Title: Energy Prices Bill – Supernormal Revenues

IA No: BEIS063(F)-22-ESNM

RPC Reference No: N/A

Lead department or agency: Department for Business, Energy

and Industrial Strategy

Other departments or agencies:

Impact Assessment (IA)

Date: 12/10/2022

Stage: Development/Options

Source of intervention: Domestic

Type of measure: Primary legislation

Contact for enquiries: energybill2021@beis.gov.uk

RPC Opinion: N/A

Summary: Intervention and Options

Cost of Preferred (or more likely) Option (in 2019 prices)

Total Net Present Social Value N/A Business Net Present Value N/A Net cost to business per year

Business Impact Target StatusNon qualifying provision

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

N/A

The problem under consideration is that some low carbon generators currently earn supernormal revenues due to the wholesale price of electricity being set by the current very high price of gas. This is leading to unfair distributional impacts for electricity consumers. The powers being sought in the accompanying legislation would allow government to delink the price paid for low carbon generation from the wholesale electricity price.

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

The powers sought in the accompanying primary legislation allow government to address the high prices being paid by electricity consumers for electricity generated by lower marginal cost generation. The exact objectives and intended effects of the policy will be developed further at secondary legislation stage. Indicative options for the policies that could be implemented with the powers sought include Contracts for Difference and a temporary Cost Plus Revenue Limit. These are explained in this IA to give an idea of the groups impacted only, and most of this IA focusses on describing the range of interventions that could be enabled through the powers sought.

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

There are numerous policies that could be enabled by the powers sought. It is too early to determine what policy is the preferred option, more work will be carried out at secondary legislation stage to inform this. The "do nothing" refers to the state of the world where the government does not intervene to delink the price paid by low carbon generators from the wholesale electricity price, and the price of electricity generated by these plants continues to be set by the marginal plant (pay-as-clear pricing).

Will the policy be reviewed? N/A. If applicable, set review date:						
Is this measure likely to impact on international trade and investment? N/A						
Are any of these organisations in scope?	N/A	Micro	Small	Medium	Large	
What is the CO ₂ equivalent change in greenhouse gas emissions?			Traded:	Non-t	raded:	

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:

(Million tonnes CO₂ equivalent)

Jan lun-ly). Date:

N/A

11 October 2022

Evidence Base

Problem under consideration and rationale for intervention

In this Impact Assessment, 'generators' will be used to reflect low carbon generators of electricity in scope of this legislation. 'Suppliers' refers to electricity suppliers. 'Consumers' refers to electricity consumers (i.e., billpayers), both domestic and non-domestic.

This document will cover supernormal revenue powers only and not other powers sought in the bill – these are covered in separate Impact Assessments.

The wholesale electricity market operates on a pay-as-clear basis where the most expensive electricity generation sold in the market sets the price for all other electricity generation sold within it over a given period. At present, gas fired generation tends to be the marginal technology that sets the price. The current severe global gas supply crisis has resulted in record wholesale electricity prices and consumer bills. Wholesale electricity prices are currently approximately five times higher than pre-crisis levels.

Low carbon generation (such as renewables and nuclear) typically has lower running costs than generators with fuel input costs (such as gas), but this is not feeding through into the wholesale price because of the pay-as-clear system. Whilst this has always been the case, the unprecedented rise in electricity prices means the premium that low carbon generators have the potential to earn above their costs is significantly greater than we would expect in the typical market. As such, some generators have disproportionately benefitted, making supernormal revenues with no increase in costs or risk, while consumers are faced with unaffordable high retail prices for electricity. This legislation seeks to correct the fact that the gas price crisis means our current market design is resulting in unfair distributional impacts for electricity consumers.

Government wishes to take action to reduce these supernormal revenues, and the accompanying burden on consumers, without damaging investor confidence in the UK generating sector or distorting the market.

This legislation will therefore provide the powers to delink the price paid for low carbon generation from the wholesale electricity price, reducing the current supernormal revenues being achieved by some generators. Temporarily reducing the revenues generators receive for electricity will reduce the cost to suppliers. While other policies to reduce bills, such as the Energy Price Guarantee (EPG), are in place, the intervention is expected to reduce the cost to the exchequer (and hence the taxpayer) of those interventions. Once the EPG interventions are finished, this intervention is expected is to reduce bills for consumers of electricity in the short-term.

These measures will cover, but are not limited to, existing Renewables Obligation (RO) and legacy nuclear generators. They will not cover those that already have a CfD (Contract for Difference) unless a generator has a CfD, is generating, but CfD payments have not started yet, where a short-term intervention might be applied. The details of the policy will be set out in secondary legislation.

Regulatory changes are necessary to achieve the policy aims. Without new regulation, there is both no mechanism for revenues from these generators to be reduced, and no way for this saving to be passed through onto consumer bills or the exchequer, ruling out any voluntary interventions. Non-regulatory changes are therefore not feasible for meeting the aims of the intervention. Different examples of interventions that could be put in place with the powers sought are described below.

Interaction with other policies aimed at reducing electricity bills

• The Energy Price Guarantee (EPG) caps domestic dual fuel (electricity plus gas) bills at £2,500 per year for a typical GB household. Whilst the EPG is in place, application of these powers would have the effect of reducing the cost-burden on the government of funding the EPG. After the EPG, any impacts would feed through onto bills for consumers of electricity. This intervention would also alter prices paid by non-domestic electricity customers, although the extent of this will depend on their contract.

Stakeholders affected by interventions that make use of the powers sought include taxpayers, domestic and non-domestic electricity customers, electricity suppliers, low carbon generators in scope of the intervention, and more broadly all businesses operating in the GB and NI electricity markets.

Rationale and evidence to justify the level of analysis used in the IA (proportionality approach)

This impact assessment is supporting primary legislation to enable the government to intervene at a future date, which will require secondary legislation. We have therefore provided a high-level, qualitative assessment of the likely impacts of this policy and will further consider the impacts at the secondary legislation stage when the preferred policy design is known. Given the broad impacts possible, commercial and market sensitive nature of the intervention, and time pressure we believe this is a proportionate approach.

Description of options considered

The primary option being considered is to implement the broad powers that the accompanying primary legislation sets out. The counterfactual is that these powers are not introduced and there is no change to revenues earnt by low-carbon generators.

As indicative options, the powers sought could be used to introduce Contracts for Difference (CfD) and/or a temporary Cost Plus Revenue Limit. The detailed design of either policy has yet to be determined, however the CfD would, in most cases, be like existing Contracts for Difference (CfDs) under the Energy Act 2013. Under the CfD, depending on whether a specified wholesale reference price is above or below a specified strike price when a given MWh of electricity is generated, the low carbon generator is either required to pay or receive the amount of the difference between those two prices per MWh generated in that period. A Cost Plus Revenue Limit could be introduced more quickly than CfDs, by setting a cap for low carbon generation. This would mean that the generator would only pay back the difference between their earnings and the cap, but would not be 'topped up' to the cap price, if the wholesale price falls below that price.

Contracts for Difference (CfDs)

• This option would offer generators who might currently receive market wholesale prices for their electricity plus additional subsidies (such as RO Certificates and Capacity Market payments) onto guaranteed price CfDs. While the proportion of capacity that might be offered CfDs is yet to be determined, this could impact up to around 40GW of low carbon capacity in Great Britain¹. It is the wholesale market that is not functioning effectively so, under these new contracts, generators would retain their existing subsidies, but like for existing CFDs, the wholesale portion of the generator's revenue would in effect be replaced by a fixed price for the length of the contract (which may vary).

Cost Plus Revenue Limit

• Under this option, the government sets a cap that generators receive for their electricity generation in the wholesale market. The length of this intervention is to be determined.

The exact policy design (and therefore the options taken forward) will be determined at secondary legislation stage.

Policy objective

The primary objective of seeking these powers is to facilitate a policy intervention that would delink the price paid for low carbon generation from the wholesale electricity price. It should be noted that consumers, households and, over a shorter initial period, business will be insulated from any significant increase in bills through the EPG. While the EPG is in place, any reduction in suppliers' costs from a

¹ This figure includes GB RO generators and legacy nuclear plants. There is additional RO capacity operating in NI. Sources: https://pris.iaea.org/pris/CountryStatistics/CountryDetails.aspx?current=GB and https://pris.iaea.org/pris/CountryStatistics/CountryDetails.aspx?current=GB and <a href="https://www.ofgem.gov.uk/publications/renewables-obligation-ro-annual-report-2020-21#:~:text=105.26%20million%20Renewables%20Obligation%20Certificates,the%202019-20%20obligation%20year.

policy intervention using these powers would instead reduce the cost to the Exchequer of the EPG. However, once the EPG ends, any impact from the policy will feed through to consumers of electricity.

Any application of these powers would also seek to minimise unintended consequences for the market, which include, but are not limited to, ensuring security of supply, not adversely affecting market liquidity or investor confidence, speed of implementation and simplicity, and targeting supernormal revenues only where they exist.

Summary and preferred option with description of implementation plan

The primary legislation that this IA sets out gives the broad powers to implement numerous policy options, including over both the short and the long term. There are multiple options available at present for scheme start dates, contract lengths, administrators and enforcers. These details will be confirmed in secondary legislation. For now, the IA describes two broad options that could be implemented within the scope of the powers sought.

Monetised and non-monetised costs and benefits of each option (including administrative burden)

The impact of any policy that makes use of the powers sought will depend on uncertain factors including but not limited to precise policy design and future wholesale electricity prices. Subject to this, we have set out our initial view of the potential impact on stakeholders below. As noted above, we have not monetised these impacts at this stage but impacts will be considered further at secondary legislation stage. The majority of the costs/benefits covered below represent a transfer, so this policy will not have a large net present value but could have a large net cost to business as revenues are redistributed from businesses to consumers or taxpayers.

Generators

We expect generators would see a reduction of revenues in the short-term. While wholesale prices remain high and exceed an agreed contract price, generators would pay back the difference. If a longer term CfD is implemented, the contract would provide revenue certainty for generators and may insulate generators from lower prices in future, providing a benefit.

Suppliers

The impact to suppliers will be the inverse of the impacts to generators. The intervention would reduce the net cost to suppliers of buying wholesale electricity from affected generators in the short-term when wholesale prices exceed the agreed strike price. However, it is generally expected that suppliers would pass this onto electricity consumers so, in theory, there is no cost or benefit to suppliers, except for any changes to cash flow depending on how the scheme is implemented.

Consumers/Exchequer

Reducing suppliers' cost of electricity should be reflected in lower bills for consumers in the short-term, depending on the extent suppliers pass savings. In the short-term, consumers will already be insulated from a significant portion of costs through the Energy Price Guarantee (EPG). Where this is the case, savings to suppliers would reduce the cost of the EPG to the government. When the EPG ends for households and, in the nearer-term, businesses we would expect impacts to be passed on through competition on supplier tariffs. We are seeking powers to best allocate savings to ensure savings are passed on. Under CfDs, this intervention would be an additional subsidy to generators if wholesale prices fall below agreed strike prices. This subsidy cost would be considered in Ofgem's price cap calculation and passed on to consumers.

As noted above, while the EPG is in place, we expect that savings for suppliers would reduce the cost of the EPG and be passed on to the Exchequer.

Wider Impacts

Depending on how it is implemented, the intervention may have wider impacts in terms of impacts on inflation (where the EPG is no longer in place), hedging (selling power ahead of time on agreed terms) against persistent or future wholesale price increases, electricity futures market liquidity, and the administrative cost of implementing the policy and auditing generators.

Direct costs and benefits to business calculations

Not applicable as per our proportional approach described above.

Risks and assumptions

As noted above, policy design (including the level of the price/contract determined) and future wholesale electricity prices will significantly affect the scale of the impacts. The further into the future any intervention lasts, the greater the uncertainty around outturn electricity wholesale prices. For CfDs, all else being equal, if wholesale prices fall quickly after initial savings, the lifetime value of intervention for consumers will be reduced, as the policy would become a net cost to consumers (who then top up generators from the wholesale price to the strike price). Conversely, if wholesale prices remain high, the lifetime position for consumers will improve, with more revenue extracted from generators than is paid back.

The extent to which savings can be delivered in the short term also depends on how generators sell their power. It is common for generators to 'hedge', which means they agree terms to sell their power ahead of time. In the short-term, hedges are expected to be at a price much lower than the current wholesale electricity price. This means, in practice, they may not be making supernormal revenues, although in some cases, their hedged price could still be considerably above what they would have expected to earn pre-crisis. There is uncertainty on the level of 'hedging', and at what price, as understanding this would involve reviewing commercial information for thousands of generators. These assumptions will directly affect the impact of the intervention.

Impact on small and micro businesses

The policies that could be implemented from the powers sought will not have a disproportionate impact on small businesses. The fleet of low carbon generators in the UK is varied. The majority are owned by large multinational companies, although it is possible that some small businesses will fall in scope of this intervention. Any costs or reduction in revenues will be proportionate to the size of the generation from the plant, except administrative costs. Therefore, we deem it appropriate to include small businesses in scope, in order to increase the savings from any intervention, and ensure that all generators are impacted fairly.

Wider impacts (consider the impacts of your proposals)

At this early stage, we have undertaken an initial assessment of unintended consequences for security of supply (dispatch incentives) and market reform (the Review of Electricity Market Arrangements, REMA). Further work would be required to develop our understanding once the preferred policy option has been agreed.

Review of Electricity Market Arrangements (REMA)²

REMA aims to deliver an enduring electricity market framework that will work for businesses, industry, and households. Any long-term intervention made possible through these powers could impact the value of potential longer-term reforms consulted on as part of REMA. This will be considered when developing the intervention at secondary legislation stage.

Security of supply

For generators with high input costs, and flexibility over when they dispatch power (primarily fuelled technologies such as biomass), there is uncertainty around the impact of any price offered on their incentive to generate. This is also true for the legacy nuclear plants which are part of the Capacity Market. This could represent a risk to security of supply and potentially also have an impact on Net Zero. These factors will be considered in more detail ahead of secondary legislation, and scheme design will focus on mitigating potential risks and unintended consequences.

Forward market liquidity

Moving a significant portion of current UK generation onto CfDs could significantly impact the liquidity of electricity trading markets. As CfD agreements typically take the day-ahead price as the reference price, this incentivises generators to only trade on day-ahead markets. CfDs could therefore significantly reduce the liquidity of forward trading of wholesale electricity, which suppliers rely on to lock-in prices to match against tariffs offered to consumers. If suppliers are no longer able to do this, it will expose them to risk. This impact may be mitigated by policy design decisions which will be considered in more detail ahead of secondary legislation.

² Link to REMA consultation: https://www.gov.uk/government/consultations/review-of-electricity-market-arrangements

Monitoring and Evaluation

If appropriate, a Monitoring and Evaluation plan will be set out at secondary legislation stage. Policy options have been considered at pace and there are not sufficient details of the intervention to set out a Monitoring and Evaluation plan at this stage.

Title: Energy Price Guarantee (EPG) - Domestic	Impact Assessment (IA)	
IA No: BEIS062(F)-22-NZBI	Date: 12/10/2022	
RPC Reference No: RPC-BEIS-5234(1)	Stage: Final	
Lead department or agency: Department for	Source of intervention: Domestic	
Business, Energy and Industrial Strategy (BEIS)	Type of measure: Primary legislation	
Other departments or agencies: N/A	Contact for enquiries: https://www.gov.uk/guidance/contact-beis	
Summary: Intervention and Options	RPC Opinion: Awaiting Scrutiny	

Cost of Preferred (or more likely) Option (in 2019 prices)				
Total Net Present Social Value	Business Net Present Value	Net cost to business per year	Business Impact Target Status Not a regulatory provision	
N/A	N/A	N/A		

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

The UK is experiencing unprecedented rises in household energy bills, driven by rising global energy prices, at the same time as a wider increase in the cost of other goods. The default tariff cap (the energy Price Cap) rose by 54% in April 2022 and by a further 80% in October 2022. Rising energy prices are placing pressure on the budgets of most households and unmitigated will lead to underconsumption of energy or other essential goods and services during winter with harmful impacts for households, particularly those already vulnerable, as well as detrimental impacts on wider society. The government announced a package of support in May 2022 to help households with the cost of living based on expectations at the time that the October 2022 increase would be ~40%. But the increase is now double that, and while future energy prices are currently highly uncertain, these unprecedented high energy costs are expected to persist beyond this coming winter, pointing to the need for further support.

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

To address this, an intervention is required that could meet the following criteria:

- 1. Providing significant further support to mitigate high energy prices this winter and beyond.
- 2. Available to the broader population, for all those in need and impacted by the increase in energy prices.
- 3. Deliverable ahead of the coming winter, ensuring support is provided over the period of highest

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base) Since early 2022, the government has been monitoring the increase in the cost of living and formulating appropriate policy responses. The announcement of a further increase in the GB default tariff cap pointed to the need to for greater support to be offered beyond the package of measures announced in May. As such, on 8 September 2022, the government announced a new Energy Price Guarantee (EPG), which will mean that, from 1 October 2022, a typical UK dual fuel household will pay an average £2,500 a year on their energy (electricity plus gas) bill for the next two years. This Impact assessment considers the implementation of the EPG compared to a counterfactual of providing no additional support.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: June 2024					
Is this measure likely to impact on international trade and investment?					
Are any of these organisations in scope?	Micro Yes	Small Medium Large Yes Yes Yes		_	
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)		Traded: N/A	Non-t N/A	raded:	

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:	Jan Mur My. Date:	11 October 2022

Summary: Analysis & Evidence

Policy Option 1

Description: Government funded Energy Price Guarantee for two years (October-22 to September-24)

FULL ECONOMIC ASSESSMENT

Price Base	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)		
Year 22/23	Year N/A	Years N/A	Low: Optional	High: Optional	Best Estimate: N/A

COSTS (£m)	Total Trar (Constant Price)	,	Total Cost (Present Value)
Best Estimate	N/A	N/A	N/A

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

The total value of the EPG support paid by the exchequer is estimated to be £31bn across the UK for the first 6 months of the scheme (Oct-22 to March-23). This is a gross cost and does not include ~£4bn reimbursements back to government from energy suppliers over the same period. There will be an additional cost to the exchequer of around £360m to support those hard-to-reach consumers who may not be caught by the core domestic EPG through one-off payments. Other exchequer costs include forgone VAT revenues (up to £1.5bn over 6 months) and the cost to government for developing and administering the scheme (~£16.5m over 2-years). There will also be around £11m direct costs to business linked to familiarisation and dissemination, reporting, and making the necessary system changes to deliver the EPG and reconcile money at the end.

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

There will be costs to Ofgem for administering and, eventually, enforcing the scheme as well as negative externalities associated with energy consumption, such as carbon emissions and air quality costs.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition)	Total Benefit (Present Value)
Best Estimate	N/A	N/A	N/A

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

Domestic gas and electricity customers in the UK will receive around a £29bn transfer over 6 months from government in the form of discounted electricity and gas prices (inclusive of VAT savings) and discretionary funding.

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

Reduced energy costs for households will lead to indirect benefits including avoided negative health impacts associated with the underconsumption of energy and other essential goods and services, avoided burden and associated costs on the health system and economic productivity, reduced household borrowing costs, interest payments, and debt accumulation, reduced levels and depth of fuel poverty, improved social inclusion and cohesion and reduced risk of civil unrest. The EPG will also reduce the risk and associated costs of energy supplier insolvency and help mitigate future increases in inflation.

Key assumptions/sensitivities/risks Discount N/A

The direct costs to government and benefits to domestic gas and electricity customers is highly sensitive to prevailing future energy prices which are highly uncertain, particularly the further out one looks. The analysis in this impact assessment therefore focuses on the first 6 months of the scheme, assuming energy costs consistent with the average gas and electricity forward curves trading over 10-days to 12 September 2022.

BUSINESS ASSESSMENT (Option 1)

Direct impact on b	usiness (Equivaler	nt Annual) £m:	Score for Business Impact Target (qualifying
Costs: N/A	Benefits: N/A	Net: N/A	provisions only) £m:
			N/A

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Introduction

- 1. The cost of living in the UK has been rapidly increasing the inflation level was 9.9% in the 12 months to August 2022¹. A key contributor to this high level of inflation is the unprecedented rise in energy costs, driven by rising global energy prices. The Cost-of-Living package announced in May 2022 provides a mix of targeted and universal support to help households manage these rising costs. However, the expected level and duration of future energy costs is now greater than at the time the package was developed, and so further support is required to mitigate these costs.
- 2. On 8 September 2022, government announced a new Energy Price Guarantee (EPG), which will mean that, from 1 October 2022, a typical UK household will pay an average £2,500 a year on their energy (electricity plus gas) bill for the next two years.²
- 3. Emergency legislation (the Energy Prices Bill) is being introduced to support the delivery of the EPG scheme (and other schemes), which will:
 - create a spending power to allow the Secretary of State for Business, Energy and Industrial Strategy to take steps, including through the provision of financial assistance, to support any person to meet energy costs, thus enabling spending on the EPG,
 - place the operation of the EPG in statute through amendments to necessary legislation, supplier licence conditions and codes, and enable enforcement by Ofgem,
 - reinforce the use of the Ofgem's Default Tariff Cap (price cap) as the reference price for setting the EPG discount for the duration of the EPG, updating Ofgem's duties to have due regard for the impact of price cap setting on public expenditure,
 - provide for similar powers for setting up a scheme in Northern Ireland,
 - require landlords and other intermediaries that include utility costs in rents and fees charged to tenants to pass on the energy bill benefits of the EPG, Energy Bills Support Scheme (EBSS), and non-domestic Energy Bill Relief Scheme (EBRS), where applicable, to their tenants.
- 4. This Impact Assessment sets out the problem and rationale for intervention, a high-level cost-benefit analysis, and a monitoring and evaluation plan for the main GB EPG scheme, Northern Ireland equivalent, and additional funding for those households unable to fully access the main scheme. It has been developed at pace in response to the scale of the rise in the Default Tariff Cap (price cap) from October-22 announced by Ofgem on 26 August.
- 5. Given the time available and the largely indirect nature of the costs and benefits of this scheme, we have not developed a fully quantified cost benefit analysis – most of the costs and benefits identified relate to the spending power with around £11m identified direct costs to business, linked to familiarisation and dissemination, reporting, and making the necessary system changes to deliver the EPG and reconcile money at the end (further detail on direct cost to business is set out on p. 19). As such, we have prioritised monetising the most significant costs of the scheme - the transfer from government, via energy suppliers or discretionary funding, to domestic energy consumers - and drawn from other related analysis to inform qualitative assessments of other costs and benefits.

