting for the rebound effect.[50]

103. Reducing the overall amount of energy used will also lead to a reduction in fuel bills. This frees up resident funds which can be spent on increased energy demand to increase the comfort of the home. This effect is called comfort taking. The IA accounts for this rebound effect by assuming that the energy savings from measures that decrease heat demand will be reduced by 15% to represent comfort taking. This comfort taking benefit is monetised based on the retail energy price series (please find further details on comfort taking below). Given that future energy prices are uncertain, sensitivity analysis on energy prices have been carried out to demonstrate the impact of alternative energy price projections on the key economic metrics.

[50] Green Book supplementary guidance: valuation of energy use and greenhouse gas emissions for appraisal: https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal

Negative benefit of using capital to achieve SRS MEES instead of building new supply (opportunity costs)

104. These are the costs to society from providers using capital to meet the SRS MEES regulatory requirements instead of building new social housing supply. The value associated with diverting money away from building new social housing supply is estimated to be around £1,660m - £1,737m for the preferred option and the assumptions are set out in annex B.

Residents

Lower energy costs

105. The installation of energy performance improvement measures will generate bill saving benefits to some residents. This benefit is estimated using the HMT Green Book retail energy prices.[51] As the bill saving benefit is a transfer between energy supplier and residents, it does not result in a net benefit to society and therefore has been excluded from the social cost-benefit analysis. However, this benefit is considered in the equity-weighted social cost-benefit analysis since the reduction in energy bills is valued more highly than the loss of revenue to energy suppliers.

Improved thermal comfort in homes (comfort taking)

106. Energy performance improvement measures reduce the amount of fuel required to deliver a given level of energy service, meaning that some households will heat their homes to a higher temperature, for a longer period, or heat more rooms in their homes. This is valued at retail energy prices which act as a proxy for the willingness of consumers to pay for the additional comfort. Retail prices are used for the quantification of thermal comfort benefits because it is directly related to energy bills. The monetised comfort benefit is estimated to be around £178m - £181m for the preferred option.

Improved health outcomes as a result of warmer homes

107. By improving the energy performance of the SRS, the SRS MEES proposal will aim to create warmer homes. Living at low temperatures poses a risk to health, with a range of negative morbidity and mortality impacts associated with exposure to the cold. The Marmot Review Team report[52] on cold homes sets out a body of evidence linking low temperatures to negative health outcomes, in particular cardiovascular and respiratory illnesses. These benefits are monetised using the Health Impact Domestic Energy Efficiency Measures (HIDEEM) module of the NBM, this also includes wider societal benefit of reduced costs to the NHS. The monetised health benefit is estimated to be around £715m - £800m for the preferred option.

[51] The Green Book: appraisal and evaluation in central government: https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent

[52] Marmot Review Team (2011). The Health Impacts of Cold Homes and Fuel Poverty: http://www.instituteofhealthequity.org/projects/the-health-impacts-of-cold-homes-and-fuel-poverty

108. HIDEEM simulates the change in relative risk of a range of cold-related morbidity and mortality risks for people living in homes receiving energy efficiency improvements. The changes in relative risk are then converted into Quality Adjusted Life Years (QALYs) and monetised in accordance with Department of Health guidance on health valuation.[53] More detail on the HIDEEM model is provided in Annex B.

Reduction in damp and mould

109. Incidences of damp and mould are highly correlated with poor energy efficiency, as condensation damp is most prevalent in cold, damp homes. By improving their fabric and energy efficiency, social homes will be warmer and dryer, limiting the necessary conditions required for the spread of damp and mould. A reduction in damp and mould will improve health outcomes for residents as ongoing exposure to large quantities of damp and mould can lead to potentially fatal illnesses, for example in the tragic case of two-year-old Awaab Ishak.

8. Outcomes and impacts

Monetised cost benefit analysis (CBA) output

110. Table 8 summarises the monetised costs and benefits of the three options considered in this IA. It has been monetised and discounted in line with HMT Green Book Supplementary Guidance on valuing energy use and greenhouse gas emissions. The impacts have been modelled using the DESNZ's NBM, details of which can be found in Annex B, alongside the key assumptions and overall modelling approach. Please note that all modelling scenarios presented have assumed a compliance data of 2030 and a time-limited spend exemption of £10,000 per property. A ten-year validity period for the spend exemption have been assumed in the modelling. For Modelling Scenario 1, where providers can choose between meeting a secondary smart readiness or heating system metric, the impact is uncertain and depends on provider behaviour. To account for this uncertainty, we have provided a range for Modelling Scenario 1. The range represents two scenarios: 1) all providers opt for the secondary smart readiness metric (mirroring Modelling Scenario 3); 2) half of providers choose smart readiness, while the other half opt for the heating system metric. The estimated impact for this option is derived by averaging the outcomes of Modelling Scenario 3 and Modelling Scenario 4.

Table 8: monetised costs and benefits of policy options

2025 price base year, Present Value	**Modelling Scenario 1: Fabric then Smart or Heat**	**Modelling Scenario 2: Fabric only metric**	**Modelling Scenario 3: Fabric then Smart Readiness**	**Modelling Scenario 4: Fabric then Heating System**
Capex (£m), excluding VAT, net	7,826 - 8,204	2,606	8,204	7,447
Familiarisation costs (£m)	5	5	5	5

[53] Green Book supplementary guidance: health: https://www.gov.uk/government/publications/green-book-supplementary-guidance-health

Hassle costs to residents (£m)	73 - 84	40	84	61
Hassle costs to providers (£m)	389 - 460	216	460	321
Administrative costs (£m)	334 - 416	113	416	255
Surveying costs (£m)	214	214	214	214
Total costs (£m)	**8,841 - 9,383**	**3,194**	**9,383**	**8,303**
Energy Savings (£m) (Long Run Variable Cost)	5,258 - 10,356	2,110	10,356	336
Air Quality Benefits (£m)	90 - 192	81	90	293
Traded Carbon Savings (£m)	193 - 569	116	569	(128)
Non-Traded Carbon Savings (£m)	1,272 - 4,380	1,423	1,272	7,392
Comfort Benefits (£m)	178 - 181	223	181	175
Health Benefits (£m)	715 - 800	216	715	876
Opportunity cost (£m)	(1,737) - (1,660)	(509)	(1,737)	(1,584)
Energy savings optimism bias adjustment (£m)	1,020 - 1,247	395	1,247	807
Total benefits (£m)	**8,322 - 10,199**	**3,265**	**10,199**	**6,553**
NPV (£m)	(519) - 815	71	815	(1,750)
Benefit: cost ratio	0.94 - 1.09	1.02	1.09	0.79

111. A brief description of Table 8 is provided below:

- **Capital costs**: Table 8 shows that the capital cost of installing measures represents the largest overall cost, at around 90% of the total modelled costs for the preferred option (Modelling Scenario 1). The key factors driving the difference in capital costs between the four options are the number of homes treated and the measures incentivised. The dual metric options treat the most homes and therefore have the highest capital expenditure. In addition, heat pumps, which are incentivised by the heating system metric, are typically more expensive than the energy efficiency measures incentivised by the other metrics, further driving up the cost of the options including the heating system metric.

- **Energy savings:** The value of the energy saved and the non-traded greenhouse gas savings are the greatest monetised benefits, driven by the numbers and type of measures installed. The Fabric metric achieves energy savings through energy efficiency measures or electricity-generating measures, while the Heat metric achieves energy savings predominantly through installing heat pumps in off-gas-grid homes. Modelled option 3 treats the most homes, achieving the highest energy savings.

- **Carbon savings**: Carbon savings, both traded and non-traded, are highest for the options including the heating system metric as such options focus on reducing fossil fuel consumption, particularly through the installation of heat pumps. Modelled option 4 achieves the highest carbon savings.

Split of HA and LA costs

112. Table 9 shows the division of costs between Local Authorities (LAs) and Private Registered Providers (PRPs), or their respective residents. These costs have been calculated as a total

cost to providers and then apportioned by the number of social housing units owned by LAs and PRPs, except for opportunity costs, which are based on new supply impacts driven by PRPs only. In recent years, PRPs have delivered significantly more affordable housing than LARPs (79% vs. 14% in 2023/24, 2% unknown[54]). The split of HA and LA costs is based on 2024 RSH data which indicates that 63% of social homes are owned by PRPs.[55]

Table 9: Division of costs between Local Authorities and Private Registered Providers

2025 price base year, Present Value	Local Authorities	Private Registered Providers
Capex (£m), excluding VAT, net	2,880 - 3,019	4,946 - 5,185
Familiarisation costs (£m)	1.96	3.36
Hassle costs to residents (£m)	27 - 31	46 - 53
Hassle costs to providers (£m)	143 - 169	246 - 291
Administrative costs (£m)	123 - 153	211 - 263
Surveying costs (£m)	79	135

Equity weighted cost-benefit analysis

113. Given the redistribution impacts of this proposal, it is important to consider the relative impacts on different sections of society, their ability to afford the policy costs, and the additional utility received from the monetised policy benefits to the SRS. The equity weight is 1.42 for social housing residents, calculated in line with the HMT Green Book methodology.[56] Both median population and resident incomes are derived from EHS 2018-19 data.[57] Table 10 presents the result of the equity weighted cost-benefit analysis, using the weights derived from EHS data. The social resident equity weighting has been applied to the benefits that social residents directly benefit from, namely having a reduced energy bill and being able to increase the comfort of their home. Further detail is provided in Annex B.

Table 10: Equity weighted costs and benefits

2025 price base year, Present Value	**Modelling Scenario 1: Fabric then Smart or Heat**	**Modelling Scenario 2: Fabric only metric**	**Modelling Scenario 3: Fabric then Smart Readiness**	**Modelling Scenario 4: Fabric then Heating System**
NPV (equity weighted) (£m)	1,359 - 4,425	1,071	4,425	(1,532)
Benefit: cost ratio (equity weighted)	1.15 - 1.47	1.34	1.47	0.82

[54] Affordable housing supply in England: 2023 to 2024 (MHCLG): https://www.gov.uk/government/statistics/affordable-housing-supply-in-england-2023-to-2024/affordable-housing-supply-in-england-2023-to-2024

[55] Registered provider social housing stock and rents in England 2023 to 2024 - GOV.UK – See Registered providers additional tables; Table 1.1. Calculation excludes Low cost home ownership. There is not provider information available for the remaining 5% of units.

[56] HM Treasury (2020) The Green Book, Annex A3: https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent

[57] Based on English Housing Survey 2018-19 data, the median equivalised (after housing costs) income for a household in England was £24,000. The median income for households in SRS homes was lower at £15,800.

114. Compared to the standard NPV and BCR presented in Table 8, the equity weighted NPV and BCR are higher. This is driven by the high equity weight assigned to social residents who are the main beneficiaries of the benefits.

Key outcomes of policy options

115. In addition to the monetised costs and benefits outlined, there are a number of other outcomes of SRS MEES which have been assessed as part of the IA. These are outlined in Table 11 below.

Table 11: key quantifiable outcomes of policy options

	Modelling Scenario 1: Fabric then Smart or Heat	**Modelling Scenario 2: Fabric only metric**	**Modelling Scenario 3: Fabric then Smart Readiness**	**Modelling Scenario 4: Fabric then Heating System**
Number of homes treated	1,670,542 - 2,090,947	874,269	2,090,947	1,250,137
Total treated homes meeting HEM proxy definition	1,250,053 – 1,851,493	683,193	1,851,493	648,613
Number of homes taken out of fuel poverty	346,635 - 402,715	268,698	402,715	290,554
Non-traded CB5 savings (MtCO2e)	0.52 - 1.67	0.83	0.52	2.57
Traded CB5 savings (MtCO2e)	0.37 - 1.12	0.25	1.12	(0.24)
Non-traded CB6 savings (MtCO2e)	0.76 - 2.61	0.88	0.76	4.39
Traded CB6 savings (MtCO2e)	0.16 - 0.46	0.07	0.46	(0.12)
Non-traded Lifetime savings, by 2071 (MtCO2e)	7.19 - 24.84	7.85	7.19	42.12
Traded Lifetime savings, by 2071 (MtCO2e)	0.82 - 2.39	0.47	2.39	(0.55)
Annual bill savings, per household (£) (2030 prices)	96 - 165	150	165	4
Heat pumps installed[58]	48,999 - 336,830	48,999	48,999	624,661
Jobs supported (annual average by 2038)	13,901 - 17,061	4,220	17,061	10,740

116. A brief description of these outcomes is provided below.

[58] Further details of the measures installed under each option can be found in Annex C.