Problem under consideration

6. The UK is currently experiencing record rises in household energy bills, driven by rising global energy prices. The GB default tariff cap (price cap) for a typical dual fuel household paying by Direct

¹ CPI - https://www.ons.gov.uk/economy/inflationandpriceindices

² https://www.gov.uk/government/news/government-announces-energy-price-guarantee-for-families-and-businesses-while-urgently-takingaction-to-reform-broken-energy-market

Debit rose by 54% in April 2022 (to £1,971) and a further 80% in October 2022 (to £3,549).³ Future levels are highly uncertain, but there are credible scenarios, such as that implied by recent forward market energy prices, that would suggest energy bills could be sustained at high levels over the next two years. For example, forward gas and electricity prices as of 12 September 2022 would imply a further increase in the price cap in January 2023, to around £4,200.⁴ Electricity and gas prices have also increased in Northern Ireland and further rises are anticipated.

- 7. There are several government policy initiatives that were already available ahead of the increase in energy prices to help domestic energy consumers who are fuel poor or in vulnerable situations, including:
 - Warm Home Discount⁵: provides pensioners and fuel poor households with £140 (increasing to £150) off their energy bills.
 - **Energy Company Obligation**⁶: obligated energy suppliers provide energy efficiency measures to fuel poor, vulnerable and low-income households.
 - Winter Fuel Payments⁷: pensioners receive between £100 and £300 to help with heating bills.
 - Cold Weather Payments⁸: people on certain benefits can receive £25 for each 7-day period of very cold weather between 1 November and 31 March.
 - Affordable Warmth Scheme (Northern Ireland)⁹: a grant aimed at low-income households of up to £10,000 to install energy efficiency and improved heating measures.
- 8. However, the rise in energy prices that began in the second half of 2021 meant that further support was required to protect consumers from the sizeable increase in energy bills. This includes protecting consumers who will continue to struggle despite the existing support. For example, a survey from the ONS reporting on consumer experience from November 2021 to March 2022 reported that 40% of respondents found it difficult to pay their energy bills and 19% of households reported increasing borrowing. The most common actions reported by adults who said their cost of living had increased were spending less on non-essentials (57%), shopping around more (36%), using less fuel such as gas or electricity at home (51%), and spending less on food shopping and essentials (35%).
- 9. In response, in May 2022, a £37 billion package of one-off support to help households with the cost of living was announced.¹⁰ This package includes:
 - A £400 Energy Bills Support Scheme payment to all domestic electricity customers;
 - A £650 one-off Cost of Living payment for around 8 million households on means tested benefits;
 - A £300 Pensioner Cost of Living payment for over 8 million pensioner households to be paid alongside the Winter Fuel Payment;
 - A council tax rebate of £150 for all households in council tax bands A to D;
 - A payment of £150 for around 6 million people across the UK who receive certain disability benefits, and;
 - A £500 million increase and extension of the Household Support Fund.
- 10. However, these interventions were based on a projected October-22 price cap level at the time of £2,800¹¹, compared with a final outturn level of £3,549 announced by Ofgem in August 2022, and worsening expectations of future prices. To illustrate the issue, the Cost-of-Living Package delivers a

⁵ https://www.gov.uk/the-warm-home-discount-scheme

 $^{^{3}\ \}underline{\text{https://www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/default-tariff-cap}$

⁴ BEIS analysis

 $^{^{6}\ \}underline{\text{https://www.ofgem.gov.uk/environmental-and-social-schemes/energy-company-obligation-economics}}$

⁷ https://www.gov.uk/winter-fuel-payment

⁸ https://www.gov.uk/cold-weather-payment

 $^{^9 \ \}underline{\text{https://www.nihe.gov.uk/Housing-Help/Affordable-Warmth-Boiler-Replacement/Affordable-Warmth-Scheme} \\$

¹⁰ https://www.gov.uk/government/news/millions-of-most-vulnerable-households-will-receive-1200-of-help-with-cost-of-living

¹¹ Oral evidence provided by Jonathan Brearley to the BEIS Select Committee on 24 May 2022: https://committees.parliament.uk/event/13596/formal-meeting-oral-evidence-session/

one-off benefit of around £800 on average across all households and £1,200 on average to the poorest 10% of households¹². However, the price cap will have increased by around £2,300 between October 2021 and October 2022, and energy prices are currently expected to remain elevated into next winter. This points to the need for further, longer lasting, support beyond the Cost-of-Living Package urgently ahead of the coming winter, and for the broader population.

11. In the absence of additional support, the increase in the cost of energy will require all households to either allocate a larger proportion of their budget to consume the same level of energy at the expense of consumption of other goods and services, reduce their energy consumption, or a combination of both. This problem will be faced by more households than ever before and is expected to be most acute over the winter period when the need for energy to heat homes is greatest and when there is an increased risk to life associated with the weather¹³.

Rationale for intervention

- 12. The current and projected level of energy bills is unprecedented historic bills have not exceeded £1,600 (in real terms) on average before this current crisis¹⁴. Energy is an essential and unavoidable expense for all households. This level of energy bills will create financial difficulties for many households beyond those already in or at risk of fuel poverty and within the scope of existing schemes, and these financial constraints are expected to lead to potentially harmful underconsumption of energy and other essential goods and services.
- 13. Budget and liquidity constraints are likely to mean that many households may be forced to select consumption bundles below desired welfare standards i.e., not sufficiently heating their home, reducing consumption of other essentials such as food or clothing or increase borrowing. In addition, when making this decision, energy consumers may not fully account for the positive externalities associated with their consumption choices, for example health benefits and associated avoided societal costs.
- 14. By January 2023, even households consuming the average amount of energy for the highest income decile could see energy spending exceed 10% of total household expenditure after housing costs (see Figure 1). These energy price rises will also have significant impacts on inflation more generally, further worsening the cost of living without mitigation, private sector forecasters are expecting CPI to peak between 13% and 17%, with an average of 15.5%.¹⁵

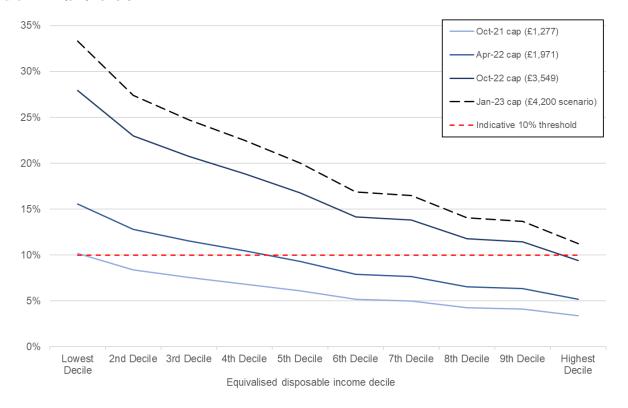
HMT distributional analysis accompanying the May 2022 Cost-of-Living package announcement: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1078837/DA_May_2022_publication.pdf
13 https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/excesswintermortalityinenglandandwales/2020to2021provisionaland2019to2020final

¹⁴ BEIS Quarterly Energy Prices: https://www.gov.uk/government/statistical-data-sets/annual-domestic-energy-price-statistics

¹⁵ Further detail is provided in the 'Benefits' section

Figure 1: Energy spend as share of total expenditure after housing costs at each price cap level from Oct-21 through to Jan-23

Source: BEIS analysis using Ofgem price cap data and ONS Family Spending data. Total expenditure based on FY19/20 levels.



Policy objective

- 15. Given the problem and rationale set out above, an intervention is required that could meet the following criteria:
 - **Provide further, longer lasting, support** to mitigate significantly higher energy prices this winter and beyond;
 - Available to the broader population, for all those in need and impacted by the increase in energy prices; and
 - Deliverable ahead of the coming winter, ensuring support is provided over the period of highest consumption to mitigate the adverse impacts of underconsumption.

Options

Description of options considered

- 16. Since early 2022, BEIS and other government departments have been working closely to track the increase in the cost of living and formulate appropriate policy responses to the rise in the cost of energy faced by households. The GB default tariff cap (price cap) for a typical dual fuel household paying by Direct Debit rose by 54% in April 2022 (to £1,971) and by a further 80% in October 2022 (to £3,549). This points to the need for greater support to be offered beyond the package of measure announced in May.
- 17. As such, on 8 September 2022, the government announced a new Energy Price Guarantee (EPG), which will mean that, from 1 October 2022, a typical UK dual fuel household will pay an average £2,500 a year on their energy (electricity plus gas) bill for the next two years.

18. This Impact Assessment considers the costs and benefits of the EPG against a counterfactual of doing nothing beyond the package announced in May 2022.

Option 0: Do nothing (Counterfactual)

- 19. Under the counterfactual, the EPG would not be developed and, as such, the energy cost reduction benefits would not be felt by bill payers. This is expected to result in a high proportion of domestic energy consumers facing unmanageable energy costs putting increased pressure on household budgets. Around 45% of households have no savings¹⁶ and a recent survey from the ONS reported that 40% of respondents found it difficult to pay their energy bills. Moreover, this is expected to have worsened with increasing energy prices since the time the data was collected.
- 20. Households will need to make trade-off decisions in their budgeting; if they have no savings to rely on, this will mean forgoing consumption of goods and services or expensive borrowing. This is expected to result in opportunity costs for all consumers. In the most vulnerable households this would lead to dangerous levels of underconsumption, such as underheating or undereating. This would likely have additional indirect costs to the exchequer associated with underconsumption of these necessity goods, such as increased strain on the welfare system and NHS particularly over winter periods. Under the counterfactual non-payment of bills may happen at a much larger scale which would further increase energy debt levels, with knock on impacts on individuals' long-term finances. This would also put further pressure on energy supplier cash flows, risking energy market stability, and increasing the likelihood of, and costs associated with, further supplier exits from the market.
- 21. Existing, targeted support schemes, such as the Warm Home Discount, Winter Fuel Payment, Cold Weather Payments, and the May 2022 Cost-of-Living package, will still be available. There may also be initiatives set up by industry or advocacy bodies (for example, several energy suppliers have increased their hardship funds and other energy saving initiatives). While this support will partially reduce the impacts across consumers, this is expected to be an insufficient response to the unprecedented levels of energy prices households will be experiencing. This is both because of the scale of support provided, and the number of households supported by these existing schemes.
- 22. Doing nothing further would also lead to higher levels of inflation. In August, the Bank of England forecasted that inflation could reach around 13% in the following months, citing energy prices as one of the main causes¹⁷. Subsequent external forecasts suggest CPI could peak between 13% and 17%, with an average of 15.5%.¹⁸

Option 1: Government funded Energy Price Guarantee

- 23. Under this option, the government sets an Energy Price Guarantee (EPG) to limit the prices paid by domestic electricity and gas consumers. This will be delivered through a grant to energy suppliers for the difference between a benchmark cost of buying and supplying the energy to their customers (the "reference price") and the EPG (further implementation detail below). This grant will include government covering the costs of "green policies" which will be reflected in the level of the EPG.
- 24. In line with the policy objectives, the rest of this Impact Assessment considers the impacts of an EPG at £2,500 per year, effective for two years from 1 October 2022. The combination of a £2,500 EPG and the May 2022 Cost-of-Living package would ensure that the most vulnerable households would see little change in their energy costs between last winter and the coming winter.¹⁹
- 25. For the first 3 months of the scheme the reference price is assumed to be the Ofgem default tariff cap, and the EPG level is defined in similar terms. As such, £2,500 is an average figure for GB based

¹⁶ https://www.gov.uk/government/collections/english-housing-survey#2020-to-2021

¹⁷ https://www.bankofengland.co.uk/monetary-policy-report/2022/august-2022

¹⁸ Further detail is provided in the 'Benefits' section

¹⁹ £2,500 - £400 EBSS - £650 means tested Cost-of-Living payments - £150 Council tax rebate for bands A-D = £1,300. This compares to an October 2021 price cap level of £1,277 for a typical GB dual fuel household paying by direct debit. Vulnerable households consisting of elderly or disabled individuals will also stand to benefit further from additional measures in the Cost-of-Living Package.

on a typical dual fuel household paying by direct debit.²⁰ The equivalent implied discount will be applied to gas and electricity tariffs in Northern Ireland. This means that the variations in prices between regions and payment methods reflecting differences in associated costs-to-serve, as exist in the default tariff cap approach, are maintained. It also means the cap applies to prices, and not total bills – bills will be higher than £2,500 for households consuming above typical domestic consumption levels, and less for those consuming below.

- 26. There are three broad categories of customers that will either not benefit from the domestic EPG in Great Britain or Northern Ireland, or will only partially benefit:
 - Households supplied via a commercial energy supply: There are between 740,000 and 886,000 UK households and care home residents²¹ that are not supplied from a domestic energy supplier (for example, they are served via a commercial supply contract, such as park homes and heat networks) and would therefore not benefit from the domestic EPG. These customers will be supported by the Energy Bill Reduction Scheme (EBRS) for non-domestic energy customers.
 - Households that use alternative fuels for their heating: Around 2 million UK households use
 fuels other than gas or electricity for heating²² and would therefore only partially benefit from the
 EPG through their general electricity consumption.
 - Households on fixed rate tariffs: Around 6 million²³ customers on existing fixed tariffs will stand to benefit from the EPG but floor rates will be applied to minimise deadweight customers will receive a discount either equivalent to the main EPG discount or up to the point their tariff rates reach the floor level, whichever is less. This means that customers on legacy fixes stand to benefit less from the EPG where their tariff rates are already favourable compared to the EPG. For the first 3-months of the scheme, no new fixed tariff offerings will be in receipt of the discount. Future policy development will consider the treatment of fixed tariffs in future periods.
- 27. Domestic energy consumers that receive their energy via an intermediary with a commercial energy contract will be supported by the Energy Bill Reduction Scheme (EBRS) for non-domestic energy customers.
- 28. Customers that do not use either mains gas or electricity for their heating will be eligible for an additional payment of £100. This payment is aimed at ensuring the percentage increase in prices faced by households using alternative fuels to heat their home is brought to the same level as households using mains gas that are covered by the EPG. More detail on how this figure was derived is set out in Annex A.

Implementation of Energy Price Guarantee option

- 29. The high-level scheme design for the EPG is as follows, with the Energy Prices Bill providing the legislative framework:
 - a) Government sets maximum unit prices for gas and electricity to achieve a £2,500 EPG per year (on average for GB for a typical dual fuel household paying by direct debit) for consumers who are on Standard Variable Tariffs. In the period October-December 2022, the average EPG unit rates for GB for customers paying by direct debit (inclusive of VAT) will be 34p/kWh for electricity and 10.3p/kWh for gas. These unit rates include the cost of removing "green levies" from customers' bills – these costs will instead be covered by the payments made by government to

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²⁰ Consistent with Ofgem's Typical Domestic Consumption Values for a medium dual fuel household: 2.9MWh p.a. electricity and 12MWh p.a. gas

²¹ Annex A of the Energy Bill Support Scheme Impact Assessment

²² BEIS modelling based on English Housing Survey (EHS), Scottish House Condition Survey 2019, Welsh Housing Condition Survey & Northern Ireland housing Statistics.

²³ Ofgem data

energy suppliers. Standing charges will remain consistent with the announced default tariff price cap for October 2022.

- b) Fixed Tariff customers will receive an equivalent unit rate reduction in their tariff but, as many customers on existing Fixed Tariffs are likely to be on comparatively favourable rates, a floor rate (equivalent to £2,500) has been introduced to cap the benefit available to them to reduce deadweight. Those on Fixed Tariffs below the floor will receive no additional benefit and those above will only receive a benefit value that takes them to the floor.
- c) Government enters into private law contracts for an initial term of three months (1 October to 31 December 2022), with all 26 GB domestic energy suppliers, which require the suppliers to offer energy to customers in line with the EPG. There will be two, multilateral contracts (one for electricity and one for gas) with identical terms for all suppliers so that the scheme can be delivered on a level-playing-field basis.
- d) In return, government agrees to compensate suppliers for the difference between the EPG and a 'reference price', representing the maximum reasonable price (per unit of energy) energy suppliers could otherwise have charged. For the first 3-months of the scheme, this reference price will be the default tariff cap (price cap), as announced by Ofgem on 26 August and the unit price discounts will be 4.2p/kWh for gas and 17p/kWh for electricity (excluding VAT). The same unit price discounts will apply in Northern Ireland (see further details below).
- e) The reference price will be reviewed on an agreed, regular basis, possibly quarterly in line with the current price cap timetable. As such, the level of discount required to achieve a £2,500 EPG will vary quarterly.
- f) Xoserve and Elexon, the settlement bodies for gas and electricity respectively, will act as the scheme administrators and make payments to suppliers on an agreed timeline. They will also be under contract with the government. Payment timings are intended to strike a balance between ensuring adequate supplier cashflow and considerations of managing public money and subsidy control. We believe that existing industry systems are capable of providing this service rapidly and slightly in arrears with a weekly frequency.
- 30. This scheme was designed at pace to ensure it could be effective from 1 October. As such, certain design elements may need to be reviewed in future to improve the effectiveness and efficiency of the scheme.
- 31. In Northern Ireland, both the EPG and EBSS will work very similarly to those in Great Britain, as described above, and householders will receive an equivalent level of support. NI energy suppliers will reduce bills by a unit price reduction of up to 17p/kWh for electricity and 4.2p/kWh for gas. Additionally, for the first five months of the scheme HMG will provide additional 'backdating' support to compensate for the fact that customers in Northern Ireland did not receive EPG support in October. The additional rates are as follows: for electricity, 2.91p/kWh, for gas, 0.61p/kWh. This additional support will be paid until the 31 March on top of the 'standard' rate.
- 32. This will take effect from 1 November 2022. This would mean NI household bills typically remain cheaper than GB ones, but that all UK households are receiving the same level of financial support with their gas and electricity bills. This will maintain the price differential that currently exists between the two gas using regions in NI. The same contractual approach would be taken with NI suppliers.
- 33. In future we may not align the NI discounts with GB. Additionally, as there is no quarterly review of prices in NI, we might need to vary the discount more or less often than GB to account for suppliers moving their prices up and down.

Cost-benefit analysis

Justification for the level of analysis

- 34. This Impact Assessment has been developed at pace in response to Ofgem's announcement in late August of a very large increase in the default tariff cap (price cap) from 1 October 2022. It is imperative that the necessary measures to deliver the domestic EPG are in place by 1 October 2022 to ensure domestic energy consumers are supported further, to achieve the policy intent.
- 35. Given the time available, we have had to work around various data constraints. For example, we have limited quantified evidence on the likely costs of the scheme to certain energy participants and Ofgem, or the level and prevalence of certain tariffs, particularly in Northern Ireland. There are also significant uncertainties around market responses under 'do nothing' and under the scheme for example, the demand response to such unprecedented high prices and the impact of the EPG on supplier tariff offerings at different price levels. More data will be collected once the scheme is live, which can inform future reviews. Furthermore, the main costs and benefits relate to spending powers and are therefore considered indirect.
- 36. As such, for this Impact Assessment, we have not developed a fully quantified cost benefit analysis. Rather we have prioritised monetising the most significant costs of the scheme the transfer from government via energy suppliers or discretionary funding to end consumers and drawn from evidence gathered in the process of developing the EBSS to inform other costs and benefits, accompanied by qualitative assessments of how these might differ under the EPG. Where the time available has limited our ability to fill data gaps for any quantification, we have made simplifying assumptions, and these are set out in the relevant sections below.

Costs

Cost of the grant for domestic gas and electricity

37. The largest cost of the scheme will fall on the exchequer to fund the reduction in domestic gas and electricity unit rates to achieve the target unit rates – this is essentially a transfer from government via energy suppliers to domestic energy consumers. This cost is particularly sensitive to prevailing future wholesale energy prices and demand but, based on the 10-day average forward prices for gas and electricity to 12 September 2022, we estimate the total cost of the UK scheme for the first 6-months to be £31bn²⁴ (nominal undiscounted). This is a gross cost and does not include repayments from energy suppliers back to government for subsidy not spent on fixed tariffs bounded by the floor rates. These repayments could be in the region of £4bn across the first six months, based on a simplified assumption of a straight-line decline in the number of fixed tariffs over the course of the scheme.²⁵

²⁴ The costs of delivering the EPG to households in Great Britain over the first six months is £30bn and £1bn in Northern Ireland

²⁵ According to Ofgem, there are expected to be around 6 million customers on fixed tariffs as of 1 October 2022, the majority of which are likely to be on favourable legacy rates (given limited availability of attractive fixes over the past year), although these are likely to expire over the course of the next 2-years. This compares to an estimated 14 million customers on fixed tariffs on 1 October 2021. We assume a simplified assumption of a straight-line decline in the number of fixed tariffs and an upper bound assumption that all these variable rates are below the EPG to arrive at this estimate.

Equivalent support for hard-to-reach consumers

38. The cost to the exchequer of providing a £100 support payment to UK households off the gas grid will depend on how accurately this support can be targeted. Households using district heating or electric heating will already be supported by the EBRS or EPG and may be out of scope for this payment. The total cost is estimated to be between £220m and £500m²⁶ over the winter months, with a central estimate of £360m.

Forgone VAT revenues

39. There will also be an indirect cost to government in the form of reduced VAT revenues collected from end consumers of gas and electricity at the 'do nothing' price cap level. This could be up to 5% of the final grant amount, or up to around £1.5bn in the first 6 months of the scheme. This is likely an overestimate given the expected demand reduction at price levels under 'do nothing'.

Government administrative costs

40. There will also be costs for government and industry (including suppliers and delivery bodies) for developing and administering the scheme. The cost to government to administer the domestic EPG is estimated to be £16.5m (excluding additional legal costs) over the two-year delivery period, based on an extrapolation of the costs of administering the EBSS. There will also be additional costs associated with delivering support to alternative fuel consumers although these could be minimised by making use of delivery vehicles similar to the EBSS framework for delivery to these consumers. There are also expected to be costs to Ofgem for their role in administering and eventually enforcing the main scheme for gas and electricity in GB, but these have not been estimated at the time of writing.

Business administrative costs

- 41. We do not have formal cost estimates for business, but we can make a qualitative assessment based on more developed costings for EBSS. The costs borne by domestic energy suppliers is estimated at £44m to deliver the EBSS across the UK delivered between October 2022 and March 2023, although over 90% of these costs are associated with delivering the EBSS payments themselves - under EPG there is no requirement on suppliers to make payments to customers like EBSS, including the significant avoided cost of delivering vouchers for traditional prepayment customers. The support offered through EPG is expected to be of a substantially higher scale, duration, and involves a volumetric subsidy for both gas and electricity supplies. This will require energy suppliers to apply floor rates, and deal with the required reconciliation process which could add complexity and cost. In the absence of the EPG suppliers would still be required to change tariffs on a quarterly basis in line with the default tariff cap and the EPG scheme will be refined to ensure that a more automated system is developed as soon as possible to reduce future costs. Over time, the number of tariffs on which floor rates and reimbursements need to be applied will also fall as fixed term tariffs come to an end and customers default to the EPG level. Furthermore, the use of Elexon and Xoserve, who collect the required volume data to deliver the scheme, avoids the need to collect any additional data from suppliers thus reducing the burden on them.
- 42. Overall, our expectation is that the EPG could be less costly for energy suppliers to administer than EBSS. Using a simplified assumption of scaling 10% of EBSS costs by the higher value of the EPG in the first 6 months, this would imply a smaller cost to suppliers of around £11m for the first 6 months²⁷. Applying a reasonable adjustment factor on top of this for the handling of fixed tariff floor rates and associated reimbursements would still likely put this below EBSS over the same period.
- 43. The extent to which industry costs are absorbed by suppliers or absorbed by government or consumers in future will depend on the extent to which they are reflected in future reference prices

²⁶ This range reflects the dependency on the delivery mechanism and associated targeting effectiveness.

²⁷ Simplified cost to business EPG = (£44m*10%)*(£31bn/£12bn) = £11m

and will be a consideration of future policy development. These costs may also be offset by benefits to suppliers from reduced debt accumulation and customer non-payment because of the EPG.

Negative externalities associated with consumption of energy

44. There will also be additional costs in the form of negative externalities (carbon emissions, air quality impacts) associated with consumption of energy. However, it is important to note that the primary objective of the intervention is to result in safer levels of energy consumption, and that, even with the intervention, the resulting energy consumption is not expected to place the UK off track for meeting its carbon budgets given the scale of price increases expected and given a £2,500 EPG is still above historic energy price norms. No estimates have been made at this stage given high levels of uncertainty around future prices under "do nothing" and the fact that current energy price levels are far beyond any variations used to assess price elasticity of energy demand in most literature.

Benefits

Reduced domestic energy bills

45. Benefits of the EPG will primarily accrue to domestic energy customers in the form of lower prices to enable consumption of energy mainly. As with the direct costs to the exchequer, this benefit is particularly sensitive to prevailing future wholesale energy prices and demand but, based on the 10-day average of forward prices for gas and electricity trading in the period over the period 12 September 2022, we estimate the total benefit of the UK scheme to domestic energy consumers for the first 6-months to be £29bn.²⁸

Reduced underheating, avoided negative health impacts and reduced welfare costs

- 46. Underconsumption of heating can lead to, or exacerbate, health issues²⁹ and their associated knockon adverse effects on the wider economy, including burdens and costs on the National Health Service and reduced productivity. The timing of these indirect benefits also needs consideration as winter is typically a time when the health service is already under strain due to flu, COVID and other associated conditions.
- 47. The EPG helps mitigate against this by reducing prices and enabling more energy consumption and higher temperatures in homes, specifically over the winter period. While we have been unable to monetise the effect of the EPG on this, we can draw qualitative and quantitative conclusions from other studies. A study on the effect of heating costs in the United States found that lower energy prices help prevent winter deaths³⁰. This is supported by findings from a previous Warm Home Discount evaluation, which found a small increase in the temperatures of properties in receipt of the grant. In addition, a Building Research Establishment (BRE) report estimated that excess cold in ~800,000 homes led to health costs of ~£6 billion annually, and £15 billion in total wider society costs.

Reduced incidence of fuel poverty

48. The EPG can lead to a reduction in the level of fuel poverty by directly reducing the cost of energy relative to the counterfactual. BEIS analysis of the impact on fuel poverty^{31 32} in England suggests that, taking account of other support such as EBSS, a £2,500 EPG compared with the £3,549

²⁸ Equivalent to the total cost of the UK scheme and discretionary funding plus foregone VAT minus reimbursements.

²⁹ https://www.nice.org.uk/about/nice-communities/social-care/quick-guides/helping-to-prevent-winter-deaths-and-illnesses-associated-with-cold-homes

 $[\]frac{30}{\text{https://www.nber.org/bh-20192/lower-heating-prices-prevent-winter-deaths-particularly-cardiovascular-and-respiratory-causes}$

³¹Fuel poverty defined using Low Income Low Energy Efficiency (LILEE), finds a household to be fuel poor if it has a residual income below the poverty line (after accounting for required energy costs) and lives in a home that has an energy efficiency rating below Band C. https://www.gov.uk/government/publications/sustainable-warmth-protecting-vulnerable-households-in-england

³² Full details on BEIS approach to modelling fuel poverty impact can be found here: https://www.gov.uk/government/publications/fuel-poverty-statistics-methodology-handbook

October 2022 price cap level could lead to 600,000 fewer households in England in fuel poverty. We would also expect improvements in fuel poverty levels in other UK countries.³³

Reduced impact on inflation

49. At a macroeconomic level, by directly influencing the unit price of energy for domestic customers, the EPG has a high likelihood of mitigating increases in inflation metrics (CPI, CPIH, RHI) that would occur under "do nothing". Subject to ONS determination, a range of external forecasts suggest the EPG could reduce peak CPI by around 4-5 percentage points (see Table 1).

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³³ Fuel poverty is a devolved issue, with each nation in the UK having its own fuel poverty definition and targets, therefore cross-regional impacts are not directly comparable.

Table 1: External forecaster assessments of the inflation impacts of EPG

Forecaster (commentary on effect of bills freeze)	Peak CPI post-EPG	Peak CPI pre-EPG	Change, ppts
Citi (peak in January)	11.7	17.4	-5.7
Panmure Gordon (peak in Q4 2022)	10.2	16.6	-6.4
Goldman Sachs (peak in October, pre-freeze peak in January)	10.9	14.8	-3.9
Nomura	-	-	-4.5
Capital (may peak at 11% in October)	11	14.5	-3.5
HSBC (peaking earlier and lower in October)	10.3	14	-3.7
Pantheon (peak may be 10.1)	10.1	17	-6.9
Barclays (already peaked in July)	10.1	13	-2.9
MS (peak lowered by 4.5pts)	11	15.5	-4.5
PWC (between 11 and 13)	12	17	-5
ING (up to 6pp off January peak)	10	16	-6
Average	10.7	15.6	-4.8

Reduced household borrowing and interest payments

50. In the absence of the EPG, many households will likely increase their borrowing to pay for their energy bills. The ONS reported that, for June 2022, 20% of adults surveyed said that they had increased borrowing or were using credit from the previous year.³⁴ The cost of borrowing will vary depending on the type of finance and individual circumstances, but average figures reported by the Bank of England³⁵ suggest interest payments could be between 4% and 34% across overdrafts, credit cards and personal loans. If, in the absence of the EPG, consumers raised the equivalent funds by borrowing, this would represent a disbenefit in the form of interest payments for the borrower. The range of total savings in borrowing costs for the first six months is estimated between £130 and £359 for a household with typical energy consumption that would need to borrow the entire difference between energy costs without the EPG and with the EPG³⁶.

Reduced risk of debt accumulation and supplier insolvency

51. There are reported to be around three million domestic gas and electricity accounts which are either in debt or arrears³⁷. This is expected to increase with recent (and future) energy price increases. The EPG is anticipated to improve the ability of energy consumers to manage their energy bills, and so reduce the risk of non-payment. This will also reduce energy suppliers' cost of borrowing to service those debts, so reducing their cashflow problems and risk of insolvency at a time when energy supply businesses are financially constrained. This has the knock-on benefit of reducing expected future costs of insolvencies that would be mutualised across the market. As an illustration, the total mutualised cost of winter 21/22 supplier failures is estimated at £2.7bn.³⁸

 $^{^{34}\}underline{\text{https://www.ons.gov.uk/people population}} and community/wellbeing/datasets/public opinions and social trends great britain household finances$

³⁵ https://www.bankofengland.co.uk/statistics

³⁶ A household with typical usage will save an estimated £1,057 across the first six months. To estimate the avoided interest payments on borrowing we have assumed the interest rate of overdrafts (34%) and personal loans (4%) in line with evidence from the Bank of England. We also assume the term of the borrowing for overdrafts is 1 year, and 5 years for personal loans.

https://www.ofgem.gov.uk/energy-data-and-research/data-portal/all-available-charts?keyword=debt&sort=relevance Accessed: 03/08/22

National Audit Office analysis of Ofgem data as at May 2022: https://www.nao.org.uk/wp-content/uploads/2022/03/The-energy-supplier-market.pdf

Wider societal benefits

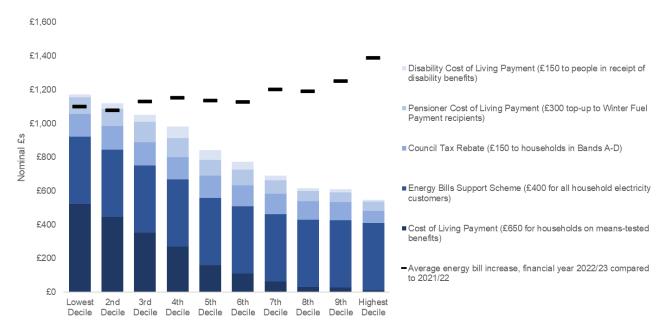
52. Reduced energy costs can also have wider societal benefits, such as improved social inclusion and cohesion, and reduced risk of civil unrest.

Distributional impacts

- 53. All households are intended to benefit from the EPG. As it is a volumetric measure, the absolute financial value of the benefit will be greatest among those households with highest energy demand this could include households with large homes and large numbers of appliances and/or an electric vehicle, as well as households in relatively inefficient homes or otherwise high energy needs including those in or at risk of fuel poverty. Households with the lowest energy usage will therefore receive the lowest financial benefit including those in smaller or more efficient homes and homes with small-scale onsite electricity generation (like solar PV).
- 54. In general, the value of the support will represent the greatest benefit as a share of income/expenditure to the lowest income households. These households are also most likely to experience the wider benefits set out above since they are least able to absorb increased energy costs without this support. To provide an indication of what this support implies for households with different incomes, we have carried out analysis of the combined impact of the May 2022 Cost-of-Living package and a £2,500 EPG, which shows that households in the lowest income deciles are on average slightly better off in Financial Year (FY) 2022/23 than FY21/22 (see Figure 2). The EPG limits the average increase in energy bills for the lowest income decile to around £1,100 which is more than offset by support from the May 2022 package of around £1,200 in the absence of the EPG the increase in bills would be around £2,100.

Figure 2: Average energy bill increase between FY21/22 and FY22/23 with a £2,500 EPG compared against the May 2022 Cost-of-Living package

Source: BEIS analysis using ONS family spending data and HMT analysis of the May 2022 Cost-of-Living package.



Direct costs and benefits to business

- 55. As in the 'Cost' section, we have provided an indicative cost to business of delivering the domestic EPG of around £11m in the first 6 months across the 32 energy suppliers the UK. We consider all these administrative costs to be direct, with the possible exception of some of the 'other administrative costs', in line with RPC guidance³⁹. We also note there could be some cost savings to energy suppliers. The key areas where energy suppliers are expected to incur costs and benefits are discussed below:
 - **Familiarisation and dissemination:** Reading and understanding new regulatory requirements and guidance is assumed to happen at an energy supplier level. This includes the time associated with creating guidance, planning implementation and dissemination to wider teams through training.
 - **Reporting:** Energy suppliers will be required to report before, during and after the EPG. Across the lifetime of the EPG, energy suppliers will be required to report monthly delivery, certification and submit information for counter fraud analysis. This is assumed to be carried out by a mixture of internal financial and business analysts, with approval provided by senior officials.
 - Delivering the EPG: All suppliers are expected to bear costs associated with communicating to
 customers to inform them of the EPG's impact on unit energy costs. This could be delivered via
 e-mail or post. Energy suppliers are also expected to incur some costs for applying the price
 floors for fixed tariff customers each quarter. However, the number of existing fixed tariffs on
 which a floor is applied is expected to decline over the course of the scheme, and the scheme
 will be refined to ensure that a more automated system is developed as soon as possible to
 reduce future costs.
 - **Reconciliation:** After receiving the funds from the scheme administrators, the energy supplier will provide data on overpayment in relation to applying the floor to existing fixed tariff customers

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³⁹ https://www.gov.uk/government/publications/rpc-case-histories-direct-and-indirect-impacts-march-2019

to the administrator. At the end of the scheme energy suppliers may have to return any overpayments to HMT. As above, we would expect this cost to decline over time.

- Other administrative costs: There could also be some additional administrative requirements
 related to communicating with customers, dealing with in-coming calls about the scheme and
 preparing the required documentation for audits. In particular, additional customer calls have
 been stated as a concern for energy suppliers in response to emerging malicious
 phishing/spamming campaigns. However, it is challenging to assess what proportion of these
 would be additional because of the EPG, given that at the same time energy prices will be
 increasing and the EBSS will be delivered.
- 56. There will also be benefits to suppliers in the form of reduced costs associated with customer responses to prices that would otherwise have risen above the EPG level, such as the costs of managing customer non-payment and debt accumulation, as well as wider knock-on benefits of improved market stability. These have not been quantified at this time and it therefore has not been possible to reliably assess the extent to which these will outweigh the direct costs to businesses of the scheme. However, given the need to act urgently and at scale to deliver an intervention, we consider these costs justified.
- 57. The reduction in the unit cost of energy for the EPG targets domestic customers only and is government funded, as such so there is no direct cost or benefit to businesses as energy consumers. The Energy Bill Relief Scheme (EBRS)⁴⁰ has been announced to provide support to non-domestic energy customers such as businesses, charities, and public sector organisations for rising energy costs.
- 58. Furthermore, the introduction of legislation which requires landlords who offer all-inclusive rents to pass on the full benefits of such schemes to tenants is expected to have an impact on some landlord and letting agencies. Evidence on the prevalence of all-inclusive rents is limited, according to a Citizens Advice around 13% of tenants⁴¹ have their energy managed by their landlord but only a subset of these will be on an all-inclusive basis. These landlords or agents may face additional administrative burdens in familiarising themselves with the requirement and passing these costs through to tenants. However, this would only be additional if in the absence of the legislation they would not have passed on the support. This is expected to be a quick desk-based exercise for landlords or letting agents and come with minimal additional costs.

Key assumptions and uncertainties

59. There are several uncertainties, inherent in the above analysis. The most material ones are:

- Future energy prices: The costs and benefits are highly dependent on future wholesale gas and electricity prices, which will directly affect the reference price and therefore the level of the support. Energy prices are currently highly volatile, leading to significant uncertainty over the proposed two-year duration of the EPG. Costing has therefore focused on the first 6-months of the scheme where the uncertainty is much narrower the default tariff cap for the period October-December 2022 is already set although uncertainty remains as to the level for January-March 2023, where we have assumed the 10-day average gas and electricity forward curve prices trading over the period to 12 September 2022.
- **Household energy consumption**: The costings are based on historic average domestic demand for gas and electricity⁴². Given the increase in energy prices, it is reasonable to expect that energy consumers may reduce their consumption in response, as indicated by the result of

41 https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/room-for-reform-embedding-fair-outcomes-for-tenants-in-tomorrows-retail-energy-market/

 $^{{\}color{red}^{40}} \; \underline{\text{https://www.gov.uk/government/news/government-outlines-plans-to-help-cut-energy-bills-for-businesses} \\$

⁴² Average temperature adjusted demand over the past five years taken from BEIS energy statistics: https://www.gov.uk/government/statistical-data-sets/annual-domestic-energy-price-statistics

the aforementioned ONS survey. If consumption is in fact lower than historic trends, the total costs of the scheme will be lower than estimated here. However, actual consumption and therefore costs will also be influenced by the weather and other factors.

- The scale of administrative costs: There is uncertainty over both government and industry administrative costs to deliver the EPG. As discussed, the costs around developing and administering the EPG for government have been estimated by BEIS and, for industry, we have used the costs of the EBSS scheme as a comparator. Energy suppliers should be incentivised to keep these costs to a minimum to remain competitive, although uncertainty over the total cost remains.
- The extent of industry admin cost and benefit pass through: Energy suppliers will bear
 costs and benefits associated with delivering the EPG. These could be included in future
 reference prices and hence the support provided by government. This would enable energy
 suppliers to recover the majority of these from consumers on default tariffs while reducing the
 extent of overcompensation (see next section).

Policy uncertainties, issues, and unintended consequences

- 60. There are a number of implications of the initial policy design which will need to be considered and managed across the delivery of the EPG. These are summarised below:
 - Deadweight: There are likely to be issues of deadweight given this is a universal measure, reflecting the challenges of developing a more targeted scheme in time for delivery ahead of this winter. Despite the significant increases in energy costs, there are likely to be households for which energy prices under "do nothing" would still be manageable and not lead to issues of underconsumption, mostly likely those with higher incomes. The share of the spend on the scheme that is deadweight reduces the higher energy prices are under "do nothing".
 - Overcompensation: Under the initial design of the scheme, there is likely to be some
 overcompensation of energy suppliers for supply costs avoided. For example, within the price
 cap, there are scalable allowances associated with the costs of energy. Where these are
 associated with customer responses to price levels (e.g., customer non-payment and debt
 servicing), these would be partially avoided by the EPG. The extent of overcompensation will
 depend on the levels of future "do nothing" prices and the consumer response to these
 emerging high prices. This overcompensation may be mitigated in future reviews of the
 reference price.
 - Enforcement of contracts based on common law: The EPG is being delivered via private law contracts between the government and energy suppliers. There is therefore a risk not every energy supplier opts to sign up to the scheme, and therefore the customers of those energy suppliers would not benefit from the scheme. Reputational damage as well as the very high likelihood that non-participation would lead to a major loss of customers, could act as a mitigating incentive. Once the scheme is placed on a statutory basis, this risk will be removed as all licensed suppliers will be required to take all reasonable steps to partake.
 - Customers who pay for their utilities via rents: Where households pay for their utilities within
 rents (all-inclusive rents) new legalisation is being introduced as part of the Energy Prices Bill to
 ensure intermediaries including property owners pass on the benefit to end users in line with the
 arrangements in their respective contracts or tenancy, and guidance is being developed to
 advise how tenants should expect to benefit from the scheme, as well as how to challenge
 where necessary.
 - The scheme is insufficient: The Cost-of-Living package announced in May 2022 includes
 additional one-off support which, combined with EPG, means the most vulnerable households
 should see minimal increases in their energy costs between last winter and the coming winter,

but there is no further support yet announced for next winter. The government continues to monitor the cost-of-living situation and does not rule out the need for further targeted support in future years.

• Gaming and fraud: As with any large government spend, there is a risk of fraud or gaming. Any gaming/fraud by energy suppliers or consumers could impact on the funds delivered by the EPG and could mean the funds would not be used for the policy intent, reduce the effectiveness or increase the cost of the EPG. The BEIS Counter Fraud team has established, with the Public Sector Fraud Authority (PSFA), an Energy Price Guarantee Assurance Programme (EPGAP) where suppliers and payment bodies must provide the SoS and its data processor (Cabinet Office) with data relating to consumer supplies for the purpose of monitoring performance, auditing parties, and conducting fraud, error and assurance compliance checks with the Scheme. The Public Sector Fraud Authority (PSFA) will continue to develop their assessment of the scheme and develop any necessary further controls. In addition to the EPGAP, there are already provisions within the contracts to deal with any instances of fraud discovered in the course of the scheme and the risk will be further mitigated by taking the necessary powers in planned emergency legislation to provide Ofgem with the ability to fully undertake compliance and enforcement activities in reference to supply licence conditions.

Impact on small and micro businesses

- 61. The domestic EPG main scheme will be delivered by all electricity and gas suppliers who serve and have a direct relationship with their domestic electricity and gas customers in the United Kingdom. According to the latest Ofgem data, there are 26 energy suppliers in the GB domestic retail energy market, with around 11 suppliers classified as either a small business or microbusiness as of 13 May 2022⁴³. In total these 11 suppliers currently serve fewer than 150,000 consumers. In addition, as of Q1 2022 there are 3 domestic energy suppliers supplying electricity only and 3 domestic energy suppliers supplying both gas and electricity in Northern Ireland⁴⁴. These suppliers will deliver the domestic aspect of the EPG in Northern Ireland. We do not currently have data on how many of these suppliers are small and micro businesses.
- 62. The EPG aims to support as many domestic energy customers as possible in the United Kingdom. As such, any exemption for suppliers would not be in line with the policy intent and to the detriment of customers and their suppliers. There will be no additional or different requirements placed on small or micro businesses. However, we recognise the impact of delivering the EPG may be felt differently across energy suppliers.
- 63. We expect some similarity in experiences as with delivery of the EBSS and can therefore draw from responses to the EBSS consultation and engagement with suppliers. This feedback suggests smaller suppliers could face an increased administrative burden owing to their inability to change ways of working or the makeup of their customer base. Conversely, we have also heard from some suppliers that these smaller entities may be able to respond to delivery requirements in a more agile way because they have smaller customer bases and less cumbersome and legacy ways of working. The reporting requirements of the EPG are expected to be similar to the existing reporting all suppliers submit to Ofgem, which is expected to reduce additional complexity. Ultimately, the experience is expected to vary across suppliers, dependant on their business model.
- 64. Overall, while suppliers may face different challenges in delivering the EPG, and there could be a greater impact placed on small or micro businesses, the potential for this is assessed to be outweighed by the importance of ensuring as many customers as possible benefit from the EPG and that competition is not distorted by excluding some customers and suppliers from this scheme.

 Moreover, the response to the EBSS consultation suggested that all suppliers would be incentivised

⁴³ Based on BEIS analysis of Companies House data https://www.gov.uk/guidance/companies-house-data-products

⁴⁴ https://www.uregni.gov.uk/files/uregni/documents/2022-06/Q1%202022%20QREMM%20%28FINAL%29v2.pdf

to deliver such schemes as cost effectively as possible to maximise their competitiveness and deliver the greatest benefit to their customers.