- **Number of homes treated:** This is the total number of homes expected to have measures installed because of the regulation, even if they do not meet the target metric(s) because of the spend exemption or technical constraints. Modelling scenario 3 is expected to result in the highest number of homes being treated, as a larger proportion of homes fall below the target metric and are technically capable for meeting the standard under this scenario. In contrast, modelling scenario 2 is projected to treat the fewest homes, since a significant share of the sector already meets the proposed fabric only requirements, leaving fewer homes in need of intervention compared to the other modelling scenarios.

- **Total treated homes meeting HEM proxy definition:** This indicates how many homes reach the proxy metric targets. Modelling scenarios 1 to 3 estimates that around 80% of treated homes are able to meet the proposed metric requirements. Modelling scenario 4 shows a lower metric attainment rate of around 50% of homes expected to meet the proposed standard. This reflects the relatively high cost of heat pumps and the impact of the £10k spend exemption thresholds, which together limits the number of homes that are able to achieve compliance under this option.

- **CB5/6 and lifetime savings:** This is the amount of carbon saved in each of the carbon budget periods or across the policy lifetime, indicating the contribution of the regulation towards the UK's legally binding carbon budget targets on the pathway to net zero. Modelling scenario 4 is modelled to deliver the highest total lifetime carbon savings, primarily driven by significant non-traded carbon savings achieved through the installation of heat pumps. In contrast, modelling scenario 1 is projected to achieve the lowest carbon savings as it incentives fabric only measures, which have more limited emissions reduction potential.

- **Bill savings:** Bill savings represent the annual amount saved on energy bills based on the reduction in energy use. Bill savings to residents are estimated using the HMT Green Book retail energy prices. As this is a private benefit to residents, transferred from a benefit to energy suppliers, this is not included in the social cost-benefit analysis. This is a significant benefit to residents and is particularly acute in the current environment of high energy prices. The estimated bill savings across the three policy options are expected to change under new SAP methodology. The sensitivity analysis section below estimates the impact of SAP changes on bill savings. Modelling scenario 3 is modelled to deliver the highest average bill savings per treated household, due to the prioritisation of solar PV installations. In contrast, modelling scenario 4 is projected to yield low (but positive) bill savings due to the relatively high current cost price of electricity compared to gas.

- **Jobs supported:** Spending from providers on energy efficiency measures supports jobs in the house retrofit sector. Job figures are presented as an annual average over the period 2025-2037 (including retrofit activities post-transition). However, it is likely to be largely a shift in employment rather than generating lots of new jobs. This impact has not been monetised or included in the cost-benefit analysis as it is not likely to be a significant net social benefit. The number of jobs supported is estimated using a jobs multiplier applied to the capital spend. As a result, the projected jobs supported is directly proportional to the level of capital expenditure in each modelling scenario.

Non-monetised benefits

117. There are a number of benefits of the regulation that cannot be appropriately monetised. This is primarily due to a lack of evidence around these benefits preventing quantification of their impact. Benefits to the SRS MEES that fall into this category include supporting jobs, improving quality of life, and supporting groups with protected characteristics. The details of the potential non-monetised benefits have been provided in Annex C.

Justification for the preferred option

118. The preferred option in this consultation stage IA is Modelling Scenario 1: Meet a primary Fabric Performance metric and a secondary Smart Readiness or Heating System metric by 2030, with a £10,000 spend exemption. This option strikes the best balance between government objectives and sector affordability for the following reasons:

119. **It focuses on thermal comfort:** By setting a primary Fabric Performance metric, the proposal will prioritise the installation of measures that reduce heat loss from a property, it is anticipated to improve the feel and comfort of homes for social housing residents. This will keep homes warmer and lower the incidence of damp and mould caused by condensation (providing adequate ventilation is also in place). Fabric improvements also prepare homes for the installation of low carbon heating.

120. **It provides flexibility for providers:** Allowing providers to select their secondary metric provides the flexibility to ensure a more tailored solution for each home, enabling a more flexible approach that may be more efficient, technically feasible and proportionate compared with a mandated secondary metric.

121. **It supports a significant number of homes:** The preferred option is projected to treat between 1,670,542 to 2,090,947 households while lifting approximately 346,635 to 402,715 out of fuel poverty.

<u>Supplementary Analysis: Modelled Output of Single HEM Metric Scenarios</u>

122. In addition to Option 1 and Option 2, the consultation also considers three additional options:

Option 3: Providers would be required to meet a standard set against two specified metrics without government expressing a preference of which to do first.

Option 4A: Providers would need to meet an average standard, set at EPC C or equivalent, across the three metrics (fabric, smart and heat). A provider could choose to meet EPC A or equivalent on one metric, and EPC D on the other two and still meet MEES, depending on where an average standard is set.

Option 4B: A minimum standard equivalent to band C is set against all three metrics, allowing the provider to choose two metrics to meet MEES for each property. This means that providers could choose any combination of the three proposed metrics rather than this being prescribed by government.

123. It has not been deemed possible or proportionate to fully model Option 3, Option 4A and 4B due to the stage of EPC reform consultation. Therefore, in absence of this, modelled scenarios of single HEM metric are presented to provide a sense of scale of these options.

The analysis of these options would need to be developed further following the outcomes of EPC reform.

Table 12: key quantifiable outcomes of single HEM metric scenarios

	Fabric only metric, £10k spend exemption, 2030 compliance date	Smart Readiness only, £10k spend exemption, 2030 compliance date	Heating System only, £10k spend exemption, 2030 compliance date
Number of homes treated	874,269	2,028,881	1,139,406
Total treated homes meeting HEM proxy definition	683,193	1,829,808	646,327
Number of homes taken out of fuel poverty	268,698	401,441	286,643
Non-traded CB5 savings (MtCO2e)	0.83	0.49	2.55
Traded CB5 savings (MtCO2e)	0.25	1.12	(0.25)
Non-traded CB6 savings (MtCO2e)	0.88	0.71	4.38
Traded CB6 savings (MtCO2e)	0.07	0.46	(0.12)
Non-traded Lifetime savings, by 2071 (MtCO2e)	7.85	6.71	42.01
Traded Lifetime savings, by 2071 (MtCO2e)	0.47	2.38	(0.56)
Annual bill savings, per household (£) (2030 prices)	150	168	0
Heat pumps installed[59]	48,999	48,999	637,710
Jobs supported (annual average by 2038)	4,220	16,747	10,492

9. Business impact

Equivalent Annual Net Direct Cost to Business (EANDCB) and Business Impact Target (BIT)

124. The proposed SRS MEES will result in increased costs to providers. Providers of social housing include Local Authority Registered Providers (LARPs) and Private Registered Providers (PRPs, such as not-for-profit housing associations, co-operatives, and for-profit organisations). For the purpose of the EANDCB and BIT assessments, only the costs and benefits associated

[59] Further details of the measures installed under each option can be found in Annex C.

with PRPs have been considered, as local authorities are not in scope of EANDCB and BIT assessments.

125. According to 2023-24 RSH data, more than half of the social housing stock in England are provided by PRPs. Table 13 below provides the breakdown of social housing stock by local authorities and private registered providers (PRPs).

Table 13: proportion of social housing stock owned by local authorities and PRPs.[60]

	Local Authorities	PRPs
Number of social housing stock owned (thousands)	1,557,468	2,676,563
Portion of social housing stock owned (%)	37%	63%

126. Direct costs determined to be in scope are:

- **capital costs of installations** (parts, labour, and VAT[61])
- **familiarisation costs**
- **admin costs** (the cost of time taken by providers to prove compliance with or apply for an exemption from the regulations)
- **hidden/hassle costs of installations**

127. The monetised benefits of energy efficiency improvements in the SRS are almost entirely felt by the resident in the form of energy savings, comfort and health benefits, and by society in the form of reduced carbon emissions. As such, there are no direct benefits to business included in this assessment. Unlike in the PRS, providers in the social sector are only able to raise rents by the maximum uplift as set out in the rent settlement, which may not entirely reflect property value uplift.

128. The direct impacts to business from SRS MEES are therefore the sum of each of the six components above, over the appraisal period of the policy. Using the government's Impact Assessment Calculator[62], Table 14 below sets out the net direct costs to business and score in the business impact test, alongside the net present social value and business net present value.

Table 14: EANDCB and Business Net Present Value (£m),

2025 prices, 2025 present value	Modelling Scenario 1: Fabric then Smart or Heat	Modelling Scenario 2: Fabric only metric	Modelling Scenario 3: Fabric then Smart Readiness	Modelling Scenario 4: Fabric then Heating System

[60] English Housing Survey 2021 to 2022: social rented sector: https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-social-rented-sector - chapter 1, annex table 1

[61] VAT is not counted in the cost-benefit analysis as it is a transfer from providers to the Exchequer, but providers face this direct cost and therefore VAT is included as part of the capital costs when calculating the EANDCB.

[62] Impact assessment and options assessment calculator: https://www.gov.uk/government/publications/impact-assessment-calculator--3

Total Net Present Social Value	(519) - 815	71	815	(1,750)
Business Net Present Value	(5,877) - (5,542)	(1,993)	(5,877)	(5,209)
Net direct cost to business per year	232 - 246	84	246	218
Score against business impact test	1,161 - 1,231	418	1,231	1,091

Small and Micro Business Assessment (SaMBA)

129. Based on the definition of small businesses defined in the Better Regulation Framework guidance, businesses employing between 10 and 49 full-time equivalent (FTE) employees are classified as small businesses, while businesses employing between one and nine employees are classified as micro businesses.[63] This definition of small and micro businesses (SMBs) needs to be revised for the SRS as providers tend to employ few people relative to their housing stock. Therefore, to assess the impact on small and micro businesses in this IA, an alternative definition has been used to identify small and micro providers. According to the Better Regulation Framework guidance, local authorities are not SMBs; and therefore, they have been excluded from the SaMBA. This section only applies to the social housing units provided by PRPs and excludes those provided by local authorities.

130. The RSH defines small PRPs as those owning fewer than 1,000 social housing units and large PRPs as those owning more than 1,000 social housing units[64]. Information provided by RSH to MHCLG shows that, on average, PRPs with fewer than 1,000 homes have fewer than 50 staff. According to RSH data, there are around 1,400 PRPs, of which at least 83% have fewer than 1,000 social homes each. This is expected to be a conservative estimate, while SMBs (based on the definition of owning less than 1000 units) comprise most of the sector, only PRPs owning the housing stock below the target metric are required to make any improvements to their properties. In addition, while a smaller proportion of PRPs own more than 1,000 units, they represent more than 95% of the PRP stock.

Table 15: number of PRPs and stock owned by PRP size

Size of PRP (units)	**Number of PRPs (weighted)**	**Percentage of total PRPs**
0	112	8.2
1 to 250	861	63.0
251 to 1,000	162	11.9
1,001 to 2,500	52	3.8
2,501 to 10,000	98	7.2
10,001 to 50,000	73	5.3
Over 50,000	8	0.6

[63] Better Regulation Framework: https://www.gov.uk/government/publications/better-regulation-framework

[64] As defined in the statistical releases used for this analysis, see previous footnotes

Total	**1,366**	**100.0**

131. The IA does not propose to exempt small and micro businesses from the SRS MEES requirements for the following reasons:

- SMBs are not expected to be disproportionately impacted by the proposal. Although at least 83% of PRPs could be classified as SMBs, they own around 5% of the total PRP stock. As the majority of the costs incurred by PRPs as a result of the proposal are likely to be on a per-property basis – meaning that providers with small property portfolios (and therefore deemed as SMBs, as discussed above) should not be disproportionately burdened by the SRS MEES requirements.

- The RSH indicates that small providers are more likely to provide housing for older people and those with disabilities than larger organisations. The exemption of SMBs would prevent these residents from benefiting from energy efficiency improvements, such as improving thermal comfort and reducing energy bills.

- A subset of the small providers (e.g., alms houses) are likely to have unusual, and potentially both old and listed stock. This might mean that at least some of the small providers could be disproportionately likely to trigger the exemptions to MEES that are proposed in the DHS consultation or the SRS MEES time limited spend exemption. For more information on proposed exemptions for SRS MEES, please see Section 7 of the DHS consultation [link to DHS consultation].

- SMBs can apply for a time-limited spend exemption once they have spent at least £10,000 per property. This exemption will help small PRPs to spread the installation costs across a longer period of time.

- Exempting these PRPs from MEES would not allow the policy to meet its objectives, leaving many residents still in fuel poverty. Social homes whose landlords are SMBs should not lose out on the opportunity to benefit from energy efficiency improvements.