65. Furthermore, the introduction of legislation which requires landlords who offer all-inclusive rents to pass on the full benefits of such schemes to tenants is expected to have an impact on some landlord and letting agencies, some of which are likely to be small or micro businesses. Evidence from the English Housing Survey suggests that only around 0.6% of rental properties offer all-inclusive rent, translating into approximately 60,000 households in the UK⁴⁵. These landlords or agents may face additional administrative burdens in familiarising themselves with the requirement and passing these costs through to tenants. However, this would only be additional if in the absence of the legislation they would not have passed on the support. This is expected to be a quick desk-based exercise for landlords or letting agents and come with minimal additional costs.

Equality impacts

- 66. We have also considered the equality implications of the preferred option. This included a Public Sector Equality Duty (PSED) assessment which has been completed for the preferred option. Overall, we believe that the EPG will have a positive impact for all recipients, including those that share the protected characteristics assessed under the PSED requirements. This is due to automatically providing support to all domestic gas and electricity consumers in the UK without an application process.
- 67. As already discussed in this Impact Assessment, this aims to help all UK households manage unprecedented levels of energy prices and help avoid dangerous levels of underconsumption of energy or other goods/services. However, we recognise that there are several impacts of the EPG design which could have varying impacts across different groups. The EPG will provide the greatest benefit to the fuel poor and those households most likely to be facing financial difficulties because of significantly high energy costs, for whom energy, as an essential service, represents a significant share of total household expenditure or income. People with protected characteristics such as age, disability, and ethnicity are typically disproportionately represented among this group. The concern about paying energy also differs between protected characteristics. A summary of the key considerations is set out below.
- 68. **Religion:** the median hourly pay in England and Wales in 2018 was lowest for those who identified as Muslim⁴⁶ and so may derive a greater benefit from EPG assuming energy expenditure makes up a greater proportion of their income.
- 69. **Age:** in 2021 the UK median weekly pay for employees in their 40s was 35% higher than employees in their 20s and 80% higher than those aged between 18-21⁴⁷. The median equivalised fuel costs increase as the age of the oldest person in the household increases for those households who have an individual above the age of 24⁴⁸ suggesting higher demand and therefore a higher absolute benefit from EPG. People aged 25-54 were more likely to be very or fairly worried about energy bills (74% compared with 60% of those aged 55 and over, and much lower at 42% of those aged 16-24). The propensity to be most worried about energy bills compared with transport or food expenditure was lower for people aged 16-24 (32% compared with 62% of those aged 25 and over). However, those aged 16-24 were also more likely to say that this doesn't apply to them (16% compared with 2% in all other age groups) which partly explains this difference.

https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/religion/articles/religioneducationandworkinenglandandwales/february20 20#earnings

48 https://www.gov.uk/government/statistics/fuel-poverty-supplementary-tables-

Based on 28m UK households (ONS - https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families) and EHS - report.pdf

https://commonslibrary.parliament.uk/research-briefings/cbp-8456/

- 70. Disability or vulnerability: of those surveyed in 2020 by the ONS Wealth and Assets Survey⁴⁹, over 40% of adults in Great Britain have a combined financial and property wealth below £23,249. Of those poorer households 41% have a physical or mental disability⁵⁰ and so may derive a greater benefit than those who earned higher wages and so were less sensitive to the pressure of increasing energy prices. Furthermore, households with energy-using health equipment will typically be associated with higher energy use and stand to benefit more from this volumetric scheme. The lead causes of excessive winter deaths are lung and heart conditions, dementia, and Alzheimer's related to the excessive cold – the greatest impact being among older age groups⁵¹. Dangerous underconsumption of energy leading to colder households could exacerbate the issue of excessive winter deaths. The energy costs reduction brought by the EPG should help mitigate placing many people with health vulnerabilities at risk compared the counterfactual. There is little difference in the energy efficiency, median floor area (that would require greater heating expenditure for a bigger home all else equal), and median equivalised fuel costs of those households that are deemed vulnerable⁵² compared to those that are not. The fuel poverty gap is greater for those in non-vulnerable households, but the proportion of those in fuel poverty is greater in vulnerable households compared to non-vulnerable households, potentially explained by a lower median equivalised income in vulnerable households.
- 71. **Ethnicity:** The median household wealth⁵³ was lowest for those where the household representative was of Black African ethnicity, over 10x less than the highest median earners (of Indian ethnicity)⁵⁴. Again, these lower income households may derive a greater proportional benefit from the EPG and have been disproportionately negatively impacted from potential energy price rises in the absence of the EPG. Households where the household reference person was of white ethnicity had higher median equivalised fuel costs, less efficient homes, and larger homes than those households whose household reference person was of an ethnic minority. This resulted in a higher average fuel poverty gap for white households, albeit the proportion of households in fuel poverty was lower in white households than ethnic minority households due to a higher median income⁵⁵.
- 72. **Sex and household composition:** According to the BEIS Public Attitudes Tracker⁵⁶ women were more likely to be very or fairly worried about energy bills (69% compared with 60% of men) and the propensity to be most worried about energy bills compared with transport or food expenditure was higher for women than men (61% compared with 55% of men). Couples aged over 60 with no dependent children had the largest, least efficient homes with the greatest average fuel poverty gap compared to other household compositions⁵⁷ and therefore stand to benefit more, in absolute terms, from this volumetric measure.

Monitoring and Evaluation

73. We are planning an approach to monitoring and evaluating the EPG that is proportional, supports scheme delivery and can feed into key policy review points and provides the necessary insights

 $\frac{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/adhocs/14597analysisofwealthandassetsbydisabilityageandincomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/adhocs/14597analysisofwealthandassetsbydisabilityageandincomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/adhocs/14597analysisofwealthandassetsbydisabilityageandincomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/adhocs/14597analysisofwealthandassetsbydisabilityageandincomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/adhocs/14597analysisofwealthandassetsbydisabilityageandincomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomegreatbritainapril2018tomarch2020}{\text{https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomegreatbritainapril2018tomarch2018tomarch2018tomarch2018tomarch2018tomarch2018tomarch2018tomarch2018tomarch2018tomarch2018to$

 $\underline{https://www.ons.gov.uk/people population and community/personal and household finances/income and we alth/datasets/household we althing reatbrita \underline{inbyethnicity}$

⁴⁹

⁵⁰ Mental disability is referencing those with learning, memory and recognition of physical danger disabilities according to the ONS Wealth and Assets Survey

⁵¹ https://www.gov.uk/government/publications/health-matters-cold-weather-and-covid-19/health-matters-cold-weather-and-covid-19

⁵² A household is determined as vulnerable in these statistics if it contains at least one household member who is 65 or older, younger than 5 or living with a long-term health condition affecting mobility, breathing, heart or mental health condition.

⁵³ Excluding private pension wealth

⁵⁴

⁵⁵ https://www.gov.uk/government/statistics/fuel-poverty-supplementary-tables-

⁵⁶ https://www.gov.uk/government/statistics/beis-public-attitudes-tracker-summer-2022

⁵⁷ https://www.gov.uk/government/statistics/fuel-poverty-supplementary-tables-

around whether the policy has met its expected objectives. It will ensure there is demonstrable evidence of how the EPG scheme was implemented, including the benefits, outcomes, impact and value it has delivered, and capture learning to inform the development of future similar interventions to address energy cost concerns for households across the UK.

- 74. The EPG will be delivered through energy suppliers, and as such, there is a need for us to collect scheme data from the suppliers for a range of purposes including supporting delivery, compliance purposes, and providing key data for evaluation purposes.
- 75. Alongside this monitoring, we expect to conduct process, outcome, impact, and economic evaluations of the EPG. This evaluation will be commissioned and is expected to start in early 2023. It will use a range of approaches to assess whether the scheme objectives have been met, as well as gathering insight into the implementation and business/stakeholder response to the scheme. The evaluation approach will require further scoping. The evaluation will be designed to allow key insights to be fed into key policy review points, building on the in-flight narrative provided by monitoring activities, and will also need to be flexible to respond to any policy changes. At a high-level we intend to monitor and evaluate:
 - **Operational aspects**, to understand the delivery of the EPG and the intervention's design and administration supported delivery of EPG objectives. Insights will be gathered on the process around agreeing the reference price with suppliers, the delivery of compensatory payments from government to suppliers, any scheme administration challenges and lessons learned.
 - Consumer awareness and perceptions of EPG, including the ability of different consumer groups to benefit from the price cap and any PSED considerations.
 - Outcomes achieved by the EPG, to inform policy development and strengthen predictions
 around the benefits and impacts arising from the intervention. This will involve analysis of
 monitoring data on energy bills, consumption levels, energy bill payments, fuel poverty and selfdisconnection rates among different income groups, among other variables.
 - Scheme impacts, to understand what difference the scheme has made, and where possible
 exploring the additionality from EPG on supporting households during the energy crisis and
 other wider societal and economic impacts.
 - Value for money, through comparing the costs of delivering the policy alongside the benefits
 realised, as well as comparing the cost-effectiveness of the policy between groups to
 understand any differences in equity within the policy.
- 76. The evaluation will also need to be aware of wider external factors which may influence the success of the scheme. These may include: The economic context and business uncertainty, given high rates of inflation; Interactions with other Cost of Living support measures; and Wider domestic policy landscape.

Annex A: Determining the level of support for households using alternative heating fuels

- 77. The main EPG limits prices for electricity and gas but will not cover alternative fuels used for heating in homes off the gas grid, such as heating oil. The Alternative Fuel Payment scheme will ensure a £100 payment is made to eligible households to compensate for the rising costs of those fuels. This is intended to guarantee households will receive support equivalent to those on both the electricity and gas grid for the total cost of their energy. Rather than an adjustment to prices, this support will take the form of payments to households. The support provided to off-grid households is intended to ensure that a typical household does not face a higher rate of growth in their heating costs since last winter, compared to those on gas supported by the EPG.
- 78. Without the EPG, the cost of heating the average on-grid home with gas would have increased by approximately 220% between October 2021 and October 2022⁵⁸. With the EPG, this is limited to 130%, not accounting for support from EBSS. Over the same period, heating oil prices in Great Britain have risen by approximately 150%. Allowing for slightly higher than average consumption of energy for Home Heating Oil (HHO) customers versus mains gas customers, the amount needed to bring HHO customers down to a 130% increase is £100. While heating oil prices vary between Great Britain and Northern Ireland, a payment of £100 limits the average bill increase to match that of a gas consumer in both markets. Off-grid homes with an electricity connection will also benefit from the EBSS payment.

Table A1: Heating Oil Costs in Great Britain and Northern Ireland over the past year

	Great Britain	Northern Ireland
Heating fuel demand for average off grid home (Litres)	1514 ⁵⁹	1817 ⁶⁰
Average heating oil price August and September 2021 (p/Litre)	40.6 ⁶¹	45.1 ⁶²
Average heating oil price September 2022 (p/Litre)	100.3 ⁶³	104.6
Heating oil bill (average demand) August/ September 2021	£615	£820
Heat oil bill (average demand) September 2022	£1,518	£1,900
Growth in average bill over the past year	147%	132%
Heating oil bill if growth is limited to 130%	£1,415	£1,885
Difference from current bill	£103	£15

- 79. While the calculation above is based on the change in heating oil prices, the same support from the discretionary fund will be made available to all households using alternative fuels. Based on the price data currently available, while other alternative fuels, such as LPG, have increased in price since last winter, these increases have been proportionally smaller than that seen with heating oil.
- 80. Because the discretionary fund will be a fixed grant to alternative fuel users, rather than a volumetric or per unit discount on the price of fuel, there is inherently a different distributional impact to the support received via the discretionary fund relative to the core EPG. Compared to the core EPG higher consumers will receive proportionally less benefit that lower consumers.

⁵⁸ This reflects the growth in energy price cap determined by Ofgem.

⁵⁹ BEIS analysis. Demand estimates are based on modelling of the characteristics of UK housing stock.

⁶⁰ Consumer Council demand for Northern Ireland. This is the mid-point between Consumer Council research findings (May 2022) and the Sutherland usage estimate for a standard boiler.

⁶¹BEIS - Monthly and annual prices of road fuels and petroleum products - Standard grade burning oil, monthly prices https://www.gov.uk/government/statistical-data-sets/oil-and-petroleum-products-monthly-statistics

⁶² Consumer Council Average Heating Oil price data for Northern Ireland. https://www.consumercouncil.org.uk/homeheatingoilpricechecker/tool

⁶³ Average price for Sept 2022 as of 22/09/22 from Boiler Juice.com https://www.boilerjuice.com/heating-oil-prices/

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81. The calculation of the support payment looks specifically at the trend from Autumn 2021 to prices as they currently stand (September 2022). The discretionary fund will need to be kept under review in case alternative fuel prices rise significantly.

Title: Energy Bills Support Scheme (EBSS)
IA No: BEISO61(F)-22-PAD

RPC Reference No: RPC-BEIS-5234(1)
Lead department or agency: Department for Business,
Energy and Industrial Strategy (BEIS)
Other departments or agencies: N/A

Source of intervention: Domestic

Type of measure: Other
Contact:
energy.bills.rebate@beis.gov.uk

Summary: Intervention and Options

RPC Opinion: Awaiting Scrutiny

SNPV: -£6,267m

Business Net Present Value: -£44m

Cost of Preferred Option (2021 prices)

Net cost to business per year

Business Impact Target Status £44m

What is the problem under consideration? Why is government action or intervention necessary? The UK is currently experiencing an unprecedented rise in household energy bills, driven by rising global energy prices. The default tariff cap for a typical dual fuel household paying by Direct Debit rose by 54% in April 2022 and prior to the announcement of the Energy Price Guarantee (EPG) would have increase by a further 80% in October 2022. This is placing pressure on household budgets and could lead to potentially harmful underconsumption of energy or other essential goods and services during the winter. The government wants to help households manage the increase in energy prices and, in February and May 2022, announced a package of measures intended to help households with the rising cost of living.

What are the policy objectives of the action or intervention and the intended effects? The Energy Bills Support Scheme (EBSS) aims to help households manage rising energy bills. The EBSS will provide a £400 grant to over 30 million domestic electricity customers in the United Kingdom over the winter months. This is intended to reduce pressure on households' budgets, helping them avoid harmful underconsumption of energy or other essential goods and services. The EBSS is designed to align the consumer experience across all different energy bill payment types, to be delivered through the energy system and to ensure households feel the benefit over the winter 2022/23 period.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base) Since early 2022, BEIS and other government departments have been working closely to track the increase in the cost of living and formulate appropriate policy responses. The announcement of a further increase in the GB default tariff cap pointed to the need to for greater support to be offered. As such on the 26th of May 2022, the government announced the doubling of the supported offered through previous announce from £200 to £400 for each household and no future requirement for this to be repaid. This Impact assessment considers the implementation of the EBSS compared to a counterfactual of providing no additional support.

Will the policy be reviewed? It will not be reviewed. If applicable, set review date: N/A Is this measure likely to impact on international trade and investment? No Mediu Micro Small Large Are any of these organisations in scope? m Yes Yes Yes Yes Traded: Non-traded: What is the CO₂ equivalent change in greenhouse gas emissions? N/A N/A (Million tonnes CO₂ equivalent)

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:

| Jan lu- 1| Date: 11 October 2022

Description: £400 Energy grant

Summary: Analysis & Evidence Policy Option 1

(Preferred option)

FULL ECONOMIC ASSESSMENT

Price Base	PV Base	Time Period	Net Present Value (PV) (£m)		
Year 2022	Year 2022	Years 1	Low: Optional	High: Optional	Best Estimate: -6,267

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition)	Total Cost (Present Value)
Best Estimate		N/A	18,318	18,318

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

The total value of the grant would be £12.1bn, which would be a <u>transfer</u> from government to domestic electricity customers via their electricity supplier. The cost to government to administer the EBSS is estimated at £9m. The costs borne by domestic electricity suppliers is estimated at £44m, reflecting the need to make multiple payments. The social cost of emissions and air quality impacts associated with the net increase in energy consumption is estimated at £6.2bn.

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

There could be additional social costs i.e., carbon emissions and air quality impacts associated with households spending some or all the grant on increased consumption of other goods and services. However, this impact is challenging to assess.

BENEFITS (£m)	Total Trans (Constant Price)		Total Benefit (Present Value)
Best Estimate		12,051	12,051

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

The total value of the grant <u>transfer</u> to households would be £12.1bn which is expected to help maintain consumption of energy and other goods and services during winter 2022/23 compared the counterfactual. This will benefit households in the form of heating and utility from increased consumption of other goods and services.

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

There are expected to be significant non-monetised benefits in addition to the value of the grant which we lack robust evidence to fully monetise. These benefits are expected to arise from the avoided underheating and associated health impacts, potential reduction in household borrowing (£49-136 per lender) and associated interest payment costs and reducing the total number of homes in fuel poverty relative to the counterfactual (4.2%).

Key assumptions/sensitivities/risks Discount rate 3.5%

We assume that between 15 and 66% of the grant is spent on energy consumption based on evidence from the Winter Fuel Payment. All key assumptions are tested in sensitivity analysis.

BUSINESS ASSESSMENT (Option 12)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying	
Costs: 44	Benefits: 0	Net: 44	provisions only) £m:	
			44	

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Executive summary

- 1. The cost of living in the UK has been rapidly increasing inflation rose by 9.9% in the 12 months to August 2022¹. A key contributor to this is the unprecedented rise in energy prices, driven by global energy prices. As a result, the default tariff cap for a typical dual fuel (electricity plus gas) household paying by Direct Debit rose by 54% in April 2022 and was expected to increase by a further 80% in October 2022. The increase in energy cost is placing more pressure on household budgets, with many households facing difficulty managing their energy bills.
- 2. Cost of living increases mean that, in the absence of government support, many households would have to make a difficult choice about where to prioritise their finances this winter and, for fuel poor consumers in particular, could end up choosing to underheat their homes to save money particularly over the winter months. The increase in energy prices means the proportion of households at risk is likely to increase, outside of those covered by existing targeted support. As all households will be impacted by the increase in energy prices and to minimise the risk of not supporting those in need, the Government has decided to provide support to as many households as possible.
- 3. The EBSS is a one-off measure to provide a £400 energy grant to over 30 million domestic electricity customers in the United Kingdom this winter, which will be delivered through their electricity suppliers. This will be supported by additional funding to ensure households without a direct relationship with an energy supplier will be supported, alongside legislative changes which mean the support reaches those intended. This support will sit alongside the recently announced Government Energy Price Guarantee which will reduce the unit cost of electricity and gas so that a typical household in Great Britain pays, on average, around £2,500 a year on their energy bill, for the next 2 years, from 1 October 2022². The combination of these measure will provide great support to UK households, the interaction with the EPG is considered in policy considerations section, however the impact of the EPG is considered in a separate IA³.
- 4. This impact assessment sets out the estimated costs and benefits of delivering the scheme in terms of benefits to consumers, delivery costs and the wider cost to society due to additional energy consumption. There are also benefits such as reduced underheating, reduced borrowing and avoided fuel poverty which we have not been able to monetise to the same extent. As a result, this is only a partial quantification, and the policy intent of reducing underconsumption of energy leads to a negative quantified social net present value.
- 5. The impact assessment also considers wider distributional impacts of the EBSS, such as an assessment of the impact on those with protected characteristics and small and micro businesses, across which the impact of the EBSS is expected to be largely neutral or positive. Where any adverse impacts have been identified, appropriate mitigations have been put in place. Finally, a summary of the future monitoring and evaluation plans for the EBSS is provided.

¹ CPI - https://www.ons.gov.uk/economy/inflationandpriceindices

² https://www.gov.uk/government/news/government-announces-energy-price-guarantee-for-families-and-businesses-while-urgently-taking-action-to-reform-broken-energy-market

³ ADD link to Domestic EPG IA

Problem under consideration

- 6. The cost of living in the UK has been rapidly increasing the inflation level rose to 9.9% in the 12 months to August 2022⁴. A key driver of this is rising global energy prices, largely caused by a surge in demand following the Covid 19 recovery period and stresses on supply chains because of the war in Ukraine and role of Russia as an energy exporter. The increase in energy prices will be the single largest year-on-year increase in energy costs in recent history, pushing energy bills up to levels not seen before.
- 7. There are several government policy initiatives already available to domestic energy consumers who are fuel poor or in vulnerable situations through several energy schemes, including:
 - Warm Home Discount⁵ provides pensioners and fuel poor households with £140 (increasing to £150) off their energy bills. Funded by all domestic billpayers.
 - **Energy Company Obligation**⁶ obligated suppliers provide energy efficiency measures to fuel poor, vulnerable and low-income households. Funded by domestic billpayers.
 - Winter Fuel Payments⁷ pensioners receive between £100 and £300 to help with heating bills.
 - Cold Weather Payments⁸ people on certain benefits can receive £25 for each 7-day period of very cold weather between 1 November and 31 March.
 - Affordable Warmth Scheme (NI)⁹ a grant aimed at low-income households of up to £10,000 to install energy efficiency and improved heating measures.
- 8. However, given the size of the increase in energy bills, further support is required, including for those not targeted by existing measures above for example, a recent survey from the ONS reporting on consumer experience from March 2021 to June 2022 reported that 40% of respondents found it difficult to pay their energy bills and 19% of household reported increasing borrowing¹⁰. The most common actions reported by adults who said their cost of living had increased were spending less on non-essentials (57%), shopping around more (36%), using less fuel such as gas or electricity at home (51%), spending less on food shopping and essentials (35%). This is expected to worsen as energy bills increase further.
- 9. In the absence of additional support, the increase in the cost of energy will require all households to either allocate a larger proportion of their budget to consume the same level of energy at the expense of consumption of other goods and services, or reduce their energy consumption, or a combination of both. This problem will be faced by more households than ever before and is expected to be most acute over the winter period when the need for energy to heat homes is greatest. Many households may have to make difficult choices about where to prioritise their finances this winter and for fuel poor consumers in particular could end up choosing to underheat their homes to save money at a risk to their health.