132. Based on the justifications set out above, **we have chosen not to exempt small and micro PRPs from the MEES requirements**. The IA acknowledges that PRPs with large property portfolios are more likely to be able to spread the installation costs or organise finance over a more significant number of properties. We recognise that smaller PRPs might face distinct challenges in meeting requirements. For example, they may not have in-house maintenance staff and therefore be more reliant on external contractors, and they do not have the economies of scale which larger providers may benefit from. In addition, there may be potential disproportionate familiarisation costs to smaller PRPs; the departments will work closely with the RSH to identify proportionate ways to mitigate disproportionate impacts on small and micro PRPs. Mitigation could be in the form of additional guidance, highlighting the support available through the WH:SHF or considering the design of spend exemptions and extensions.

10. Risks and Uncertainties

133. The impacts of SRS MEES are uncertain due to various factors. While this IA is based on the best available evidence, several key uncertainties could significantly affect the modelled outcomes. To account for this sensitivity analysis has been conducted to illustrate the effects of alternative assumption scenarios. **To note, the central scenario in the sensitivity analysis represents the upper bound estimate of our preferred policy option (Modelling**

Scenario 1). This upper bound has been selected for clarity and ease of interpretation, rather than as a prediction of providers' choice of secondary metric. The outcomes presented in this IA are based on simplified, optimistic scenarios of how many properties will be upgraded, the **impacts should be viewed as 'maximal outcomes'.**

134. As the new EPC metrics have not been finalised at the time of producing this IA, proxy definitions have been used in the analysis. The reliability of the IA estimates is therefore contingent on the accuracy of these assumptions to the final HEM definitions. Although this is a key area of uncertainty, it has not been deemed feasible to conduct sensitivity analysis on the proxy definition of the HEM metrics at this stage.

135. This section covers sensitivity analysis relating to:
    - Capital costs of measures
    - Spend exemption
    - Compliance date
    - Compliance rate
    - Impact on new social housing supply
    - Energy prices
    - Carbon prices
    - Policy appraisal period

Capital costs

136. The extent to which providers make energy efficiency improvements will depend on the costs they face against the proposed spend exemption level. While the analysis in this IA uses capital costs assumptions in the NBM, which is our best evidence available, measure costs are subject to change in the future (e.g., due to supply chain impacts or innovation). For the SRS, the key risk is that increased demand for measures against a tight supply chain could cause a spike in the cost of energy efficiency measures, which would reduce the number of measures each property can install within a set budget. The low and high scenarios for the preferred option reflect the impact of using different capital cost assumptions. The low scenario uses nominal costs 10% lower than the central estimates, and the high scenario uses nominal costs 20% higher than the central estimates.

137. The HMT Green Book guidance on optimism bias suggests that actual costs for construction projects in standard buildings may be as much as 24% higher than initially estimated, as a result of appraisers being overly optimistic.[65] The high sensitivity (+20%) presented here also provides an indication of the policy impact if adjusting for optimism bias around this level. The impact of the changes in costs on key metrics are summarised in Table 16.

Table 16: sensitivity of CBA to the cost of measures

	Low (-10%)	Central	High (+20%)
Total social costs, present value (£m)	9,400	9,383	9,251
Total social benefits, present value (£m)	10,502	10,199	9,663
NPV (£m)	1,101	815	412
BCR	1.12	1.09	1.04

[65] Green Book supplementary guidance: optimism bias: https://www.gov.uk/government/publications/green-book-supplementary-guidance-optimism-bias

Equity-weighted NPV (£m)	4,742	4,425	3,887
Equity-weighted BCR	1.50	1.46	1.42
Homes treated	2,090,969	2,090,947	2,089,453
Total treated homes meeting HEM proxy definition	1,849,376	1,851,493	1,851,493

138. The sensitivities in Table 16 show that if the costs providers face are higher than those assumed under the central scenario, the number of homes treated and homes to target metric would decrease slightly. Higher costs of measures mean that more providers would find that they could not make further progress towards the target metric without exceeding the £10,000 per property spend exemption, so both the costs and benefits will go down compared to the central scenario. Conversely, a higher number of homes and homes to target metric is expected in the low-cost scenario. In addition, in the high-cost scenario, fewer expensive measures will be installed within the £10,000 per property spend exemption, such as ASHP, which has relatively higher carbon savings and lower thermal comfort benefits than other measures. This contributes to slightly higher NPV and slightly lower equity-weighted NPV compared to the central scenario due to the equity weighting only being applied to benefits with a financial impacts to residents; please see further information on equity weighting in Annex C.

Impact of changing the spend exemption level

139. The analysis presented in the central scenario assumes a spend exemption of £10,000 on all metrics. This assumption is compared against a £15,000 spend exemption, and an unconstrained (no spend exemption) scenario. The impact of different spend exemption levels is assessed in Table 17.

Table 17: sensitivity on changing the spend exemption

	10k spend exemption (central)	**15k spend exemption**	**No spend exemption**
Total capital spend (£m)	8,204	9,177	9,837
Total social costs, present value (£m)	9,383	10,437	11,168
Total social benefits, present value (£m)	10,199	10,783	11,252
NPV (£m)	815	346	85
BCR	1.09	1.03	1.01
Equity-weighted NPV (£m)	4,425	4,240	4,108
Equity-weighted BCR	1.47	1.41	1.37
Homes treated	2,090,947	2,112,867	2,113,452
Total treated homes meeting HEM proxy definition	1,851,493	1,873,722	1,874,198
Annual average bill savings per household (£/yr)	165	178	189
Total CB5 carbon savings (MtCO2e)	1.6	1.8	2.0

140. The sensitivities in Table 17 show that if the proposed spend exemption level for SRS MEES were to increase, it would increase the number of homes treated and homes reaching target metric. This is because the NBM will install measures until either the spend exemption level is reached, the target metric is reached, or no more suitable measures can be installed. A smaller number of measures will be installed with a lower spend exemption level. Providers may also choose different measures or tackle homes in a different order depending on the level of spend exemption, whereas the NBM installs measures strictly in order of EER SAP improvement per pound. Please note that the modelling assumes spend exemption will be valid for 10 years. The analysis on spend exemption will be refined in the final stage IA.

141. Similarly for the other options, reducing the spend exemption will limit the number of homes able to reach the target metric, limiting the impact of the regulation (Figure 2). This is pertinent when weighing contributions to carbon budgets where the Heat option makes a greater contribution but at higher cost so most likely to be constrained by spend exemptions.

142. There are many homes in the sector which are shown to be close to meeting the Fabric target metric and can be improved at relatively low spend based on the HEM proxy definition used pending the consultation outcome. However, the extent of efficiency benefit achieved is also lower than when additional HEM proxy definition thresholds are appraised.

Figure 2: modelled number of dwellings achieving target or reaching cost cap by 2030.[66]

Upgrade costs by 2030	Option 1: Fabric only metric (k)	Option 2: Fabric then Smart Readiness (k)	Option 3: Fabric then Heating System (k)	Option 4: Fabric then Smart or Heat (k)
£0 - £1,000	273	80	213	146
£1,000 - £2,000	71	6	53	30
£2,000 - £3,000	60	32	50	41
£3,000 - £4,000	62	90	50	70
£4,000 - £5,000	86	251	69	160
£5,000 - £6,000	69	253	51	152
£6,000 - £7,000	55	145	51	98
£7,000 - £8,000	25	85	39	62
£8,000 - £9,000	45	73	76	74
£9,000 - £10,000	22	40	51	46
£10,000 - £11,000	33	41	80	60
£11,000 - £12,000	22	26	48	37
£12,000 - £13,000	13	15	42	28
£13,000 - £14,000	4	5	28	16
Over £14,000	20	21	52	36

Impact of changing the compliance date

143. The analysis presented in the central scenario assumes a compliance date of 2030, which is aligned with the date that is largely anticipated by the sector. It also aligns with the fuel poverty target and the target to halve non-decency. Table 18 presents the impact of alternative SRS MEES compliance date.

Table 18: sensitivity on changing the compliance date

	2030 (central)	2032	2035
Total social costs, present value (£m)	9,383	9,619	9,758

[66] Due to the staging of policies under consideration being applied during modelling, a minority had installations applied which combined to exceed the £10k cost cap. Modelling is based on a representative sample of English property types to provide values at an indicative level only.

Total social benefits, present value (£m)	10,199	10,345	10,392
NPV (£m)	815	725	634
BCR	1.09	1.08	1.06
Equity-weighted NPV (£m)	4,425	4403	4,344
Equity-weighted BCR	1.47	1.46	1.45
Homes treated	2,090,047	2,184,192	2,280,678
Total treated homes meeting HEM proxy definition	1,851,493	1,944,495	2,040,891

144. The differences between the three compliance date scenarios are predominantly driven by the discounting of costs and benefits in the future. In addition, by pushing back the compliance date for MEES, more homes are represented as needing to have met the proxy HEM standard by the model during the Transition Period. This is off-set slightly by dwellings which have been left for longer so receive small improvements captured through the counterfactual instead. The later compliance dates do not include an assumption about how providers would adjust their planning for roll-out of installations. A longer compliance date would delay progress towards meeting fuel poverty and carbon budget targets, leaving residents in inefficient homes for longer. The impacts of a longer compliance date for the other modelled scenarios would be the same.

Impact of changing the compliance rate

145. The model assumes full compliance from providers; either installing measures to reach the target or registering a valid spend exemption. There may be instances where providers do not take the necessary steps to comply with the regulation and so the impact of only 90% of the social housing stock below EPC C being brought up to the standard has been assessed. Table 19 presents the impact of alternative SRS MEES compliance rate.

Table 19: sensitivity of changing the compliance rate

	90% compliance	**100% compliance (central)**
Total social costs, present value (£m)	8,445	9,383
Total social benefits, present value (£m)	9,179	10,199
NPV (£m)	734	815
BCR	0.98	1.09
Equity-weighted NPV (£m)	3,982	4,425
Equity-weighted BCR	1.32	1.47
Homes treated	1,881,852	2,090,947
Total treated homes meeting HEM proxy definition	1,666,344	1,851,493

146. The number of homes treated and reaching the target metric reduces, leading to both lower costs and lower benefits. The impacts of a lower compliance rate for the other modelled scenarios would be the same.

Impact on New Supply

147. The total modelled capital expenditure under each option has been converted into potential new supply foregone to demonstrate the opportunity cost of MEES. The estimated supply

reduction (presented in Table 20) is converted into resulting Land Value Loss (presented in Table 21) using a Land Value Uplift methodology as per the MHCLG Appraisal Guide[67], which considers the value of residential land relative to alternative land use.

148. In line with the appraisal period used in this IA, the impact on new supply is based on the total capital expenditure (until 2071) modelled for each option. The counterfactual position for this analysis assumes that new supply will be built, and therefore the introduction of SRS MEES requirements diverts funds away from building this new supply. These estimates are intended to present the potential opportunity cost to society from meeting SRS MEES requirements. Given the uncertainties around modelling over a long time period, we have also provided supply impacts to 2037, the final date for initial compliance.

149. There is uncertainty on the exact share of capital cost that would have been invested in new supply in the absence of MEES. Here we present scenarios where 50%-100% of the capex would have been invested in new supply. These parameters represent our lower and upper bounds, with 75% being the midpoint. This approach is likely to underestimate the impact on supply for two reasons: 1) it only estimates the impact on PRP supply, and 2) the approach captures the impact of spending on MEES vs new supply, but doesn't take into account the potential reduction in financial capacity as a result of the reduction in income due to the lower supply.

150. The vast majority of new social supply is delivered by PRPs rather than local authorities, with PRPs responsible for 79% of new affordable housing delivery in 2023-24 compared to 14% by LARPs (2% unknown)[68]. As such, only the MEES costs to PRPs have been used to calculate the value of the potential reduction in supply as a result of MEES. As part of the consultation, we are seeking views on the impact of complying with MEES on all provider's ability to invest in new supply.

151. The capital costs of SRS MEES till end of appraisal period have been included in the opportunity cost calculations. Calculations are based on the total capital cost of £13,146m to 2071 (or £5,770m to 2037) (2025 prices) – based on proportions of stock, we estimate around 63% of this cost to be borne by PRPs[69]. We estimate, based on our central assumptions, that PRP spending on MEES will result in 32,200 to 64,300 fewer homes being supplied in the period up to 2071, which are valued, using land value uplifts, at £1.10bn to £2.20bn. It is important to flag that supply impacts represents the total to end of appraisal period. Therefore, the average annual supply reduction is estimated to be 700 to 1,400 dwellings. For context, 62,300 affordable housing dwellings were delivered in 2023/24[70]. Supply impacts to 2037 are estimated as 14,100 to 28,200 dwellings, which are valued at £0.80bn to £1.57bn. The annual supply reduction for this period is estimated as 14,100 to 28,200 dwellings. Tables 21 and 22 provide the range of supply impacts and LVU losses.