Rationale for intervention

10. The increase in energy prices observed to date is unprecedented – historic bills have not exceeded £1,600 (in real terms) on average before this current crisis. Energy is an essential and unavoidable expense for all households. This level of energy bills will create financial

⁴ <u>https://www.ons.gov.uk/economy/inflationandpriceindices</u>

 $^{^{5} \, \}underline{\text{https://www.gov.uk/the-warm-home-discount-scheme}}$

 $^{^{6}\ \}underline{\text{https://www.ofgem.gov.uk/environmental-and-social-schemes/energy-company-obligation-eco}}$

⁷ https://www.gov.uk/winter-fuel-payment

⁸ <u>https://www.gov.uk/cold-weather-payment</u>

 $^{^{9}\} https://www.nihe.gov.uk/Housing-Help/Affordable-Warmth-Boiler-Replacement/Affordable-Warmth-Scheme (Margaret and Margaret and M$

¹⁰ https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/datasets/impactofincreasedcostoflivingonad ultsacrossgreatbritain

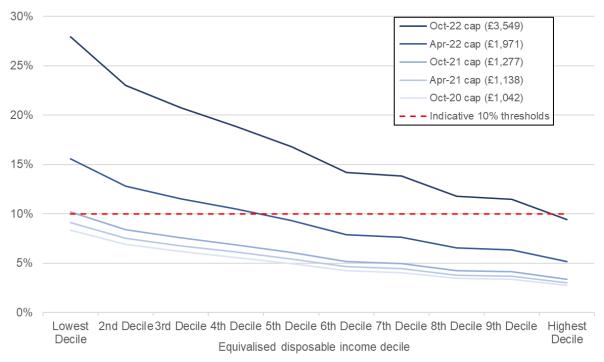
https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/articles/therisingcostoflivinganditsimpactonindividualsingreatbritain/november2021tomarch2022

difficulties for many households beyond those already in or at risk of fuel poverty and within the scope of existing schemes, and these constraints are expected to lead to potentially harmful underconsumption of energy and other essential goods and services

11. At projected cap levels, even households consuming the average amount of energy for the highest income decile could see energy spending exceed 10% of total household expenditure (see Figure 1). These significant energy price rises will also have significant impacts on inflation more generally, further worsening the cost of living – private sector forecasters are expecting CPI to peak between 13% and 17%, with an average of 15.5%.¹¹

Figure 1: Energy spend as share of total expenditure after housing costs at each price cap level

Source: BEIS analysis using Ofgem and ONS Family Spending data. Total expenditure based on FY19/20 levels.



12. More households than ever before are expected to face difficulty managing their energy bill and many will not be captured by existing support schemes. All households will face budgetary constraints and many households may be forced to select consumption bundles below desired welfare standards i.e., not sufficiently heating their home, reducing consumption of other essentials such as food or clothing or increase borrowing. In addition, when making this decision, it is possible consumers may not fully account for the positive impact associated with their consumption choices, for example health benefits and associated avoided societal costs.

Package of support

- 13. The government recognises that more households than ever need support to help deal with rising energy bills. The EBSS discussed in this IA is part of a wider package of support worth £37 billion¹². The other elements of the package of measures are below:
 - a £650 one-off Cost of Living payment for around 8 million households on means tested benefits.
 - a one-off £300 Pensioner Cost of Living payment for over 8 million pensioner households to be paid alongside the Winter Fuel Payment.
 - A council tax rebate of £150 for all household council tax bands A D

¹¹ Further detail is provided in the 'Benefits' section

¹² https://www.gov.uk/government/publications/cost-of-living-support

- a payment of £150 for around 6 million people across the UK who receive certain disability benefits.
- a £500 million increase and extension of the Household Support Fund.¹³
- 14. However, the above package of measure was based on a projected October-22 price cap level at the time of £2,800¹⁴, compared with a final outturn level of £3,549 announced by Ofgem in August 2022, and worsening expectations of future prices. In response, on the 8th of September the government announced the Energy Price Guarantee¹⁵, which will reduce the unit cost of electricity and gas so that a typical household in Great Britain pays, on average, around £2,500 a year on their energy bill, for the next 2 years, from 1 October 2022. The consumer saving will be based on usage, but on average usage a household will save £1,000 a year (based on current prices from October). Energy suppliers will be fully compensated by the government for the savings delivered to households. The Energy Bill Relief scheme¹⁶ was also announced for non-domestic energy customers.
- 15. In general, the value of the support will represent the greatest benefit as a share of income/expenditure to the lowest income households. To provide an indication of what this support implies for households with different incomes, we have carried out analysis of the combined impact of the May 2022 Cost-of-Living package and a £2,500 EPG, which shows that households in the lowest income deciles are on average slightly better off in Financial Year (FY) 2022/23 than FY21/22 (see Figure 2). The EPG limits the average increase in energy bills for the lowest income decile to around £1,100 which is more than offset by support from the May 2022 package of around £1,2000 in the absence of the EPG the increase in bills would be £2,100.

¹³ Cost of living support factsheet: 26 May 2022 https://www.gov.uk/government/publications/cost-of-living-support/cost-of-living-support-factsheet-26-may-2022

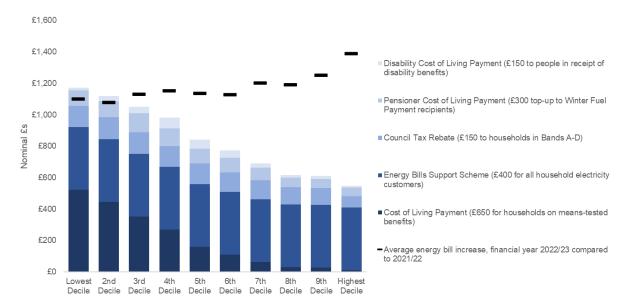
¹⁴ Oral evidence provided by Jonathan Brearley to the BEIS Select Committee on 24 May 2022: https://committees.parliament.uk/event/13596/formal-meeting-oral-evidence-session/

https://www.gov.uk/government/news/government-announces-energy-price-guarantee-for-families-and-businesses-while-urgently-taking-action-to-reform-broken-energy-market

¹⁶ https://www.gov.uk/guidance/energy-bill-relief-scheme-help-for-businesses-and-other-non-domestic-customers

Figure 2: Average energy bill increase between FY21/22 and FY22/23 with a £2,500 EPG compared against the May 2022 Cost-of-Living package

Source: BEIS analysis using ONS family spending data and HMT analysis of the May 2022 Cost-of-Living package.



Policy objectives

- 16. The policy objectives for the EBSS are set out below:
 - To support 30 million UK domestic electricity bill payers to manage this year's increase in energy prices between October 2022 and March 2023. We will aim to reach as many of the 30 million as possible. Achieving this will ensure we have reached the full scope of customers who can benefit from the scheme. This will be measured through the number of customers who receive the grant over October 2022-March 2023.
 - To help bill payers maintain appropriate levels of energy consumption by providing financial support (and so avoid underconsumption) between October 2022 and March 2023. A key outcome is to help mitigate bill payers reducing energy consumption below desired welfare standards. We will measure this objective through impact evaluation of the delivery of the grant, and consumers' energy consumption.
 - Align consumer experiences so they are consistent, irrespective of supplier or
 payment type as far as possible. Customers should not be advantaged or
 disadvantaged based on their choice of supplier or payment type. Customers pay
 their energy bills differently for example quarterly payments or monthly direct debits. We
 do not want to create perverse incentives or for customers to feel the need to switch
 payment type or supplier. We will measure this through supplier delivery plans and
 assessments of customer experience across payment types.
 - Deliver the scheme through the energy system, keeping costs and additional administrative burdens down by utilising existing processes. We want to ensure that any additional costs are kept to a minimum (for example, mitigating industry costs to deliver the grant through using existing processes). We will measure this through ensuring costs are minimised in government and suppliers.
 - Ensure consumers understand the support they are receiving, and when and how
 they will receive it across the lifetime of the scheme. We want to ensure that
 customers understand that they have received the grant. We will measure this through
 impact evaluation to measure customer awareness of the support.

Options considered

- 17. Since early 2022, BEIS and other government departments have been working closely to track the increase in the cost of living and formulate appropriate policy responses to the increase in the cost of energy faced by households. The GB default tariff cap (price cap) for a typical dual fuel household paying by Direct Debit rose by 54% in April 2022 (to £1,971) and was now expected to increase by a further 80% in October 2022 (to £3,549)17. This points to the need to offer greater support, beyond the package of measure announced in February 202218.
- 18. As such on the 26th of May 2022, the government announced an additional support package for the increase costs of living, as discussed in the section above. This included the doubling of the support offer through EBSS from £200 to £400 and the removal on any requirement to repay the grant through a future levy which was announced in February.
- 19. This Impact Assessment focuses on the costs and benefits of the EBBS scheme announced in May 2022, against a counterfactual of not providing support though EBSS. The support provided via the government Energy Price Guarantee is not considered in counterfactual of the EBSS, given the sequencing of policy development and scheme delivery timeline.

Do nothing (Counterfactual)

- 20. Under the counterfactual, most energy bill payers would face the full extent of rising energy costs this winter without additional financial support through their energy bills. This is expected to result in a high proportion of domestic energy consumers facing unmanageable energy costs, putting increased pressure on household budgets. Overall, this is expected to lead to a reduction in the consumption of energy and/or other goods and services for many households, including those who are not currently in scope of existing targeted support.
- 21. All households will need to make trade off decisions in their budgeting. If they have no savings¹⁹ to rely on this will mean forgoing consumption of other goods and services. This is expected to result in opportunity costs for all consumers. For the most vulnerable households this could lead to potentially harmful levels of under consumption, such as underheating or undereating. Evidence suggests that energy underconsumption is most common for lower income households²⁰. Underconsumption in these areas is expected to lead to adverse health impacts for individuals and wider costs on society, for example through healthcare costs and productivity losses.
- 22. Existing, targeted support schemes will still be available for domestic consumers, such as the Warm Home Discount. There may also be initiatives set up by industry or advocacy bodies (for example, several energy suppliers have increased their hardship funds and other energy saving initiatives). While this support is welcome and will partially reduce the impacts for a relatively small proportion of households, this is expected to be an insufficient response to the unprecedented levels of energy prices and reduced purchasing power households will be experiencing. As such, many households are anticipated to struggle to maintain energy consumption.

Option 1: £400 Energy grant (Preferred option)

23. As announced in May 2022²¹, this option aims to reduce domestic energy costs across winter 2022/23. Under this option all households with a domestic electricity meter point in the United Kingdom with a direct relationship with an electricity supplier would receive a total grant of

¹⁷ The decision to expand the EBSS was taken before the Ofgem announcement of the October 2022 price cap level

 $^{{\}color{blue} {18} \ \underline{https://\underline{www.gov.uk/government/publications/government-support-for-energy-bills-and-the-cost-of-living-factsheets}}$

¹⁹ The English housing survey suggests that around 40% of household have no savings, and this may have increased in the broader cost of living context.

²⁰https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/789775/Comparison_of_theoretical_energy_co_nsumption_with_actual_usage.pdf

²¹ https://www.gov.uk/government/news/energy-bills-support-scheme-explainer

- £400 over six instalments of £66/67 starting from October 2022 until March 2023. The funds would be provided by government to energy suppliers monthly, who would be responsible for delivering the grant to the domestic electricity consumers they serve.
- 24. How this would appear to consumers would vary by payment types. Customers who pay by Direct Debit would either see a reduction to their monthly Direct Debit amount collected or as a refund to their bank account each month after the Direct Debit payment has been collected. Standard credit customers will see £66/67 of credit applied to their accounts in the first week of each month. Customers with smart prepayment meters would receive a monthly credit remotely applied to their account balance (where possible) and traditional prepayment meters would receive six monthly vouchers or SAMs to the value of £66/67 from the first week of each month redeemable by consumers at top-up locations.
- 25. The grant would be funded by government and there would be no future requirement placed on energy consumers to repay this grant.

Summary of the implementation plan

- 26. To fund the EBSS, the government is using the Supply and Appropriation (Main Estimates) Act 2022. This Act allows HM Treasury to issue funds out of the Consolidated Fund and allocate them to individual government departments and Crown bodies.
- 27. The £400 payment will be delivered by domestic electricity suppliers, so the means by which suppliers will be required to deliver the EBSS to their customers must be in place. The Secretary of State will issue a Direction under section 7(3) of the Electricity Act 1989 which requires licensees to "comply with any direction given by the Gas and Electricity Markets Authority or the Secretary of State as to such matters as are specified in the licence or are of a description so specified". A licence condition will be introduced into suppliers Standard Licence Conditions that will require suppliers to deliver the EBSS in accordance with the terms set out in the Direction. Ofgem published a statutory consultation earlier in the year on the modification of relevant domestic electricity supply licence conditions to help facilitate delivery of the EBSS.²²
- 28. The Direction will require electricity supply licence holders to provide payments to their eligible domestic electricity customers on a monthly basis, between October 2022 and March 2023. The specific policy design and implementation plan is set out, in detail, in the government's response to the public consultation²³.

Northern Ireland Energy Bills Support Scheme delivery

- 29. Due to the different regulatory framework and structure of the Northern Ireland energy market compared to Great Britain, there will be a different legislative basis and some differences in delivery in the way NI EBSS will be implemented in Northern Ireland.
- 30. In conjunction with the new spending powers sought from the Energy Prices Bill, powers which enable HMG to require energy suppliers in Northern Ireland to deliver the £400 NI EBSS grant are sought to allow the implementation described above to be adopted in Northern Ireland.
- 31. These powers will allow the scheme to be placed on a secure statutory footing and strengthen scheme delivery confidence and compliance by utilising the existing regulatory framework. Further, this strengthens HMG's ability in managing public money risks. In absence of legislation, HMG would otherwise rely only the civil courts to address supplier non-compliance to deliver funding to NI households.
- 32. The primary powers would not automatically result in additional costs to business or regulated parties. However, in using these powers for the implementation of the scheme we expect there

 $^{{\}color{red} \underline{^{22}}\ \underline{^{https://www.ofgem.gov.uk/publications/ebss-energy-bill-support-scheme-statutory-consultation-suppliers}}$

²³ https<u>://www.gov.uk/government/consultations/technical-proposals-for-the-energy-bills-support-scheme</u>

to be additional costs for affected parties, such as NI electricity suppliers who will deliver NI EBSS. An indication of the scale of these potential costs is provided in the direct costs to business calculations section. The business costs set out in this IA apply to the UK as a whole, only a small proportion of these costs will fall to NI suppliers. Based on the share of UK consumers in NI the direct business cost to suppliers in NI may be around £1.8m or 3% of the UK supplier costs. This cost estimate is predicated on a GB EBSS delivery model, however, some of the factors which drive this estimate may not be the same and will be contingent on the final NI EBSS delivery model. Further, some NI electricity suppliers may have existing experience of administering and delivering similar support which was made available in the Republic of Ireland. The per supplier costs estimated in Annex A are also likely to be an overestimate for NI suppliers who, for instance, will probably not have to process as many individual payments due to a smaller customer base and will not need to issue vouchers for pre-payment meters as NI pre-payment meters can be topped-up remotely. Supplier costs are also assumed to be passed onto customers.

33. Payments to electricity customers in Northern Ireland have not begun from the 1st of October as in Great Britain but will be made as soon as feasible this winter. This is due to the time necessary to establish the appropriate regulatory framework and for suppliers in Northern Ireland to develop the capacity to deliver NI EBSS payments.

EBSS Alternative fund

- 34. Certain groups would not benefit from the EBSS because they do not have a domestic meter point and a direct relationship with an electricity supplier. The government previously announced that further funding would be available through winter 2022/23 to help those not be reached by the EBSS. The EBSS Alternative Fund (AF) will be funding that will provide a £400 energy bill grant to households that meet the following criteria:
 - The dwelling for which support is being claimed is the main or sole residential address of the applicant making the claim;
 - The resident or applicant (if someone else manages the application on their behalf) is responsible for paying for energy used in the dwelling as part of a service charge, rent or other arrangement;
 - The household is not already benefitting from EBSS payments, either through the main EBSS scheme or the EBSS Alternative Fund;
 - The applicant is not a business with a commercial supply arrangement or within business premises, with the exception of businesses whose main business activity is to provide long term residential accommodation (landlords, etc.) applying on behalf of their residents.
- 35. Based on these criteria we estimate that between 740,000 and 886,000 households would be eligible for support from the EBSS AF. More detail on this estimate can be found in Annex A²⁴.
- 36. Eligible customers will need to apply for a grant payment. The full range of eligible households and the details of the application process have not yet been finalised; however, the Energy Prices Bill provides the power to enable the delivery of the EBSS AF though a designated delivery body.

Pass-through of EBSS grants from Landlords to tenants

37. In some instances, a customer, for example, a landlord or other intermediary, will receive the benefit of a Support Scheme (EBSS, EPG or EBRS) but the allocation of that benefit to other end users for whom that intermediary is responsible has not been addressed in the relevant

²⁴ Estimated from a range of sources please see Annex A

Support Scheme. In the example of heat networks, the intermediary (operator of the heat network or landlord) may receive a benefit under a Support Scheme but is then unrestricted in how it applies that benefit in its charges for heat and/or power. While many intermediaries will choose to pass on all or a proportion of Support Scheme payments to their end users, Government is concerned that this will not always be the case. In particular, as end users who are charged by such intermediaries do not always have an alternative supplier, they may not be able to negotiate pass through of Support Scheme payments where the relevant intermediary is not prepared to do so.

38. Government intends to take a power to direct intermediaries who have an appropriate relationship with intended end users and who are responsible for charging those end users for energy, whether individually or as part of a bundle of services, (**Responsible Intermediaries**) to pass the benefits of Support Schemes (or an appropriate proportion thereof) to their end users (**Target End Users**) in accordance with the terms of the direction."

Summary of business costs from policy implementation

Policy measure	Legal power used or created	Estimated direct costs to business
EBSS GB	Existing powers to require that energy suppliers deliver the £400 EBSS grant to their customers.	£44m (for UK). Described in direct costs to business section and more detail in annex A
EBSS NI	New Powers through the Energy Prices Bill to enable the Secretary of State to require NI energy suppliers deliver the £400 EBSS grants in the same way as GB	£1.8m - Roughly 3% of the UK direct costs to business as costs scale in proportion with the number of customers.
EBSS AF	New powers to enable delivery of the £400 EBSS grant through a designated body to eligible households that are not able to receive the grant via electricity billing.	N/A – delivered to households via a designated body.
Landlord pass- through	New powers through the Energy prices Bill to require that landlords that receive the £400 EBSS grant pass the grant onto tenants.	For EBSS - Expected to be small as relatively few landlords offer "all-inclusive" rent via a domestic energy contract. See section on small and micro business impacts.

Approach to analysis

- 39. We have undertaken a Cost Benefit Analysis of delivering the EBSS in the UK. As far as possible the costs and benefits of each option have been monetised in real 2022 prices and compared to the counterfactual ('Do nothing') to estimate the additionality. This includes the estimated administrative cost for government and industry, the impact on household energy consumption, comfort taking and associated resource and social costs.
- 40. Administrative costs have been estimated using a Standard Cost Model and the social costs and benefits using the approach set out in the Green Book. This has been used to calculate the estimated social net present value.
- 41. Where it has not been possible or appropriate to monetise specific costs and benefits due to methodological difficulties or lack of evidence, we have provided an alternative quantitative sense of the impact. This includes an assessment of the impact on fuel poverty and distributional analysis. We have also drawn on available external evidence to provide a sense of scale of the impacts where appropriate.
- 42. The assessment of the impact of the EBSS AF support for those households without a direct relationship with an electricity supplier has not been incorporated into the main EBSS UK analysis as it has a different delivery mechanism and would not result in higher costs for energy suppliers. However, we expect the impacts of the £400 grant to be very similar at the household level. Costings for the EBSS AF have been set out in annex A.
- 43. The main body of this impact assessment provides an overview of the analysis and discusses the key results and preferred way forward. Please see Annex A for full detail on the assumptions and methodology used. The analysis presented in this IA has been quality assured in line with the guidance set out in HMG's Aqua book.²⁵

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 $^{^{25} \} https://www.gov.uk/\underline{government/publications/the-aqua-book-guidance-on-producing-quality-analysis-for-government}$

Key assumptions and evidence sources

- 44. Table 1 sets out key assumptions used in the quantified analysis. This also includes a RAG (Red, Amber, Green) rating of the quality and impact: the quality rating reflects the robustness of the evidence/data used; the impact rating reflects the scale of impact the assumption has on the outputs.
- 45. The response to the technical consultation and extensive stakeholder engagement has been a key input to the development of both the policy design and supporting analysis throughout the design process. In particular, the responses to the consultation have helped inform the administrative cost estimates, the risks and issues with the policy design and many of the public sector equalities duty (PSED) impacts.

Table 1 - Key assumption Quality and Impact

Funding and General Assumptions	Quality Rating	Impact Rating
The number of domestic electricity meters informs the number of		
recipients of the EBSS; BEIS's most recent published statistics have been used for Great Britain ²⁶ the number of meter point in Northern		
Ireland has been taken from UREGNI's annual report ²⁷		
Growth rate in meter points is derived from the average growth		
observed over the last 5 years, with a central value of 0.75% annual growth. ²⁸		
The proportion of the grant spent on energy is based on evidence		
from the delivery/evaluation/monitoring of Winter Fuel Payments, and assumed to be between 15 and 66% ²⁹		
The fuel mix of the reduced energy consumption is informed by		
national consumption statistics ³⁰		
Government administration costs for funding the EBSS have been		
estimated by BEIS Finance based on evidence collected through an		
internal budgeting exercise.		
Industry admin costs are based on a combination of the evidence we received from our public consultation ³¹ of the EBSS and		
comparison with elements of similar schemes; the Warm Home		
Discount, Government Electricity Rebate 2014.32		
Fuel prices, carbon prices, and air quality pollutant values are		
from Green Book supplementary guidance for valuing energy use		
and greenhouse gas emissions with adjustments made to		
appropriately reflect recent energy price increases ³³ .		
HMT's Green Book Discount Rate – a Social Discount Rate of		
3.5% has been applied.		
The appraisal period is set as one year		

²⁶ https://www.gov.uk/government/statistical-data-sets/quarterly-domestic-energy-switching-statistics, Actual data from Energy supplier will be used for the scheme delivery

²⁷ UREGNI Annual Retail Energy Market Monitoring report 2021

https://www.gov.uk/government/statistical-data-sets/quarterly-domestic-energy-switching-statistics, Actual data from Energy supplier will be used for the scheme delivery

²⁹ Evidence on Labelling from the UK Winter Fuel Payment, IFS Working Paper 11/10, available at: http://www.ifs.org.uk/wps/wp1110.pdf

³⁰ https://www.gov.uk/government/statistics/energy-consumption-in-the-uk-2021

 $^{^{31}\} https://www.\underline{gov.uk/government/consultations/technical-proposals-for-the-energy-bills-support-scheme}$

³²https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1065787/Warm_Home_Discount_reform_final_stage_Impact_Assessment.pdf,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/360461/ger_ia.pdf and

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1018133/green-gas-impact-assessment.pdf

For gas and electricity prices we have made adjustments to appropriately reflect recent energy price increases. All other assumption are from the published guidance https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal

Costs and benefits

Table 2 sets out a summary of the high-level costs and benefits.

Table 2 - Summary of costs and benefits

Costs	Benefits
Exchequer (HMG) funding: £12bn will be required to fund the initial grant to domestic electricity customers over winter 2022/23.	Increased consumer budget: The grant will provide the equivalent reduction in energy costs to consumers over winter 2022/23. This can be used to increase consumption of energy or to free up income to spend on other goods/services
EBSS development and delivery: There will be costs to design and deliver the EBSS for government and Ofgem.	Avoided disbenefit (opportunity cost): associated with underheating, increased borrowing or underconsumption of other goods and services. There are also expected to be equity benefits associated with supporting low-income households.
EBSS cost to industry: Costs for energy suppliers to deliver the grant to customers.	Potentially reduced level of fuel poverty (and poverty more broadly): relative to the counterfactual. Knock-on productivity and health benefits for wider society. ⁹
Negative externalities: The grant is expected to lead to a net increase in energy consumption relative to the counterfactual (where energy consumption is assumed to be constrained). This energy consumption has an associated greenhouse gas emissions and air quality impact.	Debt reduction: The grant could reduce the accumulation of debt. This in turn will reduce the cost of borrowing by the energy suppliers to service those debts, reducing their cashflow problems and risk of insolvency at a time when energy suppliers are financially challenged.

Unquantified/un-monetised benefits

46. There are several impacts which we have been unable to include in the quantified analysis. These are set out in table 3. The evidence available suggests that some or a combination of these benefits would likely be sufficient to change the sign of the quantified SNPV. To indicate the possible scale, where data has allowed, we have included indicative figures.

Table 3 – Summary of unquantified/unmonetised impacts

Impact relative to the counterfactual:

Reduced Underheating and avoided negative health impacts.

Underconsumption of heating can lead to, or exacerbate, health issues (and their associated knock-on adverse effects on the wider economy). A survey from the ONS suggested 40% of households were struggling to pay their energy bill and 51% were cutting back in response. In addition, evidence suggested that energy underconsumption would be greatest amongst lower-income households³⁴. The EBSS helps mitigate against this by enabling more energy consumption/higher temperatures in homes, specifically over the winter period. This is supported by findings from a previous Warm Home Discount evaluation³⁵, which found a small increase in the temperatures of properties in receipt of the grant.

³⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/789775/Comparison_of_theoretical_energy_consumption_with_actual_usage.pdf

https://www.gov.uk/government/publications/warm-home-discount-evaluation-2010-to-2015

A Building Research Establishment (BRE) report³⁶ estimated that excess cold in ~800,000 homes led to health costs of ~£6 billion annually, and £15 billion in total wider society costs³⁷.

Stimulates consumption of other goods/services, to the benefit of consumers with possible wider societal impacts.

Though there might be a wider impact to society because of consumption decisions, this could be positive or negative. We do not know what consumers will consume, although in the wider cost of living context many households may consume other essential goods and services such as shelter, food, or clothing. For example, an ONS survey found that 31% of households were cutting back on essentials. Increased consumption in these areas where there would otherwise be underconsumption is expected to benefit society positively, for example, through improved health and lower health service costs, improved productivity, and wider economic activity.

Helps reduce household borrowing and thus avoid costly interest payments.

In the absence of the EBSS, households may increase their borrowing to pay for their energy bills. The ONS reported that, for June 2022, 20% of adults surveyed said that they had increased borrowing or were using credit from the previous year.³⁸ The cost of borrowing will vary depending on the type of finance and individual circumstances, but average figures reported by the Bank of England³⁹ suggest interest payments could be between 4% and 34% across overdrafts, credit cards and personal loans. If, in the absence of the EBSS, consumers raised the equivalent funds by borrowing, this would represent a disbenefit in the form of interest payments for the borrower. The range of total savings is estimated between £49-£136 per household⁴⁰ for a grant of £400.

Reduces the risk of debt accumulation, Fuel Poverty, and marginally reduces risk of supplier insolvency.

There are reported to be around three million domestic gas and electricity accounts which are either in debt or arrears⁴¹. This is expected to increase with recent (and future) energy price increases. The EBSS is anticipated to improve the ability of consumers to manage their energy bills over the 2022/23 winter period of high energy prices, and so reduce the risk of non-payment.

Analysis has also been carried out to look at the impact of the EBSS on Fuel Poverty⁴² ⁴³. Results suggest the £400 reduction could reduce the level of Fuel Poverty in England in 2022 by around 4.2% compared to a "do nothing" scenario.

Finally, this policy will reduce energy suppliers' cost of borrowing to service those debts, so reducing their cashflow problems and risk of insolvency at a time when supply businesses are financially constrained. This has the knock-on benefit of reducing expected future costs of insolvencies that would be mutualised across the market. The future costs placed on consumers due to market exit last year are around £100 per household.

³⁶ https://www.bregroup.com/press-releases/bre-report-finds-poor-housing-is-costing-nhs-1-4bn-a-year/

³⁷ Valued in line with the Transport Research Laboratory (TRL) costs of both fatal and non-fatal injuries. These costs include human impacts (pain, grief, and suffering), indirect economic impacts, as well as direct medical costs. https://www.rospa.com/rospaweb/docs/advice-services/homesafety/re-valuation-of-home-accidents.pdf

 $^{^{38}\}underline{\text{https://www.ons.gov.uk/people population}} and community/wellbeing/datasets/public opinions and social trends great britain household finances$

³⁹ https://www.bankofengland.co.uk/statistics

⁴⁰ We assume the term of the borrowing for credit card and over drafts is 1 year, for personal loans we assume a 5-year term in line with the

^{41 &}lt;a href="https://www.ofgem.gov.uk/energy-data-and-research/data-portal/all-available-charts?keyword=debt&sort=relevance">https://www.ofgem.gov.uk/energy-data-and-research/data-portal/all-available-charts?keyword=debt&sort=relevance Accessed: 03/08/22

⁴²Fuel poverty defined using Low Income Low Energy Efficiency (LILEE), finds a household to be fuel poor if it has a residual income below the poverty line (after accounting for required energy costs) and lives in a home that has an energy efficiency rating below Band C. https://www.gov.uk/government/publications/sustainable-warmth-protecting-vulnerable-households-in-england

⁴³ Full details on BEIS approach to modelling fuel poverty impact can be found here: https://www.gov.uk/government/publications/fuel-poverty- statistics-methodology-handbook

Quantified and monetised impact

47. The following section sets out the impacts which it has been possible to quantify and monetise to inform the SNPV. However, given the non-monetised impacts above, this is only a partial assessment. Table 4 provides an overview of the key inputs parameters and outputs across the options and is followed by discussion of the results. Please see Annex A for more details.

Table 4 - Inputs and outputs summary

	\$400
Inputs	
Value of the Grant (£)	400
Number of instalments	6 @ £66/67
Outputs	
Meter points supported (Million)	30.2
Total Rebate (£bn)	12.1
Total Recovered from household energy bills (£bn)	n/a
SNPV (£bn)	-6.3
Additional benefit required to break-even (SNPV) (£/Household)	207.7

- 48. To estimate the scope of the policy we have used the most up-to-date statistics on electricity meter points⁴⁴, which report that there were around 30 million domestic electricity meter points in the United Kingdom as of March 2022. To account for the anticipated growth in meter points by October 2022 (scheme launch) we have used an annual growth rate of 0.75% derived from historic meter point growth over the last 5 years. As EBSS will be paid out in monthly instalments, these meters points would only receive part of the total £400 grant over the sixth months of the scheme this will impact an estimated 90,000 meters which come online between October and March.
- 49. The quantified SNPV includes administrative costs for government and the negative externalities associated with higher energy consumption (specifically greenhouse gas emissions and air quality). The quantified SNPV for the policy is negative, however there are benefits we have not been able to quantify in the SNPV, discussed above.
- 50. The grant is expected to increase energy consumption, consistent with the policy intent (the analysis assumes the lowest income deciles spend 66% of the grant on energy consumption, and the highest spend 15%, averaging out at around 40% across all income deciles).
- 51. The assessment of energy consumption impact is against a "do nothing" counterfactual where energy consumption would be supressed by high prices. However, it is important to note that the primary objective of the intervention is to increase energy consumption to safer levels, and that, even with the intervention, the resulting energy consumption is not expected to place us off track for meeting our carbon budgets given the scale of price increases expected. Further detail is provided in the Sustainability Impacts section of this IA.
- 52. Table **5** provides a breakdown of the specific components of the SNPV. The quantified analysis provides useful insights into the impacts of the policy, but the full range of costs and benefits cannot be captured through this type of analysis alone.

Table 5 - Break down of SNPV

IGNIO	Broak action of	/1 T T	
			SNPV
	Social NPV for (£m, discounted)	Option 1
		Grant (Gov)	£12,051
		Gov Admin	£9
Costs	s (Discounted)	Industry Admin	£44

⁴⁴ https://www.gov.uk/government/statistical-data-sets/quarterly-domestic-energy-switching-statistics And UREGNI Annual Retail Energy Market Monitoring report 2021

	Increased energy supply	£3,539
	Increased emissions	£2,392
	Air Quality damage	£283
	Grant (Non-energy spend and savings ⁴⁵)	£7,171
Benefits (Discounted)	Grant (Energy spend - Comfort taking)	£4,881
	Reduced energy supply	£0
	Reduced emissions	£0
	Improved Air Quality	£0
SNPV		-£6,267

Key modelling assumptions and uncertainty

53. There are several additional uncertainties, risks, and issues that affect the quantified analysis:

- The scale of consumption impacts: The assumptions made in this impact assessment are based on the best available evidence and are consistent with similar schemes such as the Warm Home Discount and the Winter Fuel Payment. However, it is possible that consumers may not respond to the grant as we have assumed this could be influenced by the broader context of the cost-of-living situation. If consumers decided to allocate a larger proportion of the grant to energy, then this would increase comfort taking from higher energy consumption and unquantified health and productivity benefits, but this would also see a proportional increase in the negative externalities i.e., carbon emissions associated with energy usage, which would decrease the quantified SNPV. However, if consumers use less of the grant on energy, this will increase their consumption of other goods/services or savings from which they would gain utility. Given this would reduce the additional energy consumption the cost of externalities would also decrease. However, this is a function of not being able to fully quantify the impact of additional spending/saving on society rather than a better policy outcome.
- The number of meter points: There is uncertainty over the future number of domestic electricity meter points in the United Kingdom. For this analysis, we have used the reported number of meter points from the most recent publication and analysed historic annual growth trends to inform assumptions on the future profile. The impact will mean an increase *or* decrease in the number of eligible meter points in October 2022, across the grant delivery period. Again, this impact is tested in the sensitivity analysis and is only expected to have a small impact. In practice, the exact number of meter points registered with all suppliers will be used to calculate the required funding, which will remove this uncertainty.
- The scale of administrative costs: There is some uncertainty over both government and industry administrative costs to deliver the EBSS. As discussed, the costs around developing and administering the EBSS for government have been developed by BEIS and, for industry, have been informed by industry consultation responses and the reported costs to industry of delivering similar schemes, such as the Warm Home Discount and the 2014 Government Electricity Rebate. Energy suppliers should be incentivised to keep these costs to a minimum to remain competitive, although some uncertainty remains as the approach taken to administering the EBSS may vary across energy suppliers.
- The extent of industry admin cost pass through: Energy suppliers will bear costs associated with delivering the EBSS. In the central case, this is estimated as £44m across

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⁴⁵ See Annex A

the lifetime of the EBSS. This would translate to less than £1.5 per households if recovered evenly over all domestic electricity customers. These additional costs could be included in future price caps, which would enable energy suppliers to recover the majority these from consumers on default tariffs. However, decisions on updating the price cap will be up to the energy regulator Ofgem, who are expected to require sufficient evidence from suppliers to inform this decision. Ofgem may consider including costs if they are found to be demonstrably systematic and material. To inform this they would need to understand actual operating cost increases and any saving due to the scheme, which will only be available once the scheme has gone live.

Sensitivity analysis

54. Sensitivity analysis has been carried out on key parameters of the quantitative analysis. Figure 2 provides an overview of the sensitivities assessed and their impact on the SNPV as a percentage change. Given the SNPV is negative, a positive percentage change means the SNPV improves, whereas a negative change means the SNPV worsens.

Figure 2 – Model sensitivity analysis on the SNPV



- Energy consumption: This varies the average proportion of the grant which is spent on energy by households. The assumptions range from 15%, for all households in the low scenario and 66% for all households in the high based on evidence from an evaluation of the Winter Fuel Payment. The SNPV is highly sensitive to this as it has a direct impact on the amount of energy consumption and associated social costs. However, this does not account for unquantified benefits from increased consumption of energy and other goods and services. It is expected households will generally act to maximises their utility when making consumption decisions.
- Carbon prices: The full range of carbon values reported in the HM Treasury Green Book have been assessed. The SNPV is moderately sensitive to this as it makes up a large proportion of the social cost of energy consumption – higher carbon values imply a higher social cost of emissions.
- Energy costs: Similarly, a low and high range, for both retail energy prices and long-run variable costs (LRVC), have been assessed. This impacts the analysis in two ways: retail prices impact how much energy a consumer can buy with the allocated grant funds and the LRVC is used to calculate the resource costs to society of supplying that energy. Higher energy prices reduce the increase in energy consumption but increase the resource cost of that energy. Overall, in the high energy price scenario, the increased resource costs are the larger of these two impacts.
- Administrative costs: An indicative +/- 20% range forms the basis for both government and industry ranges tested. These have a minimal impact on the SNPV, owing to their small contribution.

• **Meter point numbers:** Sensitivities on both the initial number of meter points and annual growth rates are tested. The initial number of meter points is varied by +/- 10% and the growth rate range are informed by the minimum and maximum rates observed over the last 5 years of 0.49% and 1.01%, respectively. In the former, there is a very small impact on the SNPV as the growth mainly impacts how many meter points are eligible for the grant. A change in the amount of initial meter points has an almost directly proportional impact on the SNPV of the EBSS, as this is the key assumption which dictates the size of the EBSS and its impact on aggregate energy consumption.

Policy consideration: Uncertainties, issues, and unintended consequences

- 55. There are a number of implications of the policy design which will need to be considered and managed across the delivery of EBSS. These are summarised below:
 - The scheme is insufficient: The Cost-of-Living package announced in May 2022 includes
 additional one-off support which, combined with EPG, means the most vulnerable
 households should see minimal increases in their energy costs between last winter and the
 coming winter. The government continues to monitor the cost-of-living situation and does
 not rule out the need for further targeted support in future years.
 - Domestic Energy price guarantee (EPG): The EPG and EBSS measures both act to support all households in the UK with the increased cost of energy in different ways: The EBSS provides a direct lump sum discount on a household's energy bill to the total value of £400 from October 2022 to March 2023, acting to increasing household budgets. The EPG will act to reduce the unit cost of gas and electricity, which will mean households' budgets and the support from EBSS can go further. The EPG was designed with the support from EBSS in mind and added a future element of support which scale with consumption.
 - Risk of gaming/fraud: As with any large government spend, there is a risk of fraud or gaming. Any gaming/fraud by energy suppliers or consumers could impact on the funds delivered by the EBSS and could mean the funds would not be used for the policy intent. This would reduce the effectiveness of the EBSS and could mean consumers do not benefit. We are working closely with BEIS's Counter Fraud team and the Cabinet Office to mitigate against this.
 - Bad debt: As in similar markets, some consumer debt is typically left unrecovered by energy suppliers either because consumers are persistently unable to pay or cannot be cost effectively reached to take payment. This adds to supplier operating costs. There is concern that the scale of this may grow as a result of rises in energy costs and the wider cost of living. The EBSS is designed to help consumers better manage the expected peak in energy prices, reducing the number of consumers falling behind on their bills by shifting costs to when prices are lower, and consumers have had more time to prepare. As a result, we do not expect the EBSS to increase the costs to suppliers of bad debt. There may be some beneficial impact, all else equal, but this is challenging to assess.
 - **Different payment types:** The response to the consultation and stakeholder engagement has raised awareness to a risk where consumers that pay by Direct Debit may not see any reduction in the price paid for energy due to wider increases in prices, and that some energy suppliers may not re-calculate direct debits until later in the year. This is not in line with the policy intent to ensure consumers feel the benefit across the winter 2022/23 period and, as a result, an option to deliver the support over six months from October 2022 to March 2023, in the form of a monthly discount of around £66 or £67, would be applied. Alongside this, other payment methods, such as credit and prepayment meters, would also receive the support by similar amounts and on similar timescales to ensure there isn't an incentive to switch payment methods. While this would better align with the policy intent there are expected to be greater industry administrative costs associated with delivering 6 payments instead of one.

- Managing public money: Given the size and scale of the EBSS, there is a possibility that providing energy suppliers with the funding through one payment of £400 to be applied to customer account balances could impact on energy supplier cash flows. There is a possibility that if funds were delivered in this way it may mean energy supplier(s) could benefit from holding these funds i.e., improved cash flow or interest on the funds, which is not the policy intent. As a result, an advantage of the six-monthly payment option would be to reduce this risk by staggering when the funds are delivered to energy suppliers across the six months.
- Multiple grants provided to individuals paying multiple bills: The intention of the EBSS scheme is to provide the grant to all households with a domestic electricity bill. Given the link to domestic electricity meters, those who pay multiple domestic electricity bills will receive corresponding multiple grants. There are a varied reasons for why someone could be paying multiple electricity bills, for example supporting a vulnerable relative or friend. The exact number of people who pay multiple electricity bills is unknown, however, it is expected to include an estimated 0.5 million individuals paying a second electricity bill at their second homes in Great Britain.⁴⁶ Attempting to exclude multiple bill payers, including those with a second home or empty homes, has been considered and assessed to be both highly complex and running the risk of delaying delivery, and excluding individuals who may need the grant the most.
- **Deadweight:** There are likely to be issues of deadweight given this is a universal measure, reflecting on the challenges of developing a more targeted scheme in time for delivery ahead of this winter. Despite the significant increases in energy costs, there are likely to be households for which energy prices under "do nothing" would still be manageable and not lead to issues of underconsumption, mostly likely those with higher incomes. The share of the spend on the scheme that is deadweight reduces the higher energy prices are under "do nothing". The grants would be delivered through a reduction in energy bills. As such, a recipient could not automatically re-direct this support. However, if, for example, they wish to make an equivalent donation to a charity of their choosing, they could do so.
- Interaction with inflation: The ONS has classified EBSS as a current transfer paid by central government to the household sector. As such, it will not directly affect the official measures of inflation (CPI, CPIH, or RPI).⁴⁷ Insofar as EBSS has an impact on consumption, this could lead to second order indirect effects on inflation in the future if stimulating demand pushes up prices. However, this impact is uncertain and would be challenging to attribute directly to EBSS, and it needs to be considered alongside the fact that the policy intention is to maintain demand at an acceptable and safe level compared to a counterfactual of critical underconsumption.

Wider impacts

Direct costs and benefits to business calculations

- 56. This IA has considered the costs and benefits arising to business to deliver the EBSS. An impact is considered 'direct' if it arises directly from the implementation of the measure. BEIS assesses these direct impacts using the standard methodology to calculate the annual net direct costs for business (Equivalent Annual Net Direct Costs to Business, or EANDCB).
- 57. A summary of the costs expected to be borne by suppliers under the preferred option can be found below. Please see Annex A for full details of costs.
 - Familiarisation and dissemination: Reading and understanding new regulatory requirements and guidance is assumed to happen at an energy supplier level. This

⁴⁶https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/898190/2020_EHS_second_homes_factsheet.pdf

https://www.ons.gov.uk/news/statementsandletters/energybillssupportschemeclassification

- includes the time associated with creating guidance, planning implementation and dissemination to wider teams through training.
- Reporting: Energy suppliers will be required to report before, during and after the EBSS.
 Prior to the EBSS start, this will mainly consist of reporting the required funding. This will
 be for both scheme reporting and to adhere to the updated supplier licensing conditions.
 Across the lifetime of the EBSS, energy suppliers will be required to report monthly
 delivery, and after the scheme report and return any undelivered funds. This is assumed
 to be carried out by a mixture of internal financial and business analysts, with approval
 provided by senior officials.
- Delivering the grant: All suppliers are also expected to bear costs associated with communicating to customers to inform them of the grant. This could be delivered via email or post. Energy suppliers are also expected to incur costs from delivering the grant to customers. For larger suppliers, this is expected to be a desk-based automated process which could require some updates to IT and billing systems for most customers. Suppliers are expected to face additional costs in delivering the grant to traditional pre-payment customers (around 7% of all meter points), as these accounts cannot be credited remotely, and would require vouchers or special action messages (SAM). Some consumers may require manual processing due to issues with automation or characteristics of consumer accounts.
- Additional administrative costs: There could also be some additional administrative requirements related to dealing with calls from customers and preparing the required documentation for audits.
- 58. All costs presented above are considered to be direct. The EANDCB is estimated at £44m for the 1-year when the EBSS is delivered. Around three percent of these costs are attributable to business in Northern Ireland based on their share of the consumer base, as described above the actual share of NI costs is dependent on the final delivery model.