Table 20: private registered supply reduction estimates, capex investment scenarios

Units Lost	**Lower**	**Best**	**Higher**
Fabric and Smart or Heat, £10k (to 2071)	32,200	48,300	64,300

[67] https://www.gov.uk/government/publications/the-mhclg-appraisal-guide

[68] There is not provider information on the remaining 5% of all units. - https://www.gov.uk/government/statistics/affordable-housing-supply-in-england-2023-to-2024/affordable-housing-supply-in-england-2023-to-2024

[69] Costs of £8,308m to 2071 and £3,646m to 2037 respectively. - https://www.gov.uk/government/collections/registered-provider-social-housing-stock-and-rents-in-england

[70] https://www.gov.uk/government/statistics/affordable-housing-supply-in-england-2023-to-2024/affordable-housing-supply-in-england-2023-to-2024

Fabric and Smart or Heat, £10k (to 2037)	14,100	21,200	28,200

Table 21: resulting Land Value Uplift (LVU) losses, £m

LVU lost, £m	**Lower**	**Best**	**Higher**
Fabric and Smart or Heat, £10k (to 2071)	1,099	1,649	2,198
Fabric and Smart or Heat, £10k (to 2037)	787	1,181	1,574

152. The LVU reported in Table 21 is presented in Present Value terms, 2025 prices. We assume that 90% of these units would have been net additional, as 10% would be acquisitions. We also assume an optimism bias of 10%. This disbenefit is assumed to be 100% additional, in that in the counterfactual, none of this development would have occurred (applicable land would have remained as greenfield or brownfield, without private or public development). In addition, it is assumed that the trade-off between spending on MEES vs supply persists throughout the whole appraisal period.

153. Note that we would not expect to see this many units removed from future business plans as a result of MEES. There is evidence that the sector is already expecting SRS MEES to be introduced. Based on data from the Regulator for Social Housing, the majority of providers with 1,000 or more properties have factored in meeting the EER C standard into their business plans, as such we expect such actions to contribute towards meeting the primary Fabric metric across all proposed SRS MEES options.[71] Therefore observed unit losses will likely be lower than those presented in Table 22. However, as providers could still have invested in new supply in the absence of MEES, it is still accurate to reflect this as an opportunity cost.

154. The central scenario assumes that 75% of capital expenditure PRPs spend towards SRS MEES, could have otherwise been used to develop new social housing supply. Table 22 presents the impact of varying proportion of capex that would be allocated to new supply.

Table 22: sensitivity on changing the new supply assumptions

	Modelling Scenario 1 – low range		
	50%	75% (central)	100%
Opportunity costs, present value (£m)	(1,158)	(1,737)	(2,316)
Total social costs, present value (£m)	9,383	9,383	9,383
Total social benefits, present value (£m)	10,778	10,199	9,619
NPV (£m)	1,394	815	236
BCR	1.15	1.09	1.03

[71] 2022 Global Accounts of private registered providers: https://www.gov.uk/government/publications/2022-global-accounts-of-private-registered-providers

Equity-weighted NPV (£m)	5,004	4,425	3,846
Equity-weighted BCR	1.53	1.47	1.41

Energy prices

155. Future energy prices are uncertain, as shown in section 8, the value of energy saved by SRS MEES is a major driver of the benefits. Throughout this IA the central price projections from the HMT Green Book supplementary guidance on valuing energy and greenhouse gas emissions are used.[72] Table 23 shows the sensitivity of the analysis to "high" and "low" price projections. However, energy prices do not directly impact the costs of the policy, only the benefits.

Table 23: sensitivity of CBA to energy prices

	Modelling Scenario 1 – low range		
	Low	Central	High
Total social costs, present value (£m)	9,383	9,383	9,383
Total social benefits, present value (£m)	8,997	10,199	11,817
NPV (£m)	(387)	815	2,434
BCR	0.96	1.09	1.26
Equity-weighted NPV (£m)	2,897	4,425	6,553
Equity-weighted BCR	1.31	1.47	1.70

156. As shown in Table 23, higher energy prices correlate with better value for money as the energy savings, which form a key part of the benefits in CBA, are increased. Therefore, when energy prices increase, the NPV and BCR will also increase. Please note that change in energy prices does not change the number of homes that the MEES can treat.

Carbon prices

157. Throughout this IA the central carbon value projections from the Green Book supplementary guidance on valuing energy and greenhouse gas emissions are also used. **Error! Reference source not found.**24 shows the sensitivity of the analysis to using the "high" and "low" carbon values projections. Higher carbon values correlate with higher energy and carbon savings with total costs staying the same, resulting in an increase in the NPV and BCR. The reverse relationship can be observed for the low carbon value scenario and the impact on the NPV and BCR.

Table 24: sensitivity of CBA to carbon values

	Modelling Scenario 1 – low range		
	Low	Central	High

[72] BEIS (2021) Valuation of energy use and greenhouse gas (GHG) emissions, Data Tables 4-7 and 9-12: https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal

Total social costs, present value (£m)	9,383	9,383	9,383
Total social benefits, present value (£m)	9,370	10,199	11,026
NPV (£m)	(13)	815	1,642
BCR	1.00	1.09	1.18
Equity-weighted NPV (£m)	3,596	4,425	5,252
Equity-weighted BCR	1.38	1.47	1.56

Policy appraisal period

158. In this IA, the impact of setting MEES has been appraised over a 47-year period (from 2025 to 2071) to account for benefits that persist for the full lifetime of measures that are installed. It also accounts for the costs associated with reinstalling measures with a shorter lifetime than the appraisal period. To facilitate comparison with other policies, the impacts of the modelled MEES scenarios over 10 years are presented here.

Table 25: CBA with a 10-year appraisal period

2025 price base year, Present Value	**Modelling Scenario 1: Fabric then Smart or Heat**	**Modelling Scenario 2: Fabric only metric**	**Modelling Scenario 3: Fabric then Smart Readiness**	**Modelling Scenario 4: Fabric then Heating System**
Capex (£m), excluding VAT, net	4,115 - 4,389	1,647	4,389	3,838
Familiarisation costs (£m)	5.3	5.3	5.3	5.3
Hassle costs to residents (£m)	45 - 55	28	55	34
Hassle costs to providers (£m)	212 - 269	122	269	157
Administrative costs (£m)	284 - 363	113	363	210
Surveying costs (£m)	214	214	214	214
TOTAL costs (£m)	4,875 - 5,295	2,129	5,295	4,459
Energy Savings (£m) (Long Run Variable Cost)	1,131 - 2,335	642	2,335	94
Air Quality Benefits (£m)	24 - 33	20	24	39
Traded Carbon Savings (£m)	150 - 449	98	449	-96
Non-Traded Carbon Savings (£m)	223 - 719	338	223	1,125
Comfort Benefits (£m)	39 - 42	66	42	36
Health Benefits (£m)	312 - 345	114	312	371
Opportunity cost (£m)	(684) - (653)	(200)	(684)	(623)
Energy Savings Optimism bias adjustment (£m)	(207) – (307)	(116)	(307)	(120)

TOTAL benefits (£m)	1,556 - 2,395	962	2,395	826
NPV (£m)	(3,318) - (2,900)	(1,166)	(2,900)	(3,633)
Benefit: cost ratio	0.32 - 0.45	0.45	0.45	0.19
Equity-weighted NPV (£m)	(2,796) - (1,906)	(814)	(1,906)	(3,515)
Equity-weighted BCR	0.43 - 0.64	0.62	0.64	0.21

Analysis for the final-stage IA

159. The IA acknowledges that there are several evidence gaps and uncertainties that need further exploration in the final-stage IA, including:
    - **The interaction between DHS and SRS MEES:** The outcome of the consultation to review the DHS could have a material impact on the assumption about provider behaviours used in this IA. The interaction between DHS and SRS MEES, and the subsequent impact on provider behaviour, will be explored in more detail in the final-stage Impact Assessments for both the DHS and SRS MEES.

    - **Uncertainties in compliance pathways:** The IA identifies several areas of uncertainty, particularly regarding the proportion of providers that may choose to comply through a transition plan and the selection of a secondary metric under the preferred policy option. Evidence gathered through the consultation process will be analysed and incorporated into the final-stage IA.

    - **Regulator of Social Housing (RSH) costs:** The RSH is expected to incur familiarisation and regulation costs from the proposal, however these costs have not been monetised in this IA as it will largely depend on the final policy design as the role of the regulator has not yet been fully defined. This will be explored in more detail in the final-stage IA.

    - **Provider choice of secondary metric:** The preferred option provides flexibility for providers to choose to meet a secondary metric of Smart Readiness or Heating System. To reflect the uncertainty in provider choice of secondary metric, a range is presented in the consultation-stage IA, representing all providers choosing to meet the Smart Readiness metric and 50% of providers choosing to meet the Smart Readiness metric with the other 50% choosing to meet the Heating System metric. Evidence gathered through the consultation process on likely provider choice will be analysed and incorporated in the final-stage IA analysis.

Wider impacts

160. The proposal is expected to generate a number of wider benefits that have not been captured within the cost-benefit analysis, these include:

161. **Bill savings from improved energy efficiency:** Bill savings to residents are estimated using the HMT Green Book retail energy prices. Although these represent a private benefit to residents, the benefit is a transfer between energy suppliers and residents and so does not result in a net benefit to society. Therefore, this impact is excluded from the non-weighted net present value and benefit-cost ratio. However, the equity-weighted net present value and benefit-cost ratio account for its distributional impact on social tenants.

Regional impacts

162. The impacts of SRS MEES are expected to affect regions in proportion to the number of social homes in each region. The distribution of social homes in England is shown in Table 26. London and the North West have the highest proportions of social housing, while the North East and East Midlands have the lowest proportions of social housing. The regions with highest proportion of social housing are expected to bear the highest level of costs from the SRS MEES proposal, although this data does not account for the proportion of these homes that are already at EPC C or above, we expect the number of social homes below the target metric to be proportional with the number of social homes. Wider social benefits, for example LRVC savings, would impact all regions equally so those with fewer social homes would disproportionately benefit from MEES.

Table 26: distribution of social housing in England[73]

Region	Number of social homes (thousands)	Proportion of social housing
East Midlands	345	9
East of England	462	11
London	874	16
North East	277	5
North West	620	13
South East	606	16
South West	378	10
West Midlands	493	11
Yorkshire and The Humber	439	10
Total	4,495	**100**

Growth impact assessment

163. This section considers how SRS MEES could impact the government's growth mission in terms of the following key components:

Table 27: Estimated SRS MEES growth impacts.

Growth impact components	Expected magnitude of impact	Justification
Population effects	Limited	SRS MEES will not directly impact population growth or migration. While there are distributional benefits for lower-income groups, there is no direct link to population level changes.
Employment impacts	Moderate	SRS MEES is expected to have a positive impact on the labour demand by supporting an annual average of 9,800 - 12,000 direct and 4,100 - 5,000 indirect jobs in the retrofit sector. While this may lead to a net positive effect on employment

[73] Private registered providers additional tables; Table 1.4: Private registered provider social housing stock and rents in England 2023 to 2024 - GOV.UK and Local authority registered providers additional tables; Table 1.4: Local authority registered provider social housing stock and rents in England 2023 to 2024 - GOV.UK. Note that regional breakdowns include LCHO (Low Cost Home Ownership) in addition to rented stock, and the data is weighted for non-responses. Percentages have been rounded and so may not sum to 100%.

		levels, it is important to consider potential labour displacement effects. Some of these jobs may reflect a transfer of labour between sectors rather than a net increase in total employment. Part of the positive labour demand may be met by those already in the workforce rather than those not in employment (these impacts are therefore largely displaced)
Investment impacts	Limited/moderate	SRS MEES may incentivise social housing providers to invest in retrofit programmes, generating a positive investment impact. However, the extent to which this investment is additional rather than redirected from alternative uses is uncertain.
Productivity impacts	Limited	SRS MEES could have potential productivity benefits through improving the thermal comfort of social homes and reducing the prevalence of cold-related illnesses. The extent of comfort taking arising from SRS MEES is monetised to be £178m - £181m in the table 8 above. However, the link from improvement in thermal comfort, health and productivity gains is less direct. Therefore, SRS MEES is expected to have limited productivity impacts.

Monitoring and evaluation

164. We are committed to robustly monitoring and evaluating the reforms to the SRS MEES. Our approach will build on MHCLG's existing long-term housing sector monitoring work, and we will conduct our process, impact, and value for money evaluation in line with our published Evaluation Strategy.[74]

165. If MEES are introduced for the SRS, the monitoring and evaluation of SRS MEES will be captured within MHCLG as a part of plans for the broader revisions to the Decent Homes Standard (DHS2). MHCLG are in the process of developing an evaluation strategy for DHS2. A scoping study covering reforms to the Social Rented Sector has been commissioned, which will help determine the monitoring and evaluation strategy for the reforms and will help determine the scale, scope and timing of the evaluation work.