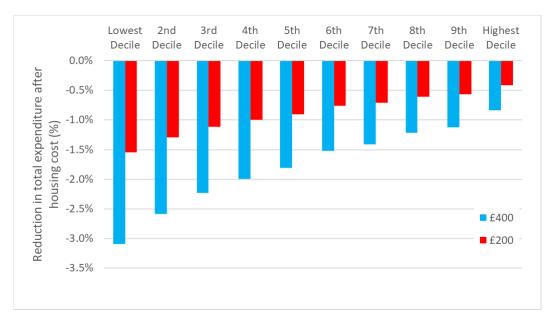
Local impacts appraisal

- 59. The EBSS covers all domestic electricity meter points with a direct relationship with the energy supplier in the United Kingdom. As such the distribution of the support will follow the distribution of meter points in the United Kingdom. The policy aims to provide support to all of these consumers to the value of £400.
- 60. However, the benefit of the initial grant will be felt differently depending on household incomes/budgets. Low-income households are expected to gain a greater benefit as a share of their total expenditure relative to those with higher incomes. To illustrate this, we have undertaken analysis on the impact of the reduction to annual energy bills as a proportion of household expenditure across disposable income deciles.⁴⁸ The results, in figure 3, indicate that a £400 payment would reduce total household expenditure (after household costs) by around 3.1% for the lowest decile, compared to around 0.8% for the highest decile.

Figure 3 – Impact of EBSS £400 payment as a share of total after housing cost expenditure by equivalised disposal income deciles⁴⁹

⁴⁸https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/datasets/familyspendingworkbook1detailede xpenditureandtrends

⁴⁹ For simplicity energy bills are based on 2022 April – September price cap levels, represented as a proportion of after housing cost expenditure across equivalised disposable income deciles



Sustainability impacts including Net Zero

- 61. Given the recent increase in energy and fuel prices, it is expected that consumption of energy and fuel, and therefore emissions, more broadly will decrease in response. This would leave short-term emissions lower than expected in the Government's November 2021 Net Zero Strategy that was based on lower energy price assumptions. For example, the default tariff (price) cap is currently £693 or 54% higher annually for an average household than the price cap level effective at the time of the Net Zero Strategy, and it will increase further in the October price cap period.
- 62. Therefore, from this perspective, energy demand and emissions may still be lower than in a scenario where high prices had not been experienced even when accounting for the impact that the EBSS has on increasing energy consumption. However, for the purposes of this impact assessment, and aligned with Green Book appraisal methods, the assessment is made relative to a counterfactual that already includes the impact of the rise in prices.
- 63. The EBSS is designed to avoid underconsumption of energy and other goods and services across the period of high prices. As a result, the EBSS is expected to increase overall energy consumption relative to the counterfactual. This will lead to an increase in the environmental costs associated with energy use i.e., carbon emissions and air quality impacts. The policy is estimated to lead to a net increase of emissions by around 9 MtCO2e. Table 6 provides an overview of the total emissions, their value, and the value associated with air quality damage.

Table 6 – Summary of energy impact and social costs

Net change in other energy consumption (TWh)	48
Increase in carbon emissions (Mt CO2e)	9
Resource costs of energy (£m)	3441
Social cost of carbon (£m)	2325
Social cost of air quality impact (£m)	275

Impact on small and micro businesses

64. The EBSS will be delivered by all domestic electricity suppliers to all domestic electricity customers with a direct relationship with their supplier in the United Kingdom. According to the latest Ofgem data, there are 26 energy suppliers in the domestic retail energy market, with around 11 suppliers classified as either a small business or microbusiness as of 13th May 2022⁵⁰. In total these suppliers currently serve fewer than 150,000 consumers. Most, if not all, electricity suppliers in Northern Ireland who will help deliver NI EBSS are unlikely to be classified as small or micro businesses, although we currently lack robust data on this.

⁵⁰ Based on BEIS analysis of Companies House data https://www.gov.uk/guidance/companies-house-data-products

- 65. The EBSS aims to support as many domestic electricity customers as possible with a direct relationship with an energy supplier in the United Kingdom. As such, any exemption for suppliers would not be in line with the policy intent and to the detriment of customers and their suppliers. There will be no additional or different requirements placed on small or micro businesses. However, we recognise the impact of delivering the EBSS may be felt differently across energy suppliers.
- 66. Responses to the consultation and engagement with suppliers suggest smaller suppliers could face an increased administrative burden in delivering the EBSS, owing to their inability to change ways of working or the makeup of their customer base. Conversely, we have also heard from some suppliers that these smaller entities may be able to respond to the delivery requirement of the EBSS in a more agile way due to having smaller customer bases and less cumbersome and legacy ways of working. The reporting requirements of the EBSS are expected to be similar to the existing reporting all suppliers submit to Ofgem, which is expected to reduce additional complexity. Ultimately, the experience is expected to vary across suppliers, dependant on their business model.
- 67. To ensure equal treatment of all customers and energy suppliers, the Government's approach to delivering the EBSS has been designed to bring as much alignment between different payment types as possible. However, we recognise that exact alignment is not possible due to the characteristics of different payment types i.e., traditional pre-payment meters are unable to be credited remotely. In addition, we also recognise the different ways of working and business models of energy suppliers across the market. As such we have opted for a policy design which provides suppliers with flexibility over how they ensure the grant is received by consumers. For example, suppliers will be able to apply the grant as either a credit, a discount, or a refund to their customers.
- 68. As discussed in the direct cost to business section, we have estimated the total administrative costs of delivering to be between £30m and £57m with a central value of £44m. Analysis of the customer base of those suppliers classified as small or micro businesses suggests that they account for less than 1% of the total eligible customer base and, as such, those suppliers would be responsible for delivering less than £6m of the total value of the grant. Like all energy suppliers, the cost of administering the EBSS is generally expected to be passed on to their customers, but this will be at the discretion of the supplier.
- 69. Where customers are on fixed tariffs, passing on costs may not be possible. While small suppliers have historically had a greater proportion of their customer bases on fixed acquisition tariffs, during the current market environment most customers previously on fixed tariffs have since moved onto default tariffs. For non-fixed tariffs, such as standard variable tariffs, suppliers generally can change tariff pricing in response to underlying cost changes, subject to the default tariff cap, set by the regulator, Ofgem. Ofgem has a duty to set the default tariff cap such that it allows efficient suppliers to finance their activities and will need to consider any cost impact of the EBSS when determining future cap levels.
- 70. Overall, while suppliers are expected to take different approaches in delivering the EBSS, and there could be a greater impact placed on small or micro businesses, the potential for this is assessed to be outweighed by the importance of ensuring as many customers as possible receive the EBSS payment and that competition is not distorted by excluding some customers and suppliers from this scheme. Moreover, the response to the consultation suggested that all suppliers would be incentivised to deliver the EBSS as cost effectively as possible to maximise their competitiveness and deliver the greatest benefit to their customers.
- 71. Furthermore, the legislation is to be introduced which will require landlords who offer all-inclusive rents to pass on the full benefits of the EBSS to tenants if they receive it. This is expected to have an impact on some landlord and letting agencies, some of which are likely to be small or micro business. Evidence on the prevalence of all-inclusive rents is limited,

according to a Citizens Advice around 13% of tenants⁵¹ have their energy managed by their landlord but only a subset of these will be on an all-inclusive basis. These landlords or agents may face additional administrative burden in familiarising themselves with the requirement and passing these costs through to tenants, however this would only be additional if in the absence of the legislation they would not have passed on the support. The government has previously made it clear that it would expect landlords to pass on EBSS payments to their tenants; the legislation formalises that. Compliance is expected to be a quick desk-based exercise for landlord or letting agents and come with minimal additional costs. Ultimately, the legislation will help to ensure the support offered by EBSS reaches those it was intended for.

Public Sector Equality Duty (PSED)

- 72. We have been considering the equality implications of the preferred option. This included a Public Sector Equality Duty (PSED) assessment which has been completed for the preferred option. A summary of the key considerations is set out below.
- 73. Overall, we believe that the EBSS will have a positive impact for all recipients, including those that share the protected characteristics assessed under the PSED requirements. This is due to automatically providing a £400 grant to over 29 million domestic electricity customers, without an application process. As already discussed in this impact assessment, this aims to help households manage the unprecedented rise in energy prices and help avoid dangerous levels of underconsumption of energy or other goods/services. However, we recognise that there are several impacts of the EBSS design which could disadvantage certain groups. These are summarised below:
 - Changes in household occupancy: Where the living circumstances of individuals change, they may only receive part of the grant. For example, young people leaving home for the first time shortly after the start of the grant process or changes to relationships that may result in new households forming⁵². To ensure that as many households as possible benefit from a proportionate amount of the grant over the winter, the £400 will be given out in instalments over 6 months, starting in October 2022, meaning newly formed households will receive a proportionate amount of the £400 up to the last payment in March 2023.
 - **All-inclusive rent:** In some rental accommodation, energy bills are included in the rent, which risks the property owner not passing on the benefit of the £400 grant to the residents. While evidence from the English Housing Survey suggests that less than 1% of households pay their energy bills in this way⁵³, they may be more likely to share protected characteristics such as age and ethnicity. To ensure that the benefit of the grant is passed on, we will communicate that property owners should pass on the grant in line with the arrangements in their respective contracts or tenancy and how tenants should expect to benefit from the grant, as well as how to challenge where necessary.
 - **Pre-payment meters (PPM):** Around 14% of all energy consumers have a pre-payment meter for their electricity in Great Britain. Around half of these are estimated to be smart pre-payment meters⁵⁴. Evidence suggests that some protected characteristics such as age and marital status are overrepresented in this group⁵⁵. Traditional PPM customers will receive the grant as vouchers, SAMs or a cheque that can be charged to the meters. Receiving the grant is not automatic in these instances, as the customer will need to redeem the voucher, so this introduces risks of the grant not being applied to these customers if action is not taken or the vouchers, SAMs or cheque do not reach them. We will require that suppliers take all reasonable steps to provide the monthly EBSS grant

⁵¹ https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/room-for-reform-embedding-fair-outcomes-for-tenants-in-tomorrows-retail-energy-market/

⁵² https://www.gov.uk/government/statistical-data-sets/new-households-and-recent-movers

⁵³ BEIS analysis of English housing survey results: https://www.gov.uk/government/collections/english-housing-survey

⁵⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1086573/table_242.xlsx and BEIS analysis of smart meter data.

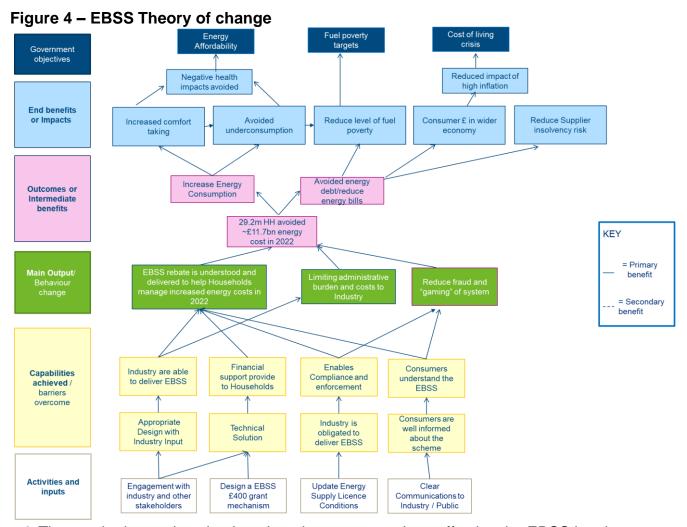
⁵⁵ Demographics of PPM

payment to each eligible customer as soon as possible after the qualifying date. We will be undertaking a rigorous communications campaign with targeted communications and messaging for prepayment meter customers. This will utilise a range of media, existing networks and systems to alert customers to the vouchers they will receive and how to use them.

74. While some PSED concerns and challenges do exist in the delivery of the EBSS, there are mitigations in place to limit their impact. This will act to ensure as many households as possible can benefit from the EBSS. We will continue to monitor the delivery of the EBSS and assess any additional PSED issues which may arise.

Monitoring and Evaluation

75. A high-level Theory of Change (Figure 4) has been developed to demonstrate the causal pathway from inputs, through to outcomes and impacts of the EBSS. This will serve as the framework for the evaluation approach, including the outcomes and impacts that will be validated/tested through the M&E process.



- 76. The monitoring and evaluation plan aims to assess how effective the EBSS has been at achieving the objectives and specific benefits set out above. A number of key benefits will be monitored and measured over the lifetime of the EBSS, such as:
 - 30 million meter-points avoid £12.1bn energy costs in the United Kingdom over Winter 2022/23
 - Avoided negative impacts to energy consumers' health because of energy underconsumption over Winter 2022/23
 - Reduced fuel poverty relative to the counterfactual
 - Reduced impact of cost-of-living crisis relative to the counterfactual

- 77. The EBSS monitoring data will serve several purposes, including delivery, enforcement and compliance, and anti-fraud checks. The primary avenue for collecting monitoring data is through suppliers. BEIS and Ofgem are working together to align reporting requirements to help reduce the burden placed on industry.
- 78. The evaluation of the EBSS will comprise of the following elements:
 - Process evaluation: will focus on understanding how the grant was distributed from
 government to energy supplier and then on to meter points (consumers). It will also cover
 aspects such as the administrative burden on suppliers and Ofgem to deliver the EBSS;
 exploration of grants/vouchers not delivered/redeemed and why; and the overall scheme
 delivery and lessons learned. This strand will also cover consumer awareness and
 perceptions of EBSS, and the ability of different consumer groups to access and benefit
 from the grant.
 - **Impact evaluation:** will cover what difference the scheme has made, including the additionality from EBSS. The methodology will consider the impact of the EBSS as far as possible, recognising the limitations in disentangling the impact of EBSS in comparison to wider cost-of-living support this Winter
 - In particular, the impact evaluation will test the anticipated impacts of the scheme including reduced underheating; reduced shock of increased energy prices through the increase in the energy price cap; fuel poverty impacts and levels of indebtedness.
 - A suitable evaluation methodology will need to be determined to be able to attribute impacts to EBSS. Quasi-experimental methods are being reviewed to assess feasibility and ensure the evidence can support a higher classification in the Maryland scale. In the absence of this, we will use theory-based methods such as contribution analysis, process tracing and realist approaches to assess the impacts of the scheme.
 - Value for money assessment: the monitoring and evaluation will also seek to conduct a
 post scheme value for money assessment to compare the outcomes of the EBSS with the
 expected impacts appraised in this impact assessment.
- 79. Monitoring and evaluation are expected to be carried out by a combination of internal delivery monitoring collected by the payment body and an external organisation to conduct the evaluation of the EBSS to ensure independence. The evaluation will be commissioned in September 2022, and we expect early findings to be available prior to Winter 2023.

Annex A – Quantified analysis Assumptions and Methodology

This Annex sets out the methodology and key assumptions which have fed into the quantified cost benefit analysis. This includes estimating the number of eligible meter points, administrative costs to government and industry, and the assumptions made on the impact on consumption.

Total Transfer value

The estimate of the total number of recipients has been informed by the number of domestic electricity meter points in the United Kingdom. The steps to estimate this are set out below and the results for the central case are shown in table 8.

- (1) Estimated meter points in Year_i = Initial meter point total * Annual growth rate
- (2) Transfer value = No. domestic electricity meter points * (£200/£400)

Government Administrative costs

The costs to government have been estimated by BEIS for the operational purposes of setting up the teams in BEIS and Ofgem. The total cost in 2022/23 are assumed to be £10m and £3m in 2023/24.

Industry Administrative costs

Estimating the costs associated with delivering the EBSS is challenging due to the diversity of approaches and business models in the domestic electricity supplier market. To inform these cost estimates we requested evidence from suppliers through the public consultation on this scheme ⁵⁶, however, only a small number of suppliers responded with sufficient information on costs. As a result, for the purpose of this impact assessment, we have compared the evidence we received from industry with the reported industry costs from elements of other policies such as the Warm Home Discount⁵⁷, the Government Electricity Rebate⁵⁸/

There still remains some uncertainty in these estimates due to the different approaches suppliers may take. As such, for the purpose of this impact assessment, we have applied a +/- 30% uncertainty range to these total costs, which was tested in the sensitivity analysis and does not have a large impact on the overall value for money of the EBSS. However, we recognise there is scope for these costs to vary as suppliers deliver EBSS.

In addition, the estimates below focus solely on the costs of delivering the EBSS. As discussed throughout this IA, there could be some areas where energy suppliers benefit from the EBSS. This could be due to reduced customer arrears and debt as a result of receiving the grant, or reduced customer calls as customers are more able to manage their energy bills. These benefits are challenging to monetise and are only expected to be small, if any. As such, the EBSS would still be expected to lead to a net cost to business.

A standard cost model has been used to estimate the cost to industry of undertaking different activities. The cost of different job roles has been informed by the 2021 ASHE publication from the ONS and we have used the mean cost per hour for the job across Great Britain⁵⁹. We have also increased the per hour costs by 22% to account for non-wage costs as per guidance from the Regulatory Policy Committee.⁶⁰

 $^{{\}color{red}^{56}} \; \underline{\text{https://www.gov.uk/government/consultations/technical-proposals-for-the-energy-bills-support-scheme} \\$

⁵⁷https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1065787/Warm_Home_Discount_reform_final_stage_Impact_Assessment.pdf

⁵⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/360461/ger_ia.pdf

 $^{^{59} \}underline{\text{https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/allemployeesashetable 1}$

⁶⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/827926/RPC_short_guidance_note_-_Implementation_costs__August_2019.pdf

The assumptions used to inform the costs to industry of delivering EBSS are summarised in table 9 and 10. This is split into administrative activities and the costs of delivering the grant. The key areas of difference are summarised below.

- Reporting: More reporting will be required as suppliers will need to submit meter point
 numbers every month and make the required funding request. In addition, the delivery
 reporting is assumed to carry on for 3 months to capture the delivery and redemption of
 vouchers by traditional pre-payment consumers.
- Delivery of the grant: The grant will be delivered over 6 instalments. We have used a
 combination of costs provided by suppliers and the cost of delivering the Government
 Electricity Rebate to inform these. Energy suppliers are expected to bear the variable
 costs of this six times. In practise, this could be an overestimate as it does not account for
 any cost saving from carrying out the same process multiple times.

Table 9 – Administrative elements of industry cost

What	Who	Wage/cost (£ or£/hour)	time taken (Hours)	Frequency/staff	Firms
Familiarisation: Reading and understanding the requirements, briefing senior officials, creating, and disseminating guidance. The equivalent of 4.5 months to complete.	Management consultants and business analysts	29	780	1	32
Training: Project groups	Management consultants and business analysts	29	4	1	32
attending training events prior to scheme launch. Training ran by internal staff for 30 internal employees.	Call and contact centre occupations	13	4	20	32
	Business, research, and administrative professionals	31	4	10	32
IT updates: Project team to	Managers, directors, and senior officials	32	8	1	32
manage and deliver any	IT specialist managers	33	80	1	32
required updates to a supplier IT system to deliver the grant automatically. Assumed to take	IT project and programme managers	37	80	1	32
the project team 2 week to deliver.	IT business analysts, architects, and systems designers	32	80	2	32
Reporting: Collecting and collating an energy supplier's	Chief executives and senior officials	65	2	9	32
customer numbers into the reporting template is expected to be an automated desk-based	Management consultants and business analysts	29	8	9	32
activity, assume to take 1 day to complete, oversight from managers, sign off from senior officials and uploading report template	Managers, directors, and senior officials	32	4	9	32
Funding request/reconciliation:	Chief executives and senior officials	65	2	9	32
Finance team to prepare and approach request for funding	Financial managers and directors	37	2	9	32
from the customer numbers prepared. Assumes to take half a day to complete, and addition sign off.	Administrative occupations: Finance	17	4	9	32
Delivery Reporting: Collecting and collating the delivery	Chief executives and senior officials	65	2	9	32
reporting of the grant to customers monthly across the deliver lifetime of the EBSS.	Management consultants and business analysts	29	8	9	32

	Managers, directors, and senior officials	32	4	9	32
Communications: Preparing email and mail communication	Chief executives and senior officials	65	1	1	32
about the EBSS and delivery for customers. It is assumed	Managers, directors, and senior officials	32	2	1	32
employees are aware of the EBSS following familiarisation	Administrative occupations	17	1	1	32
and training. We assume all customers receive e-mails and	Print	0.15	N/A	14.5 m	n/a
50% also receive a letter.	Postage	0.85	N/A	14.5 m	n/a
Customer contacts: Assumed that all suppliers employ 5	Managers, directors, and senior officials	32	5	24	32
additional call centre staff over the delivery period and additional management.	Call and contact centre occupations	13	900	5	32
Final Return funds:Finance	Chief executives and senior officials	65	2	1	32
team prepare the funds which need to be returned to the payment body, is approved by	Financial managers and directors	37	4	1	32
manager and senior official.	Administrative occupations: Finance	17	8	1	32
Audit/verification: Assumes all suppliers are subject to audit	Financial managers and directors	37	8	1	32
and verification activities over the delivery period. This requires finance and senior officials' time. Assume a senior	Administrative occupations: Finance	17	8	1	32
	Managers, directors, and senior officials	32	12	1	32
board of 6 approve the audit preparation.	Chief executives and senior officials	65	3	6	23

Table 10 - Industry cost estimates delivering the grant

rable to initiately cool commutes delivering the grant					
Grant delivery: Assumes the majority of payments are made automatically following updates to the IT system if required. Assumes 50% of	What	Approach	No.	Cost (£/custome	Frequency
traditional PPM customers	Direct debt	Automatic	21	0.04	6
receive grant via voucher	Credit	Automatic	5	0.04	6
and 50% by SAMs.	Smart PPM	Automatic	2	0.04	6
Additional costs account for	Traditional PPM	voucher	1	£1.36	12
any issues with automatic	Traditional PPM	SAMs	1	£0.02	6
payments (5%) which are 5 times as costly to do	Expectations (5%)	Manual processing	5	0.18	6
manually. Additional costs accounted for to update the bills for Direct Debit and credit customers.	Billing updates	Credit & DD only	26	£0.55	6

Impact of the grant on energy consumption

EBSS grants will be delivered through reductions in electricity bills. This is effectively an increase in household disposable income for grant recipients. We would expect households to respond through observable changes in the amount of energy and other goods and services they consume.

We expect grant recipients' energy demand to increase greater than proportionally to the increase in their incomes. We assume that 15-66% of the grant will be spent on additional fuel consumption. We scaled the proportion spent on energy by income, as such, those in the highest income decile spend 15% of the grant on energy, whereas those in the lowest decile spend 66%. This is known as the labelling effect, which was identified by the evaluation of a similar policy, the Winter Fuel Payment⁶¹. Where the grant is not used for additional energy consumption, we have assumed it is used to consume other goods and services or is saved. As a simplifying assumption, we treat this remaining portion of the grant as additional income.