166. The precise scope and whether changes to the MEES and DHS2 will have a stand-alone evaluation, or whether their process and impact will be assessed as a part of broader tenure reform programmes is yet to be determined.

167. A full list of evaluation questions will be developed as part of the scoping, but we would expect these to include the following:
    - Have changes to MEES and DHS2 improved the quality of homes in the social rented sector?
    - Are more residents satisfied with their accommodation and the service provided by their landlords?

[74] MHCLG (formerly DLUHC) Evaluation Strategy 2022: https://www.gov.uk/government/publications/dluhc-evaluation-strategy/dluhc-evaluation-strategy

- Do more residents know, understand and are empowered to assert their rights with respect to housing quality?
- Have changes to MEES and DHS2 (and related policies) contributed to improved energy efficiency of the housing stock?
- How did the Social Rental Sector respond to the new EPC system, and did the new system create challenges in meeting MEES?

168. As part of the evaluation(s), we expect to convene a steering group to oversee the project's delivery, ensuring it meets its aims, and receives expert input from stakeholders including from OGDs and academics on its methodology and identification of useful findings. Outputs from the evaluation will be published in line with the GSR Publication Protocol, ensuring transparency and accessibility to interested stakeholders and wider public.[75]

169. Alongside the scoping work, MHCLG are developing a monitoring plan to ensure baseline measurements for MEES and DHS2 are captured, as well as tracking change and progress against targets Monitoring mechanisms will include the multiple Official Statistics sources collected by MHCLG, other government departments and delivery partners, including the English Housing Survey, an annual continuous cross-sectional survey that pairs a household interview with a physical inspection of the home. In this way, we will be able to understand the characteristics of households and the condition and energy efficiency of the dwellings in which they live and gain insight into, not only improved quality and energy efficiency of dwellings, but and explore links between these and wellbeing, health, and security of tenure. In preparation for monitoring and evaluating DHS2, MHCLG has also commissioned modelled estimates of the impact of DHS2 and is in the process of modifying the survey to better capture and measure features related to changes to the standard, including energy efficiency changes.

170. Additionally, the Department has commissioned housing stock condition modelling at a local authority area, to be delivered regularly throughout the new contract of the English Housing Survey. The modelling methodology will be kept under review to ensure the analysis is fit for the purpose of measuring the impact of MEES and DHS2.The monitoring plan will also make use of admin sources of data, such as the Energy Performance Certificate database.[76] We anticipate a monitoring framework will be put in place prior to the implementation of MEES.

Description of implementation plan

171. If government decides to introduce MEES for the SRS, MEES will be included in the Decent Homes Standard (DHS) as part of Criterion D on thermal comfort, on which government is also currently consulting. SRS MEES will be implemented following a direction to the RSH. Once the Regulator has received direction about the new requirements, it will undertake a consultation on its revised Safety and Quality standard. Government will publish guidance for providers on SRS MEES following the publication of government responses to the EPC reform and HEM consultations, to support the implementation of MEES. Due to ongoing work to review EPCs, which may include changes to the headline metrics on the certificate, MHCLG and DESNZ are also considering what transitional arrangements may be required for any standard.

Public Sector Equality Duty (PSED)

[75] Government Social Research Publication Protocol: https://assets.publishing.service.gov.uk/media/628f647d8fa8f5039107d502/2022-GSR_Publication_protocol_v4_Final.pdf

[76] Live tables on Energy Performance of Buildings Certificates: https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates

172. This section provides an analysis of how the proposal is expected to impact people with protected characteristics, in line with the government's guidance on the Equality Duty. This guidance suggests the distributional impact of policies should be evaluated with regards to their impact on social groups with certain characteristics, namely:
    - Age
    - Disability
    - Gender
    - Gender reassignment
    - Pregnancy and maternity
    - Race – including ethnic or national origins.
    - Religion or belief
    - Sexual orientation

173. Equality analysis of this policy is limited to those characteristics captured by the 2022-23 EHS,[77] the 2023-24 EHS[78] and Census 2021.[79] These are age (Table 28), ethnic minorities (Table 29), long term illness or disabilities (Table 30), religion (Table 31), and sex of the household reference person (Table 32).

174. The tables below show that:
    - Improvements made to social housing properties as a result of SRS MEES are expected to be overwhelmingly positive for social housing residents, who will benefit from lower energy bills, improved thermal comfort, and reduced risk of damp and mould as a result of better energy performance. SRS households are more likely to be from an ethnic minority background and have a disability or long-term illness when compared to all households in England. As a result, this policy will disproportionately benefit these groups.
    - The majority of household reference persons (head of household who fills in the survey) in the SRS are female, 55.9% compared to 51% for the wider population. It is worth noting that this statistic might not be representative of the proportion of females in the total SRS population, as the sex of the household reference person is likely not correlated with the sex of other household members.
    - Around two thirds of social renters are religious, according to the EHS data, and this is in line with the distribution reported for all tenures.
    - As discussed in the "Impact on New Supply" section, the introduction of SRS MEES may divert some funding away from the development of new social housing. This could potentially have negative impacts on individuals currently on social housing waiting lists. While we do not hold data on the characteristics of those waiting for social housing, it is reasonable to assume that they reflect similar demographics to existing social housing tenants, as discussed above. Although SRS MEES is expected to benefit existing social housing residents, it could inadvertently affect future supply if resources are diverted. However, this remains a potential impact, as providers may continue to build new homes alongside implementing energy efficiency improvements.

Table 28: percent of the stock by age of household reference person (EHS 2023-24)

	16-24	**25-34**	**35-44**	**45-54**	**55-64**	**65 or over**
Social Housing	2.8%	12.7%	18.1%	18.3%	19.4%	28.7%

[77] English Housing Survey 2022-23: https://www.gov.uk/government/statistics/english-housing-survey-2022-to-2023-rented-sectors

[78] English Housing Survey 2023-24: https://www.gov.uk/government/collections/english-housing-survey-2023-to-2024-headline-findings-on-demographics-and-household-resilience

[79] Census 2021: https://www.ons.gov.uk/datasets/TS008/editions/2021/versions/4

All tenures	2.7%	14.5%	17.5%	17.3%	18.1%	29.8%

Table 29: percent of the stock by ethnicity of household reference person (EHS 2023-24)

	Asian	Black	Other	All ethnic minority	White
Social Housing	6.0%	10.0%	5.1%	21.2%	78.8%
All tenures	8.3%	4.5%	3.5%	16.3%	83.7%

Table 30: percent of the stock by whether a member of the household has a long-term illness or disability (EHS 2023-24)

	Yes	No
Social Housing	59.3%	40.7%
All tenures	36.7%	63.3%

Table 31: percent of the stock by religion of household reference person (EHS 2022-23)

	No religion	Christian	Buddhist	Hindu	Jewish	Muslim	Sikh	Any other religion
Social Housing	36.8%	51.8%	0.8%	0.3%	0.2%	8.3%	0.4%	1.5%
All tenures	39.0%	51.7%	0.6%	1.7%	0.5%	4.7%	0.5%	1.3%

Table 32: percent of the stock by sex of household reference person (EHS 2022-23, Census 2021)

	Males	Females
Social housing	44.1%	55.9%
All tenure	49%	51%

Annex A – Policy landscape

Reform of the Energy Performance Certificate (EPC)

EPCs are a widely used measure of the energy performance of buildings in the residential, commercial and public sectors and are a key tool in promoting energy performance improvements in buildings. Since their introduction in 2007, EPCs have been required when a property is constructed or offered for sale or let. The purpose of an EPC is to indicate the energy performance of the property to prospective tenants and buyers. In addition, EPCs provide policymakers and markets with information about the energy performance of the building stock, as well as supporting and encouraging individuals to make informed choices about how to improve the energy performance of their building.

Government is proposing to set higher MEES against new metrics planned to be introduced to Energy Performance Certificates (EPC) following EPC reform in 2026. The planned new metrics would assess the energy performance of buildings based on fabric performance, smart readiness, and the efficiency and emissions of the heating system. Further detail on these planned metrics and other proposals relating to EPC reform can be found in the consultation on 'Reforms to the Energy Performance of Buildings Regime' published on 4 December 2024. We propose an approach on how to manage changes to the metrics used for the Social Rented Sector Minimum Energy Efficiency Standards (SRS MEES) on pages 35-36 of the consultation.

Warm Homes: Social Housing Fund

The Warm Homes: Social Housing Fund (formerly the Social Housing Decarbonisation Fund) provides grant funding for social housing landlords to improve the energy performance of their properties through the installation of energy efficiency measures and low carbon technologies.

The main objectives of WH:SHF are to tackle fuel poverty, reduce carbon emissions, and deliver warm, energy-efficient homes. WH:SHF will also develop the green economy, support green jobs, and increase supply chain capability and capacity.

The Warm Homes: Social Housing Fund Wave 3 will deliver up to £1.29 billion of funding to 143 projects across England. This includes funding offered for 17 Strategic Partnership projects and 126 Challenge Fund projects.

The SHDF Demonstrator project, was launched in 2020, and awarded around £62 million of grant funding in 2021 to social landlords across England and Scotland to test innovative approaches to retrofitting at scale, seeing around 1000 social homes improved to at least EPC band C and supporting around 1,200 local jobs.

Wave 1 of the SHDF awarded £178 million of grant funding for delivery from 2022. Wave 1 formally closed on 31 December 2023, with grant recipients finalising projects through January – March 2024. Official statistics published in November 2024 showed that to the end of July 2024, there were around 31,700 measures installed in around 16,100 households under SHDF Wave 1.

Wave 2.1 of the SHDF is delivering improvements to around 90,000 social homes between April 2023 and September 2025. £778 million of government funding was allocated for Wave 2.1 to see proposed energy performance improvements to around 90,000 social homes.

SHDF Wave 2.2 allocated £75.5 million of grant funding and is supporting 42 local authorities and housing associations, helping some of the lowest income households by delivering warmer and more energy efficient homes. This funding is expected to upgrade up to 8,800 homes, save tenants an average of £400 on their energy bills, lift 4,900 households out of fuel poverty, and support 1,300 jobs. This latest wave of funding has been targeted at organisations that did not receive funding under SHDF Wave 2.1.

Warm Homes: Local Grant

The Warm Homes: Local Grant (WH:LG) is a £500m fuel poverty scheme led by Local Authorities, with delivery running from April 2025 to March 2028. 74 projects involving 271 Local Authorities across England (over 97% of eligible Local Authorities) have been awarded funding.

WH:LG will provide grants for energy performance measures and low carbon heating to private, low-income households living in EPC D-G homes in England to tackle fuel poverty and deliver progress towards Net Zero 2050 and the Carbon Budgets.

Examples of energy saving measures funded under the scheme include insulation measures, heat pumps, solar PV, smart controls, and other energy performance improvement measures such as draft proofing, windows, and doors (amongst others).

Social housing is ineligible for WH:LG funding, except for 'infill' purposes only, which is capped at 10% of homes upgraded for a given project. Social housing landlords must also contribute at least 50% of the total cost of upgrades.

If local authorities wish to deliver a mixed tenure project in their area with a significant social housing component, they could complement an owner occupier and private rented funded upgrades under the Warm Homes: Local Grant with a social housing funded under the Warm Homes: Social Housing Fund providing they are allocated funding under both schemes.

The Energy Company Obligation (ECO)

The Energy Company Obligation (ECO) is an obligation on larger energy suppliers to provide energy efficiency and heating measures to low-income and vulnerable households living in the least energy efficient homes across Great Britain.

The current iteration of the scheme, ECO4, runs from 2022 - 2026 with an increased value of £4 billion to accelerate our efforts to improve homes to meet fuel poverty targets. This will cut on average £470 annually off energy bills for households that have measures installed (based on the most recent energy prices associated with the April 2025 energy price cap set by Ofgem).

Households may be eligible under ECO4 if they receive means tested benefits, live in the least energy efficient social housing or are referred by a local authority or energy supplier participating under the flexible eligibility element of the scheme, known as ECO4 Flex. Social homes must be in EPC band E-G.

Between January 2013 and September 2024, DESNZ Household Energy Efficiency Statistics (January 2025) estimate that approximately 391,886 socially rented households have received a measure through ECO.

The Great British Insulation Scheme

Further energy efficiency support is available through the Great British Insulation Scheme (GBIS). This scheme is helping to reduce energy bills and make our energy system more secure over the longer term by reducing energy demand.

GBIS was established in law on 25 July 2023 and will run until March 2026, aligning with the current ECO4 scheme. It is worth £1 billion over three years, driving delivery of the most cost-effective mainly single insulation measures to the least energy efficient homes in the lower council tax bands and boosting support for the most vulnerable households.

The scheme targets a broader pool of households in the least efficient homes in the lower council tax bands (A-D in England and A-E in Scotland and Wales) with an EPC rating of D-G, as well as low-income households.
GBIS will help households to cut heating bills by an average of around £250 per year based on the most recent energy prices associated with the April 2025 energy price cap set by Ofgem.

Between April 2023 and December 2024, DESNZ Household Energy Efficiency Statistics (January 2025) estimate that approximately 5,902 socially rented households have received a measure through GBIS.

Eligibility of social homes for ECO and GBIS

Social housing was not previously eligible for support prior to the ECO2 transition scheme (ECO2t) owing to the relatively high energy efficiency of those properties and the relatively high proportion of funding those homes received under ECO's predecessors.

However, we considered that people living in social housing were generally more likely to be living on lower incomes than those in private tenure, and where social tenants live in energy inefficient properties, they would still have a high likelihood of being fuel poor.

Therefore, from ECO2t we permitted delivery to social housing bands E, F and G to be eligible for support across Great Britain, giving providers the ability to achieve economies of scale and leverage in other funding sources to facilitate cost-effective delivery to these homes.

Under ECO3, we extended eligibility for social housing properties with an EPC Band D for measures that are delivered under the innovation part of the scheme. When we introduced GBIS, we permitted eligibility to social housing properties with an EPC Band rating of E, F and G. For ECO4, we set out that tenants in social housing would continue to be eligible for First Time Central Heating if the property was in EPC Bands E, F and G.

The Affordable Homes Guarantee Scheme 2020 has expanded to support private registered providers of social housing to deliver energy performance and housing quality measures whilst continuing to support new development, and increasing total guarantee capacity from a maximum of £3 billion to a maximum of £6 billion. The expanded scheme went live in early 2024, with the application window open until at least April 2026.

National Wealth Fund

The National Wealth Fund (NWF) announced in October 2024 that it will provide financial guarantees that will see Barclays UK Corporate Bank and Lloyds Banking Group deliver £1 billion of funding to accelerate the retrofit of social housing in the UK. In April 2025, the NWF announced a financial guarantee of up to £400 million to cover a series of new loans provided by NatWest Group to registered providers for the retrofit of social housing stock in the UK. In June, the NWF guaranteed an initial £150 million for The Housing Finance Corporation. This brings NWF's total support for social housing retrofit to £1.3 billion. By enabling £1.65 billion of lending through these guarantees, the NWF is ensuring that attractively priced financing is available to every aspect of the social housing market and caters to all needs.

The NWF will help create a stable investment environment by mobilising private capital around the Government's strategic priorities, enabling the market to invest with confidence in clean energy and growth industries. These deals showcase how innovative public and private expertise can come together to deploy private capital to deliver warmer, greener homes for social tenants.

Not only will the flexible and competitively priced loans support housing associations to meet their net zero ambitions, they will also improve the quality of life for their tenants. Improvements such as low carbon heating and insulation create warmer homes, lower bills and better life outcomes.

Private rented sector (PRS) MEES regulations

The PRS MEES regulations were introduced in 2015 with the aim of driving cost effective energy efficiency improvements. As of April 2018, landlords of both private domestic and non-domestic properties were required to ensure their properties met a minimum energy performance standard, set at an EPC rating of E, before being able to let. All domestic rented properties must have reached EPC E by April 2020, and all non-domestic rented properties by 2023. The PRS MEES regulation was published for consultation in February 2025[80] to seek views on amending the target metric.

[80] PRS MEES consultation - https://www.gov.uk/government/consultations/improving-the-energy-performance-of-privately-rented-homes-2025-update/improving-the-energy-performance-of-privately-rented-homes-consultation-document-html

Annex B – Modelling Approach

This annex sets out in more detail the modelling approach and key assumptions used in this IA.

Costs

Familiarisation costs

Registered Providers of social housing (providers) are large organisations with multiple employees and therefore reading and understanding the regulation will be required by multiple people within the organisation.

In terms of reading and familiarisation, although the exact MEES guidance has not yet been finalised, it is anticipated that it will be similar to shorter than existing DHS guidance at around 20 pages. We estimate this will take around 3 hours per person to read and understand. The number of people per provider required to read the guidance will vary greatly based on the size of the organisation, but for illustrative purposes on average we expect 10 people at a small provider will be required to read the guidance in full and around 100 at a large provider. In addition, we expect there to be costs associated with providers updating company processes. Based on the Regulator for Social Housing's Tenant Satisfaction Measures (TSMs) IA[81], we expect around half the time required to update company processes for TSMs will be required for MEES and wider DHS. This is a lower time estimate because repair and maintenance is an existing and large share of social landlords' current activity and we therefore do not anticipate requirements to set up new teams or processes from scratch. We expect small providers to spend around 33 hours updating company processes and 280 hours for larger providers. We do not anticipate providers will have to retrain or upskill in house staff as a result of MEES and wider DHS.

The cost of familiarisation time is estimated based on the hourly salaries of provider employees taken from the Annual Survey of Hours and Earnings (ASHE) 2024. Salaries of staff at different grades were estimated and a weighted average was created based on the estimated time required at each level of the organisation, based on previously used estimates from the Social Housing Reform Bill impact assessment (IA) and Awaab's Law consultation. As is standard practice in SRS IAs we have uplifted the salaries by 20.2% for non-wage costs. The average hourly salary including non-wage costs was estimated to be £25.09 in 2024 prices.

With around 1,300 large providers and 370 small providers, we estimate the total present value cost of familiarisation to be around £5 million. Small providers are defined as those owning fewer than 1,000 dwellings.[82]

There is limited evidence to support this estimation of familiarisation requirement as it largely depends on the final policy design. We will ask questions in the consultation to understand the level of financial preparedness of providers for meeting MEES, with a view to develop the evidence base for the final stage IA.

Admin costs

[81] Tenant Satisfaction Measures Impact Assessment: https://www.gov.uk/government/consultations/consultation-on-the-introduction-of-tenant-satisfaction-measures

[82] As defined by the RSH: https://www.gov.uk/government/statistics/english-housing-survey-2021-to-2022-social-rented-sector

The admin costs have been assumed to be 5% of total capital spend in the modelling. This 5% assumption has been informed by the admin costs seen in the SHDF. For the SHDF Wave 2 scheme, the forecast admin cost was around 10%. However, the MEES requirements are less stringent than the SHDF/WH:SHF, for example compliance with the Publicly Available Specification (PAS) 2035 is encouraged but not required for SRS MEES installations, and so we expect the MEES admin costs (excluding surveying costs) to be lower.

Surveying costs

As typically large organisations, providers have permanent maintenance staff either directly employed or contracted to the organisation who would be capable of carrying out building surveys to some extent. However, given the scale of work required and the breadth of knowledge required to carry out a building survey for MEES, we anticipate most providers will choose to sub-contract the survey work, though this will likely be to large chartered surveying organisations rather than individuals. This is reflective of how most providers undertook recent damp and mould surveys after being instructed to do so by government in November 2022.

As we expect providers to survey their stock using large organisations, we have quantified the impact of doing so based on the expected time this will take and the hourly wage of a chartered surveyor reported in the ASHE uplift for non-wage costs. We expect a building survey to take on average two hours. This is based on how long it takes properties to be surveyed for the physical inspection components of the English Housing Survey (EHS) which includes both health and safety inspections and energy performance inspections, though the exact time will vary depending on factors such as the size of the dwelling. Based on the 2022 ASHE, the median annual wage for a chartered surveyor is £24.17, with the 25th percentile being £18.82 and the upper quartile £31.12. Accounting for a 20.2% non-wage uplift in costs, we expect the cost per survey in the SRS to be between £38 and £62 per dwelling, with a best estimate of £48.

Assuming there will be around 2.6 million PRP-owned dwellings in 2026 and 1.6 million LA-owned dwellings, the total present value cost to survey all SRS stock is estimated to be £135 million for PRPs and £79 million for LAs. We have assumed that all dwellings will be surveyed in the first two years of implementation.

It is likely that these costs will be an overestimate of the survey costs of MEES, as some providers will likely conduct the surveys in house at a lower cost. Additionally, some providers may not have to conduct surveys if they already have valid EPCs for their stock. However, as information on this is limited, we have taken the conservative approach to assume every SRS dwelling will need to be surveyed as part of MEES. Lastly, there will likely be some overlap with surveying for an updated Decent Homes Standard – this will be reflected in analysis following consultation.

Benefits

Opportunity cost

It is difficult to estimate what providers would have otherwise done with the capital expenditure needed to achieve MEES in the absence of the policy. Although this will vary on a provider basis, inferences can be made by observing past provider spending behaviour as reported by the Global Accounts (GAs). Typical provider activity includes building (or buying) new housing stock for rent, repairing and maintaining existing stock and providing services for residents.

A significant share of Private Registered Providers' (PRPs') investment activities involves the building of new housing stock, which in turn represents a significant contribution to society in terms of monetised benefits (or disbenefits). The vast majority of new social supply is delivered by PRPs

rather than LAs, with PRPs responsible for 79% in 2023/24 (vs. 14% for LARPs, 2% unknown).[83] As such, only the MEES costs to PRPs have been used to calculate the value of the potential reduction in supply as a result of MEES.

It is possible to value the societal benefit of new units of housing via the Land Value Uplift (LVU) framework, which measures the net benefit to society of new housing units. In order to calculate how many homes would have been delivered in the absence of MEES, it is necessary to make assumptions about the share of capex that would have otherwise been spent on new supply, as well as the regional distribution of units that would have otherwise been delivered.

Given the above, in the IA we assume that 75% of PRPs' MEES capital expenditure would have otherwise been spent on supply (a best estimate within a range of 50-100%). This is an estimate based on the fact that the delivery of new social supply is one of their primary activities and the most likely opportunity cost of alternative capital spending, however given current pressures in the sector some providers would likely re-invest some of the capex in strengthening financial resilience or on other activities. The uncertainty of this assumption is explored in Section 10: Risks and Uncertainties, where sensitivity analyses are presented.

Key assumptions used in the National Buildings Model (NBM)

Modelling assumptions included in this section are standard modelling assumptions used across the domestic energy efficiency space regarding NBM modelling. The analysis is based on the NBM and assumptions used may differ from previous published analysis for other schemes in the policy space, such as the 2015 Private Rented Sector (PRS) Regulation Options Assessment[84] and Energy Company Obligation 4 (ECO) Impact Assessment,[85] which used the National Household Model (NHM), the predecessor to the NBM.

Cost assumptions

Capital costs

Table 33 presents the cost of the different measures that are applied to properties in the NBM. Measure costs are calculated by the formula:

capital cost = installation cost x (1 + VAT%)

with the following assumptions for each measure are shown in Table 33:

Table 33: measure costs assumptions (2022 prices)

Measure	Installation cost (£)	VAT%
Double glazing	1130.0 + (146.1 x m^2 replaced)	0%
Heat pump	See below	0%
Time temperature zone controls	50.0 x number bedrooms x 2	20%
Low energy lighting	3.5 x bulbs replaced x outlets replaced	20%
Suspended floor insulation	37 x m^2 insulated	0%
Solid floor insulation	74 x m^2 insulated	0%

[83] Affordable housing supply in England: 2023 to 2024 (MHCLG): https://www.gov.uk/government/statistics/affordable-housing-supply-in-england-2023-to-2024/affordable-housing-supply-in-england-2023-to-2024. There is not provider information available for the remaining 5% of units.

[84] PRS MEES Options Assessment: https://www.gov.uk/government/consultations/improving-the-energy-performance-of-privately-rented-homes-2025-update/improving-the-energy-performance-of-privately-rented-homes-options-assessment-oa-html

[85] The ECO4 final stage Impact Assessment is available at: https://assets.publishing.service.gov.uk/media/6246c8f88fa8f527785ed18a/eco4-final-ia.pdf

Hot water tank insulation	20.0	20%
Loft insulation	160 + (5.2 x m^2 insulated)	0%
External wall insulation	For bungalows 4200 + 950 + (107 x m^2 insulated) For non-bungalows: 4200 + 950 + (124 x m^2 insulated)	0%
Cavity wall insulation	270 + (3.2 x m^2 insulated)	0%
Solar photovoltaic (PV)*	∑(peak power per face of dwelling) x $e^{(7.544 - 0.046P + regional\_factor -0.023(installation\_year - 2013))}$ Where P = peak power of the system (kWp)	0%
Solar hot water	2425.0 + (670.0 x solar panel aperture area m^2)	0%
Draught proofing	See below	0%

*The regional factors for solar PV are shown in Table 34:

Table 34: regional factors for solar PV cost calculation

Region	Regional factor
East Midlands	-0.003
West Midlands	0.0
East England	0.0
London	0.128
North East	0.042
North West	-0.016
South East	0.089
South West	0.03
Yorkshire and the Humber	0.06

Draught proofing costs

Draught proofing costs are dependent on the size and archetype of the property:

Table 35: draught proofing installations costs by archetype and floor area

Assigned dwelling type	Floor area range (m2)	Draught proofing install costs (£)
Purpose built flat (big)	> 54.29	82.0
Purpose built flat (small)	<= 54.29	48.0
End terrace (big)	> 80.45	123.0
End terrace (small)	<= 80.45	77.0
Semi detached (big)	> 80.45	123.0
Semi detached (small)	<= 80.45	77.0
Detached (big)	> 117.03	214.0
Detached (small)	<= 117.03	104.0
Bungalow (big)	> 117.03	214.0
Bungalow (small)	<= 117.03	104.0
Mid terrace (big)	> 75.5	114.0
Mid terrace (small)	<= 75.5	72.0
Converted flat (big)	> 80.45	82.0
Converted flat (small)	<= 80.45	48.0

Heat pump costs[86]

Both Air Source Heat Pump (ASHP) and Ground Source Heat Pump (GSHP) costs are dependent on the system size, the heating system being replaced and additional fittings such as emitter upgrades. The following assumptions used in the modelling are DESNZ internal estimates based on a forthcoming study by Eunomia.

Table 36: heat pump unit cost assumptions, by size (2022 prices, subject to cost reduction below):

Heat pump size (kW)	GSHP install cost (£)	ASHP install cost (£)	HTHP install cost (£)
1	6041	2740	3782
2			
3			
4			
5		3068	4234
6		3365	4644
7		3639	5021
8		3893	5373
12	7885	4781	6598
16	9525	5532	7634
20	11028	6194	8548
24	12432	6793	9375

Heat pump appliance unit costs are reduced by a factor depending on the year of installation (table 37), based on assumptions of costs reducing over time as the market expands through economies of scale and innovation. This profile is assumed to be the case for all heat pumps. In reality, there could be differences in the cost reduction between heat pump types. There are also additional costs associated with installing ASHPs (Table 38) GSHPs (Table 39) and HTHP (Table 40).

Table 37: heat pump cost reduction factors

Year	% of unit cost
2023	1
2024	0.97
2025	0.94
2026	0.91
2027	0.88
2028	0.85
2029	0.8125
2030	0.775
2031	0.7375
2032 and beyond	0.7

Table 38: additional costs associated with installing ASHP (£)

Number of bedrooms	Labour cost (subject to cost	Buffer cost	Cylinder cost	Controls cost	Miscellaneous fitting costs	Emitter upgrades	New emitters[87]

[86] The analysis in the IA only considers GSHP and ASHP for installation. It does not consider installations of High Temperature Air Source Heat Pumps.

[87] Note, that emitter upgrade costs are included if the dwelling has a wet system, otherwise new emitter costs are included if there is not wet system.

	reduction below)*						
1 - 2	1839	150	780	340	635	1250	3000
3 - 4	3677	271	1130	340	780	1850	4000
5 or more	5516	434	1510	540	935	2450	5000

Table 39: additional costs associated with installing GSHP (£)[88]

Number of bedrooms	Labour cost (subject to cost reduction below)*	Buffer cost	Cylinder cost	Controls cost	Miscellaneous fitting costs	Emitter upgrades	New emitters[89]
1 - 2	4871	150	780	340	850	1250	3000
3 - 4	4871	271	1130	340	1100	1850	4000
5 or more	5601	434	1510	540	1800	2450	5000

Table 40: additional costs associated with installing HTHP(£)

Number of bedrooms	Labour cost (subject to cost reduction below)*	Buffer cost	Cylinder cost	Controls cost	Miscellaneous fitting costs	Emitter upgrades	New emitters
1 - 2	1747	150	780	340	635	0	1400
3 - 4	3493	270	1130	340	780	0	1900
5 or more	5240	434	1510	540	935	0	2500

*Labour costs are reduced from the above values based on the year of installation (see Table 41 below) based on assumptions of reducing installation times through innovations in installation practices. Both ASHPs and GSHPs are assumed to follow the same labour cost reduction profile overtime. In reality, there could be differences that are being investigated for future analysis.

Table 41: yearly cost reduction factors for labour (%)

Year	% of given labour cost
2023	1
2024	0.9
2025	0.8
2026	0.7
2027	0.6
2028 and beyond	0.5

Additional/alternative costs may be applied where necessary, including removal of an oil tank (£1000).

Energy calculator

[88] Note that ground collectors are not currently included in the costs of GSHPs. The inclusion of ground collectors would reduce the number of GSHPs assumed to be installed and increase overall costs. However, the GSHPs form a very small proportion of overall measures installed, the omission of this cost element is not expected to notably change the CBA profile of any scenarios.

[89] Ibid.

A Standard Assessment Procedure (SAP) calculator is used to calculate the energy demand of a dwelling before and after a measure is installed. However, SAP tends to overestimate real world energy savings from energy efficiency measures since, as a benchmarking tool, SAP assumes the same internal temperature and heating pattern in all dwellings. In reality, less efficient homes tend to be heated less, resulting in a lower real world energy demand and therefore energy savings. Residents living in poorly insulated homes are also likely to be underheating their home in order to save on fuel bills and subsequently increase their heating when measures are installed in order to improve their thermal comfort. This is known as comfort taking. The inputs commonly assumed in SAP also reflect theoretical/standardised measure performance whereas in reality measures may not perform as well.

In order to account for this, the energy calculations have been adjusted in two ways: adjusting the starting energy demand and adjusting for comfort taking. A statistical model of real-world heat demand is used to calculate the starting state of the dwelling, based on the National Energy Efficiency Data-Framework (NEED).[90] The SAP calculator is then used to calculate a percentage theoretical heat demand saving achieved by a measure installation, which is then applied to a statistical model of real-world heat demand, before a 15% savings reduction is applied to account for comfort taking.[91] The comfort taking reduction is only applied to measure installations that reduce heat demand.

Stock alignment

The domestic stock in the NBM is based on the 2016/17 EHS. To account for energy performance installations that have occurred since then, adjustments have been made to align the stock to current day, by modelling installations that are known to have occurred from government schemes as well as private installations. While there is good data on installations from government schemes, it is more difficult to capture private installations. In addition, the most recent detailed data from the EHS is from 2020/21. Taking a proportional approach, the NBM stock has been adjusted by artificially installing measures to match the proportion of homes with those measures to the proportion seen in EHS 2020/21. In addition, the impact of the SHDF has been taken into account by taking the homes treated by the Demonstrator, Wave 1, Wave 2.1 and WH:SHF Wave 3 out of scope of the regulation.

Hassle costs and lifetime of measures

The assumptions on measures lifetimes are drawn from the latest Ofgem publication on ECO3 measures table[92]. The measure lifetime assumption is consistent with assumptions in other schemes, including the SHDF/WH:SHF and ECO4. The lifetime of measures used in the modelling are shown in table 43.

Table 43: hassle costs and measure lifetimes assumed in the modelling (2018 prices)

Energy performance improvement measure	Estimated hidden cost to providers (£)	Estimated hidden cost to residents (£)	Lifetime (years)
Loft insulation	65	65	42
Cavity wall insulation	75	20	42

[90] The National Energy Efficiency Data-Framework (NEED) matches gas and electricity consumption data, collected for DESNZ subnational energy consumption statistics, with information on energy efficiency measures installed in homes, from government schemes, such as the Energy Company Obligation (ECO) and the Green Homes Grant. It also includes data about property attributes and household characteristics, obtained from a range of sources. Available at: https://www.gov.uk/government/collections/national-energy-efficiency-data-need-framework

[91] The impacts of household retrofit and domestic energy efficiency schemes: A large scale, ex post evaluation, Energy Policy. Phil Webber, Andy Gouldson, Niall Kerr, 2015

[92] ECO3 Measures Table: https://www.ofgem.gov.uk/publications/eco3-measures-table

Solid wall insulation (external)	205	15	36
Floor insulation	75	55	42
Draught proofing	55	0	10
First time central heating	80	30	42
Boilers	25	0	12
ASHP	160	30	20
Heating controls	30	10	12
Hot water cylinder insulation	5	0	10
Hot water thermostat	30	10	12
Low energy lighting	5	0	10
Double glazing	75	0	20
Solar PV	130	25	30

Solar PV

The SRS MEES model includes solar PV in the selection of measures that can be applied to homes as part of the policy. To accurately reflect the impact solar PV has on SAP ratings and greenhouse gas emission savings, modelling must consider roof coverage, efficiency, and total energy produced and/or sold to the National Grid. Considerable research, testing and collaboration with DESNZ engineers and scientists has been undertaken, and assumptions on efficiency and proportion of generation exported are consistent with those used in modelling for feed-in tariffs. This results in the following assumptions being included in the model:

- the proportion of roof area that can be covered by solar PV per household is assumed to be 30%
- a proportion of the energy produced by the panels is assumed to be used by the household with a proportion of energy produced being exported back to the grid (the proportions will depend on solar PV system size and whether the dwelling has electric heating)
- the efficiency of any solar PV installation is taken to be 17.5%

Health benefits

The assumptions on health benefits comes from the Health Impacts of Domestic Energy Efficiency Measures (HIDEEM) model. HIDEEM uses the EHS as a basis for the analysis. The model is built from a number of interrelated modules covering a building's permeability properties and individual health conditions. Pollutants included in the model that impact on health are particulate matter, tobacco smoke, radon gas and mould growth. The health conditions linked to these pollutants include heart and circulatory diseases, cancers and strokes, as well as respiratory illness and common mental disorders. HIDEEM uses the Quality Adjusted Life Year (QALY) method to monetise these health impacts. Additionally, it considers the cost savings for the NHS due to improved indoor air quality. This involves placing a value on the change in a person's health over time. More details on HIDEEM can be found in Section 6 of the analytical annex for Fuel Poverty: a Framework for Future Action.[93]

Measures installed in modelled scenarios

[93] Fuel Poverty: a Framework for Future Action Analytical Annex: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211137/fuel_poverty_strategic_framework_analytical_annex.pdf

Table 44 shows the difference in total numbers of measures installed in each policy option and Table 45 shows the number of individual measures installed. These figures are model estimates and the actual numbers of measures installed in order to meet MEES will differ from this. As such, the tables below are useful for showing the key differences between the metric options and should not be considered target levels for the numbers of measures installed. It is also useful in highlighting why we see differences in the economic outcomes of each policy option. In particular, the tables demonstrate that the model makes similar installations until directed to favour a potential route and the relative cost will impact the overall expenditure as well as headroom under cost caps. Considerations can be balanced against non-monetary interests such as extent of progress towards improved energy efficiency scores.

Table 44: total measures installed under the policy options considered

	Modelling Scenario 1: Fabric then Smart or Heat	**Modelling Scenario 2: Fabric only metric**	**Modelling Scenario 3: Fabric then Smart Readiness**	**Modelling Scenario 4: Fabric then Heating System**
Total number of measures installed	2,834,146 - 3,316,217	1,801,326	3,316,217	2,352,074
Total homes treated	1,670,542 - 2,090,947	874,269	2,090,947	1,250,137
Average number of measures installed per home	–1.59 – 1.70	2.06	1.59	1.88

Table 45: measures installed under the policy options considered

	Modelling Scenario 1: Fabric then Smart or Heat	**Modelling Scenario 2: Fabric only metric**	**Modelling Scenario 3: Fabric then Smart Readiness**	**Modelling Scenario 4: Fabric then Heating System**
Low energy lighting	116,917 - 117,865	119,435	116,917	118,812
Draught-proofing	368,507 - 369,684	374,235	368,507	370,861
Loft insulation	76,929 - 77,393	79,699	76,929	77,856
Floor insulation	119,573 - 120,120	122,854	119,573	120,667
Filled Cavity wall insulation	66,749	69,615	66,749	66,749
External wall insulation	1,536	1,536	1,536	1,536
Double glazing	46,685	46,685	46,685	46,685
Room Thermostat	22,532 - 30,572	22,532	22,532	38,612
Time Temperature Zone Control	530,119 - 542,699	563,476	530,119	555,278
Hot Water Cylinder Insulation	72,346	72,346	72,346	72,346
Mains Gas Combi Boiler	18,557	18,557	18,557	18,557
ASHP	48,425 - 327,405	48,425	48,425	606,385

Solar Photovoltaic	1,042,536 - 1,827,342	261,931	1,827,342	257,730

Stock in scope and eligibility under different metrics

The stock in scope/eligible pool for the regulation below shows the change in scope coverage if the cost cap is removed.

Table 46: number of homes starting below target metric receiving measure installations

	Modelling Scenario 1: Fabric then Smart or Heat	**Modelling Scenario 2: Fabric only metric**	**Modelling Scenario 3: Fabric then Smart Readiness**	**Modelling Scenario 4: Fabric then Heating System**
Estimate of number of homes in scope of regulation	881,769	2,113,452	1,630,377	1,871,915 – 2,113,452

Background to the Cost Benefit Analysis (CBA) model and key assumptions made

A CBA model was used to aggregate the output from the NBM to calculate the Net Present Value (NPV) and Benefit Cost Ratio (BCR). The costs and benefits of the policy options have been appraised in line with the HMT Green Book and supplementary guidance, it is compared against the counterfactual option of 'Business As Usual' (SRS MEES is not implemented). The key assumptions used in the CBA model are summarised in the table below.

Table 47: key assumptions used in the CBA

Key assumption	Description
Policy start date	The SRS MEES is expected to be implemented by the end of 2025. As a result, the impacts for 2025 have been halved to reflect a partial year.
Policy end date	The appraisal period for SRS MEES end in 2071. An appraisal period of 48 years has been used based on the longest measure lifetime. Insulation measures, such as loft and cavity wall insulation are assumed to have the longest lifetime, they are assumed to last for 42 years before needing to be replaced. A table on measure lifetime have been provided in Table 44. This approach is in line with PRS MEES consultation-stage IA.
Reinstallations	The analysis assumes that measures with a lifespan shorter than the appraisal period will be reinstalled at the end of their life. For instance, low energy lighting and draught proofing have an estimated lifetime of 10 years. SRS MEES will still apply, and we assume that providers will replace measures on a like-for-like basis as they expire. The assumptions used to estimate reinstallation costs, including capital, admin and hassle costs, are in line with the assumptions set out above.
Provider behaviour	The modelling assumes that providers will install measures based on the proxy definition of the HEM metrics. Measures are installed until the property has reached the metric target, there are no further measures suitable, or the spend exemption has been reached. The outcomes presented in this IA are based on simplified, optimistic scenarios of how many properties will be upgraded, the impacts should be viewed as 'maximal outcomes'. The analysis is included to support consultees in answering the consultation questions, rather than to provide definitive impacts of the proposed SRS MEES options.
Compliance rate	The model assumes full compliance from providers; either installing measures to reach the target or registering a valid spend exemption.

Heating systems counterfactual	We assume in the counterfactual that households will replace their existing heating systems with the cheapest option, a like-for-like replacement. These costs are deducted from the installation costs of the low-carbon heating system installed.
Energy, and air-quality emissions costs	Costs have been valued using the 2023 Interdepartmental Analyst Group (IAG) national values. Air quality emissions are valued based on the distribution of the social housing stock between high density and low density urban and rural areas. The biomass assumptions are taken from the latest SAP report.[94] The CBA uses central IAG national values as the central scenario.
Carbon values	The analysis uses the most recently updated IAG carbon values[95]. The biomass assumptions are taken from the latest SAP report. The CBA uses central carbon values as the central scenario.
Hassle costs	The analysis assumes that there will be hassle costs of installing measures to both residents and providers. The hassle costs assumptions are drawn from the Ecofys report tailored to the characteristics of the whole social rented sector.[96] Please find the hassle costs assumptions used in the modelling summarised in Table 43.
Health benefits	The analysis assumes that certain energy efficiency measures will have associated health benefits. These benefits are monetised using the HIDEEM module of the NBM, including wider societal benefits, such as the reduced costs to the National Health Service (NHS).
Discount factors	The analysis applies standard discount rate (3.5%) to costs and health discount rate (1.5%) to health benefits occurring in the first 30 years of SRS MEES, in line with Green Book recommendations.[97]
Equity weightings	An equity weighting of 1.42 has been applied to financial benefits that are expected to have a redistributive impact to social residents, this includes: bill savings and comfort benefits. The equity weightings have been derived from the 2018-19 EHS, comparing the median equivalised (after housing costs) income for a household in England to that for a social household, raised to the power of 1.3, in line with HMT Green Book guidance.[98] The factor of 1.3 is an estimate of the marginal utility of income.
Price base year	The analysis is presented in 2025 price base year. The latest series of Gross Domestic Product (GDP) deflators have been used to convert all costs and benefits into 2025 prices, this accounts for general inflation in the domestic economy.[99]
Adjustments to measure costs	There is a risk that costs will be higher than modelled in the NBM. Costs have been represented using the best available evidence and the impact of measure cost inflation has been examined in sensitivity analysis. Given the cost inflation observed through the SHDF, a 3% increase in measure costs have been applied to account for the possibility that measure cost inflation may persist. This adjustment is intended to account for some of the uncertainty around future changes in the cost of measures. Any sensitivity analysis on costs done in section 8.3 comes in addition of this adjustment.
Optimism bias to energy savings	There is a risk that the estimated energy savings are not realised in their entirety, due to uncertainty in energy use patterns or the quality of installations. In terms of energy savings, evidence on energy use patterns and behaviour is limited, and

[94] Standard Assessment Procedure (SAP 10): https://bregroup.com/sap/sap10/

[95] Green Book Supplementary Guidance: https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal

[96] The hidden costs and benefits of domestic energy efficiency and carbon saving measures - Final report: http://webarchive.nationalarchives.gov.uk/20121217150421/http:/www.decc.gov.uk/assets/decc/what%20we%20do/supporting%20consumers/saving_energy/analysis/1_20100111103046_e_@@_ecofyshiddencostandbenefitsdefrafinaldec2009.pdf

[97] Green Book Supplementary Guidance Discount Factors: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936262/Discount_Factors.xlsx

[98] Green Book Distributional Weighting: https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government/the-green-book-2020

[99] GDP deflators at market prices, and money GDP November 2022 (Autumn Statement): https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-november-2022-autumn-statement

	there are many external factors that could affect the realisation of energy savings. To account for this uncertainty, a 10% optimism bias on the estimated energy savings have been applied. This has been applied to the value of the energy savings and all factors derived from this data; this includes carbon savings, comfort taking and air quality benefits.
Additionality adjustment	To account for the uncertainty that some measures might be installed through other policies, such as future WH:SHF waves and ECO schemes, a 10% additionality adjustment have been to all costs and benefits. This accounts for the risk that the analysis may overestimate the number of energy efficiency improvements attributable to SRS MEES.
Number of homes in the social rented sector	The number of SRS homes in scope is informed by the 2016/17 EHS data and adjustments have been made to the housing stock to account for the impact of other policies within the SRS, including the SHDF/WH:SHF, ECO and private installations. The IA assumes that the number of homes in the SRS sector stays constant throughout the appraisal period.

Annex C: Non-monetised benefits of SRS MEES

The annex identifies the non-monetised benefits of the SRS MEES proposal. The introduction of SRS MEES demonstrates the commitment of the government to the social housing sector, and improvements in energy efficiency may lead to an increase in the value of these properties. Such effects are expected to send a strong signal to the social housing sector, increase interest in energy efficiency and drive market demand for energy efficiency products, potentially encouraging future developments of the supply chain. Through these mechanisms, the regulation may lead to additional private efforts from providers in the UK, with the wider benefit of demonstrating the UK's commitment to climate change internationally. The table below provides a summary of the non-monetised benefits of the SRS MEES and the likely impact on the NPV and BCR.

Table 48: benefits of the regulation and likely impact on the BCR/NPV

Benefit	Description	Likely impact on BCR/NPV
Supporting jobs	The proposal will increase demand for the supply of energy efficiency measures, including the installations of these measures. This is expected to generate a benefit through supporting jobs in the retrofit sector and reducing the level of unemployment. However, it is likely to be largely a shift in employment rather than generating lots of new jobs. The IA provides an estimate on the number of direct and indirect jobs supported but this impact has not been monetised or included in the cost-benefit analysis as it is not likely to be a significant net social benefit.	Low
Improving quality of life	The proposal will improve the wellbeing and quality of life of SRS residents, such as reduction in stress and anxiety from lowered energy bill or a warmer home. This benefit is not fully captured by the monetised health benefit.	Low
Supporting groups with protected characteristics	As outlined in section 10, Public Sector Equalities Duty, the proposal is expected to disproportionately benefit people who have a long-term illness or disability or who belong to an ethnic minority as these groups are overrepresented in social housing tenants when compared to the wider population. In particular, over half of households in the social rented sector had one or more household members with a long-term illness or disability, with health benefits already captured in the CBA. For private renters and owner occupiers, this figure is around 30%.	Low

Annex D: Critical Success Factors on the Longlist of Options Considered

	Business As Usual	Regulations	Tax incentives	Grant funding
Strategic fit: **Alignment to meeting policy objectives.** **Holistic fit and synergy with all other related Policies, Regulation and Schemes impacting the Social Housing Sector.**	Providers unlikely to make necessary energy efficiency upgrades due to financial constraints and demands for spend on building safety and new supply.	Providers required to improve energy efficiency in social homes, improving the decency of social homes, cutting bills and reducing carbon emissions.	Could incentivise providers to improve energy efficiency in social homes, improving the decency of social homes, cutting bills and reducing carbon emissions.	Could incentivise efficiency in social homes, improving the decency of social homes, cutting bills and reducing carbon emissions.
Supplier capacity and capability: **Demonstration ahead of Delivery that the capacity and capability of providers and the retrofit supplier base is at the required level to the programme's demand profile.**	No increase in demands on providers or retrofit supply chain.	Providers have been expecting an EPC C MEES for some time. Many have already factored this into their business plans and are prepared for the additional demands that MEES will place on providers. Regulations would increase demand for the retrofit supply chain, however, would also signal govt's intended direction of travel for the sector. This certainty could stimulate the supply chain and mitigate constraints on supply chain capacity. The proposed transition approach for MEES is expected to reduce pressure on the supply chain in the lead up to the compliance date, giving providers and suppliers longer to comply with the higher standard.	Likely to increase demand in the sector, depending on provider uptake of tax incentive offer. Impact likely to depend on generosity of offer and length of time it is available for. Some certainty provided for the supply chain, but limited if the offer is short-term.	Likely to increase demand in the sector, depending on provider uptake of grant funding offer. Impact likely to depend on generosity of offer and length of time it is available for. Some certainty provided for the supply chain, but limited if the offer is short-term.
Potential value for money (for govt): **Demonstration that the longlisted option is designed and configured to achieve greatest VfM.**	No costs for govt resulting in minimal improvements to energy efficiency.	No costs for govt with significant improvements to energy efficiency of social homes.	VfM likely to be linked to generosity of the tax incentive offer. Some energy efficiency upgrades likely to be undertaken, with proportional cost to government.	VfM likely to be linked to generosity of the grant funding offer. Fully subsidising energy efficiency improvements likely to be the most expensive option,

				but likely to deliver significant improvements to the energy efficiency of social homes.
Affordability: **Demonstration by IA modelling that the longlisted options objectives, outcome and benefits are deliverable within providers budgets.**	No additional financial burden placed on providers.	Regulations likely to be the least affordable for providers, however many have already accounted for achieving EPC C in business plans. The spend exemption will protect providers from incurring very high costs to meet MEES by 2030. This will give providers more time to finance the costs of bringing more expensive to treat homes up to the MEES.	Depending on the generosity of the tax incentive offer available, tax incentives could mitigate some of the costs of improving energy efficiency of social homes for providers, allowing the key benefits and outcomes to be delivered without significant financial trade-offs for providers. Providers likely to still have to pay for a significant proportion of the costs of retrofit.	Depending on the generosity of the funding offer available, grant funding could mitigate the costs of improving energy efficiency of social homes for providers, allowing the key benefits and outcomes to be delivered without significant financial trade-offs for providers.
Achievability: **Ability of sector to implement option.**	No additional burdens on providers or wider sector.	Many providers have already factored in meeting EPC C by 2030 into their business plans. RSH will consult on its revised Safety and Quality standard before enforcing MEES. Government will publish guidance for providers on SRS MEES following the publication of government responses to the EPC reform and HEM consultations, to support the implementation of MEES.	Govt would need to administer tax incentives.	A grant funding scheme would need to be administered, either by govt or a delivery agent. Providers would be required to invest resource into applying for the scheme, and resource any ongoing obligations from the scheme, eg reporting, contractor management.