It is assumed the increase in energy consumption will be spread across all household energy consumption i.e., across all fuels a household uses for heating or electricity. Evidence from ECUK⁶² has been used to inform this split. To capture the social value of comfort taking, we derive the retail value of the change in energy consumption, as this represents consumers' willingness to pay for the change in comfort. This is derived as set out in the Green Book:

```
Social Value = \Deltachange in fuel consumption f * retail price f
Where f = fuel type (gas, oil, coal, electricity)
```

The resource cost of meeting increased demand for a fuel is calculated based on the long run variable cost of that fuel in 2022. For the purposes of this analysis, we have adapted prices in the green book to reflect recent movements in energy prices.

```
Resource Cost = \Deltachange in fuel consumption f * Long Run Variable Cost f

Where f = fuel type (gs, oil, coal, electricity)
```

To estimate the air quality and greenhouse gas emission impacts, we have used the conversion factors and values as set out in the green book.⁶³

EBSS AF

Eligibility Criteria:

⁶¹ Beatty, T., Blow, L., Crossley, T. & O'Dea, C. (2011). Cash by any other name? Evidence on labelling from the UK Winter Fuel Payment. Available at: http://www.ifs.org.uk/publications/5603

⁶² https://www.gov.uk/government/statistics/energy-consumption-in-the-uk-2021

https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal

Certain groups would not benefit from the EBSS because they do not have a domestic meter point and a direct relationship with an electricity supplier. The government previously announced that further funding would be available through winter 2022/23 to help those not be reached by the EBSS. The EBSS Alternative Fund (AF) will be funding that will provide a £400 energy bill grant to households that meet the following criteria:

- The dwelling for which support is being claimed is the main or sole residential address of the applicant making the claim;
- The resident or applicant (if someone else manages the application on their behalf) is responsible for paying for energy used in the dwelling as part of a service charge, rent or other arrangement;
- The household is not already benefitting from EBSS payments, either through the main EBSS scheme or the EBSS Alternative Fund:
- The applicant is not a business with a commercial supply arrangement or within business premises, with the exception of businesses whose main business activity is to provide long term residential accommodation (landlords, etc.) applying on behalf of their residents.

Size of population in scope:

We have estimated that the number of customers who meet the eligibility criteria above is 740,000 – 886,000. A large portion of this group are care home residents which make up around half the potential recipients of grants via the EBSS AF.

Table 12 below sets out the detail of how this estimate was derived as it has drawn on various reports and data sources. This represents our current estimate of the potential number of households who would be in scope of the EBSS AF, however significant uncertainty remains.

Table 12 – Available evidence on the number of homes outside of scope of EBSS

Group	Number (est.)	Source
Residents of care homes	418,000	ONS, UK Care Home review (Scotland & Wales) 2021 64
Housing association and private tenants supplied via a landlord with a commercial meter	175,000 – 280,000	Estimate received from consultation process ⁶⁵
Park Homes supplied as above	85,000 – 125,000	DHLUC ⁶⁶ , Wales.gov ⁶⁷ , gov.scot ⁶⁸
House boats at residential moorings ⁶⁹	3,000	VOA ⁷⁰
Heat network consumers who only receive electricity via a private wire from a CHP plant	Up to 32,000	BEIS analysis of Heat Network statistics ⁷¹
Travellers on authorised fixed sites	26,000	MHCLG ⁷² , scot.gov ⁷³ , gov.wales ⁷⁴
Energy consumers who live off the grid	500 – 2,000	Indicative estimate based on evidence from a Ofgem call for evidence.
Total	740,000 – 886,000	

Costs and Delivery of EBSS AF

Given the uncertainty around the size of the eligible population total costs of the EBSS AF are also uncertain. The value of the grants paid would be between £296m and £354m and allowing for 5% in admin costs the range increases to £311m - £372m.

The EBSS AF will require recipients to submit an application to a designated body in order to receive their grant this means households needing to use the EBSS AF will incur slightly higher hassle costs than those whose grants are paid automatically. Costs to businesses are assumed to zero as delivery is through a designated body with no new regulation or requirements for business.

 ${\color{red}^{68}}\ \underline{\text{https://www.gov.scot/publications/residential-mobile-homes-scotland/pages/5/}}$

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/891229/Traveller_caravan_count_2020_stats_rel_ease.pdf

⁶⁴https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/socialcare/articles/carehomesandestimatingtheselffundingpopulationengland/2021to2022#self-funding-population-of-care-home-residents

⁶⁵ https://www.gov.uk/government/consultations/technical-proposals-for-the-energy-bills-support-scheme

⁶⁶ https://www.gov.uk/government/collections/park-homes

⁶⁷ Wales gov

⁶⁹ Some houseboats with residential moorings are eligible to pay council tax and this is the group we include. Those not on residential moorings are generally not the main home of a household.

https://www.data.gov.uk/dataset/0cd0d5c0-f170-4899-ba45-e7d227bbd0e4/houseboats

⁷¹ https://www.gov.uk/government/publications/energy-trends-march-2018-special-feature-article-experimental-statistics-on-heat-networks

⁷³ https://www.gov.scot/policies/gypsy-travellers/

⁷⁴ https://gov.wales/park-mobile-homes

Title: Heat Networks Emergency Legislation

IA No: BEIS064(F)-22-NZBI

RPC Reference No: RPC-BEIS-5234(1)

Lead department or agency: Department for Business,

Energy, and Industrial Strategy (BEIS) Other departments or agencies: N/A

Impact Assessment (IA)

Date: 12/10/2022

Stage: Final

Source of intervention: Domestic Type of measure: Primary legislation

Contact for enquiries: Heatnetworks@beis.gov.uk

Summary: Intervention and Options

RPC Opinion: Awaiting Scrutiny

Cost of Preferred (£m, 2022 prices, 2022 present value)

Total Net Present Social Value: 0

Business Net Present Value 0 Net cost to business per Business Impact Target Score 0

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

The proposed domestic Energy Price Guarantee will not benefit heat network consumers as they buy heat rather than gas. The Energy Bill Relief Scheme (EBRS) will ensure heat network operators do not pay over a fixed level for wholesale gas but there is currently no way to ensure this is reflected in the prices charged to their heat network customers. This legislation seeks to ensure the benefits of the EBRS are passed on to heat network customers by heat network operators. Without intervention heat network customers would likely face heating bills significantly higher than comparable customers with domestic gas boilers. These high bills could lead to significant numbers of customers being unable to afford heating over the winter of 2022/23.

Heat networks are a unique case and differ from other businesses receiving the EBRS because they are an intermediary for heating who use the gas they purchase to generate heat and then sell the heat directly to households and other businesses. This means heating prices charged to heat network customers have risen significantly as a result of rising commercial gas prices. The nature of heat networks means they have monopoly power as residents on heat networks are not able to change to a different supplier. Therefore, when networks receive subsidised gas through the EBRS, without intervention, heat networks will be able to continue charging their heat customers at a high rate rather than reflecting their lower gas costs in their heating prices.

Finally, heat networks currently do not have same level of regulation as other energy suppliers and there is not up to date reliable data in relation to heat networks and their consumers. This means that without further provision, there will be difficulties in ensuring heat network customers receive support they are entitled to through support schemes under the Energy Prices Bill. Without reliable data about heat networks and their consumers, heat network customers may be unable to access government support.

What are the policy objectives and the intended effects?

Primary legislation within the Energy Prices Bill will introduce the power to issue secondary legislation imposing pass-through requirements on intermediaries including heat networks. This means heat networks will be required to pass on the benefits of schemes including EBRS to their customers. Primary legislation is not expected to have costs or benefits on business. This Impact Assessment also covers the impacts of expected secondary legislation relating to heat networks

There are four main components considered by this Impact Assessment which could be introduced by the Secretary of State through secondary legislation. A) Require heat network operators to reflect savings they receive as a result of the EBRS in their tariffs charged to customers. B) Require heat suppliers to inform consumers that they are receiving the EBRS, explaining how they will pass the benefit on. C) Require heat network operators to notify the government with additional information, beyond the current requirements of the Heat Networks Metering and Billing Regulations. D) Appoint Ombudsman Services to handle complaints from heat network customers against their heat supplier if consumers feel their supplier has not complied with pass-through requirements.

The intended effect of A) is to ensure heat network customers benefit from the EBRS, given that they will not benefit from the domestic Energy Price Guarantee (EPG). This is intended to make heating more affordable than in the counterfactual scenario and mitigate the health and welfare impacts of unaffordable heat. The intended affect of B) is to ensure transparency between heat network operators and customers regarding pass through. The intended effect of C) is to aid the enforcement of A) and serve as important information in identifying customers eligible for other support schemes by establishing a reliable database in relation to heat networks and their consumers. The intended effect of D) is to provide heat network customers with a path to resolving issues of operator non-compliance. This will help to alleviate consumer detriment whilst disincentivising non-compliance.

What policy options have been considered, including any alternatives to regulation? Two main options have been considered.

- Option 0: Make no intervention (counterfactual)
- Option 1: Implement the proposed legislation (preferred option)

Will the policy be reviewed? It will be reviewed. If applicable, set review date: Secondary legislation stage

Is this measure likely to impact on trade and investment?			N/A	
Are any of these organisations in scope?		Small	Medium	Large
		Yes	Yes	Yes
What is the CO ₂ equivalent change in greenhouse gas emissions?		Trade	d: Non	-traded:
(Million tonnes CO ₂ equivalent)		N/A		N/A

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: Jan Mar My. Date: 11 October 2022

Summary: Analysis & EvidencePolicy Option 2: Implement legislation FULL ECONOMIC ASSESSMENT

Price Base PV Base		se	Time Period	Net Benefit (Present Value (PV)) (£m)			
2022	202	22	1	Low: 0	1	High: 0	Best Estimate: 0
COSTS (£m)			Fotal Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)		Total Cost (Present Value)
Low			0.0			0	0
High		0.0				0	0
Best Estimate			0.0			0	0

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

Primary legislation will provide the Secretary of State with a power to issue secondary legislation regarding pass-through for responsible intermediaries, including heat networks. There will be no costs or benefits to this primary legislation.

Monetised expected costs associated with the requirements of the secondary legislation fall into three main categories:

- 1) Staff time costs to heat network operators to comply with additional registration and reporting requirements. (Currently estimated at £3,500,000 to be revisited at secondary legislation)
- 2) Resourcing cost to OPSS to record and monitor data. (Currently estimated at £500,000 to be revisited at secondary legislation)
- 3) Resourcing cost to the Energy Ombudsman to handle disputes between heat networks and consumers in the event the heat network does not comply with requirements set out in this legislation. This may form part of secondary legislation. (Currently estimated at £500,000 to be revisited at secondary legislation)

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

Primary legislation will provide the Secretary of State with a power to issue secondary legislation regarding pass-through for responsible intermediaries, including heat networks. There will be no costs or benefits to this primary legislation.

Secondary legislation will require heat networks benefiting from EBRS to inform their consumers that they have received the EBRS, and how they plan to reduce the price of heat following the cost reduction resulting from the EBRS. This will have a staff time cost on heat networks in producing this communication.

The cost of passing through the benefits of the EBRS are not deemed as cost to business as heat network operators will only be required to pass on the net benefit, meaning this should be cost neutral to operators. Secondary legislation would allow heat network customers who believe their heat network is not complying with the legislation to raise a dispute with the Energy Ombudsman. The cost of resourcing the Energy Ombudsman has been monetised but time spent by the heat network customer and the heat network staff in resolving the dispute has not. There will be a cost to business in heat networks defending themselves in cases where customers incorrectly raise a dispute to the Energy Ombudsman. The prevalence of this has not been estimated, nor has the cost.

BENEFITS (£m)	Total Transition (Constant Price) Yea	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	N/A	N/A	N/A

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

It has not been possible to monetise the benefits to this legislation. The main affected groups will be heat network consumers.

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

Primary legislation will not deliver benefits but will enable the benefits from secondary legislation.

Secondary legislation will enact an economic transfer of the savings due to the EBRS from heat network operators to heat network customers. The expected impact of this is to make heat more affordable to consumers than it would be under 'no legislation' scenario. This will help reduce the risk of heat underconsumption amongst heat network consumers and therefore reduce negative health and wellbeing consequences. For vulnerable people in particular, a lack of heating can cause serious negative consequences including death.

The creation of a reliable database through reporting requirements will allow heat network customers eligible for EBRS pass-through to be identified. This will improve equity in distribution of the support scheme by ensuring heat network customers can receive the support they are entitled to.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

There is uncertainty associated with the final scope and approach to regulation due to the policy being at primary legislation phase and the inherent uncertainty in regulating a market which currently does not have significant regulation. This includes uncertainty over the current size of the heat network market.

The required pace of policy development has meant that not all costs and benefits have been quantified. The costs which are believed to be the largest have been estimated.

The significant variation in heating efficiency, contractual arrangements and business structure across the heat network sector introduces significant complexity in how the measures will apply to different heat networks. Though the design of the policy seeks to allow for heat network operators to account for the circumstances of their network, this creates uncertainty in the quantification of sector wide costs and benefits.

There is a significant dependency of this legislation on the implementation of the Energy Bills Relief Scheme (EBRS). This legislation also seeks to ensure that other support set out in the Energy Prices Bill will reach heat network customers.

BUSINESS ASSESSMENT (Option 3)

Direct impact on busing	ness (Equivalent Annual	Score for Business Impact Target	
Costs: 0	Benefits: N/A	Net: 0	0

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Executive Summary

- 1. A Heat network is a distribution system of insulated pipes that takes heat from a central source and delivers it to a number of domestic or non-domestic buildings.
- 2. Heat network customers purchase heat from their heat network operator rather than gas like a domestic gas boiler customer. This means that the domestic price cap for gas does not benefit heat network customers.
- 3. The rising wholesale cost of gas has increased the costs of running gas fuelled heat networks leading to increased charges to heat network customers.
- 4. Separate to the legislation covered by this impact assessment the government has set a Supported Wholesale Price – expected to be £75 per MWh for gas, less than half the wholesale prices anticipated this winter. This will provide support to non-domestic gas and electricity consumers by providing discounts targeted at reducing the wholesale element of prices.
- 5. This legislation seeks to ensure heat network customers benefit from the supported wholesale price.
- 6. Additionally, there is currently risk that some heat network customers will not be identified so will not receive benefits they are entitled to under the Energy Prices Bill. This legislation seeks to build a database sufficient to facilitate the allocation of funds to these customers.
- 7. Primary legislation will introduce powers to issue secondary legislation to further define and introduce these policies.

Problem under consideration

- 8. The Heat Network market is currently less regulated than other utilities such as gas and electricity. This means that currently heat network consumers do not benefit from the same levels of protection as gas and electricity consumers.
- 9. Rising fuel prices have caused significant increases in the cost of heat for heat network consumers.
- 10. The nature of heat network operations mean that currently heat network customers will not benefit on their heating bills through the Energy Price Guarantee and may not indirectly benefit from the Energy Bill Relief Scheme.
- 11. The lack of a reliable database relating to heat networks and their consumers presenting challenges in ensuring heat network customer receive he support they are entitled to under the Energy Prices Bill.
- 12. Due to the nature of heat networks; being mainly an urban technology and appropriate for multi-tenancy buildings, Heat Networks tend to serve more vulnerable, urban, and elderly consumers¹. The HNCS found that 44% of HN consumers are retired, compared to 14% of non-HN customers, suggesting a greater number of elderly people use HN's. This means heat network customers being unable to access sufficient heat could have serious consequences.

¹ Heat Networks Consumer Survey (2017) <

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Rationale for intervention

13. A number of market failures and barriers have been identified in the Heat network market:

- Monopolistic characteristics –Once connected it is often not possible or feasible for a
 customer to change supplier. This could lead to instances where consumers face
 detriment and have little recourse, as the network has market power. This may mean
 heat networks are not incentivised to reflect gas price savings in the rates charged to
 customers.
- Information Failures Heat network customers can often face incomplete information and a lack of transparency. When a customer joins a heat network, they often are unfamiliar with its heat network characteristics, which can prevent them from making informed decisions. Without intervention it may not be possible for a heat network customer to determine whether the price of heat they are charged is fair.
- Equity issues The nature of heat network operations mean that currently some heat network customers may not benefit from other measures in the Energy Prices Bill. This is compounded by the fact that networks tend to serve more vulnerable and elderly consumers.

Policy objective

- 14. This regulation has four objectives:
- Ensure heat network customers benefit from the EBRS, given that they will not benefit from the domestic Energy Price Guarantee. This is intended to make heating more affordable than in the counterfactual scenario and mitigate the health and welfare impacts of unaffordable heat.
- Ensure transparency between heat network operators and customers regarding pass through.
- Ensure government support schemes can reach all eligible heat network customers.
- Provide heat network customers with a path to resolving issues of operator noncompliance.
- 15. Primary legislation will introduce powers to issue secondary legislation for these policies. Secondary legislation will follow, further defining and introducing these policies.

Description of options

- 16. There are two overarching options in this IA: a continuation of other elements of the Energy Bill Relief Scheme but without legislation relating specifically to heat networks (Option 0: Counterfactual) or implement heat network legislation alongside the Energy Bill Relief Scheme (Option 1).
- **Option 0:** (Counterfactual): Continuation of other elements of the Energy Bill Relief Scheme but without legislation relating specifically to heat networks
- **Option 1:** (Preferred) implement the proposed heat network legislation alongside the Energy Bill Relief Scheme

Option 0: Counterfactual

17. The Energy Price Guarantee and Energy Bill Relief Scheme will be introduced but there will be no legislation introduced specifically for heat networks

- 18. Heat network operators will be able to benefit from the Energy Bill Relief Scheme. This will reduce the price that some heat network operators pay for gas. As heat network customers are unable to change supplier, heat network operators have monopoly power, so will not be pressured through market forces to reflect the benefit of EBRS in heat prices. There will be no measure to ensure EBRS is reflected in the heat prices they charge to their customers.
- 19. A reliable and complete register of heat networks will not be established. Current Heat Network Metering and Billing Regulations will continue which require heat networks to notify the government once every four years. Heat networks customers will be at risk of not receiving support they are entitled to through the Energy Prices Bill.
- 20. The counterfactual option would have no cost to business but would fail to make the interventions seeking to protect heat network customers set out below.

Option 1: Implement the proposed heat network legislation alongside the Energy Bill Relief Scheme (Preferred option)

- 21. Primary legislation will introduce powers to issue secondary legislation for these policies. Secondary legislation will define and introduce these policies.
- 22. The areas of legislation which are sought to be introduced with secondary legislation are set out in the table below:

Table 1 - Summary of measures

Regulatory powers	Scope	Description
Additional reporting requirements	All heat suppliers and operators	Require heat suppliers to notify information essential for passing savings from support schemes to the relevant customers.
Enable OPSS to share data about consumers and publish certain data about heat suppliers	OPSS	Enable OPSS to share data about consumers and publish certain data about heat suppliers.
Ensure 'pass- through' of EBRS	All heat suppliers and operators	Require heat networks to 'pass-through' savings from EBRS to their customers, taking into account the circumstances of their network.
Require heat networks to inform customers of EBRS	All heat suppliers and operators	Require heat networks to inform their customers that they are in receipt of the EBRS and how they will reflect this in their bills.
Allow heat network customers to raise a dispute with the Energy Ombudsman	All heat network customers	Allow heat network customers to raise a dispute with the Energy Ombudsman if they believe their network operator is not complying with these directions.

Approach to analysis

- 23. To assess the impact of introducing this legislation, costs and benefits have been identified. These consist of two main elements:
- High level, quantified, estimated costs of legislation. These costs all relate to secondary legislation.
- A qualitative assessment of costs and benefits.

- 24. Costs and benefits are compared against the counterfactual scenario (Option 0). This provides an indication of the expected costs and benefits that arise from the preferred option.
- 25. Due to the short term intended impacts of the legislation a 1 year appraisal period is being considered.

Evidence sources

- 26. Key sources of evidence used for the impact assessment:
- Heat metering and billing regulation (HMBR) notifications— data on around 14,000
 Heat Networks in the UK. The assumptions derived from this source include the current
 structure of the UK heat network market, estimated number of Heat supplier and the
 current number of final customers which have been used to assess the likely future
 burden on the Regulator and industry.

Estimated costs

- 27. Primary legislation is not expected to have any costs.
- 28. Expected costs associated with secondary legislation fall into three main categories:
 - a. Staff time costs to heat network operators to comply with additional notification requirements. (Currently estimated at £3,500,000, to be revisited at secondary legislation)
 - b. Resourcing cost to OPSS to carry out monitoring and recording of data. (Currently estimated at £500,000 to be revisited at secondary legislation stage)
 - c. Resourcing cost to the Energy Ombudsman to handle disputes between heat networks and consumers in the event the heat network does not comply with requirements set out in this legislation. (Currently estimated at £500,000 to be revisited at secondary legislation)
- 29. Secondary legislation would require heat networks benefiting from EBRS to inform their consumers that they have received the EBRS, and how they plan to reduce the price of heat following the cost reduction resulting from the EBRS. This will have a staff time cost on heat networks in producing this communication.
- 30. If heat network customers believe their heat network is not complying with the legislation, they will be able to raise a dispute with the Energy Ombudsman. The cost of resourcing the Energy Ombudsman has been monetised but time spent by the heat network customer and the heat network staff in resolving the dispute has not. There will be a cost to business in heat networks defending themselves in cases where customers incorrectly raise a dispute. The prevalence of this has not been estimated, nor has the cost.

EANDCB

- 31. There will be no costs to business from primary legislation. Costs to business will result entirely from secondary legislation.
- 32. Costs to business are expected to be the staff time required to comply with additional reporting requirements. This is currently estimated to be in the region on £3.5m but will be revisited at secondary legislation.
- 33. The cost of passing through the benefits of the Energy Bill Relief Scheme are not deemed a cost to business as heat network operators will only be required to pass on the net benefit, meaning this should be cost neutral to operators.
- 34. There will be a cost to business in defending themselves in cases where customers incorrectly raise a dispute to the Energy Ombudsman. This has not been estimated.
- 35. As a 1 year appraisal period is used due to the short term nature of the policy impacts, the EANDCB is estimated at £3.5m.

Assessment of Regulatory benefits

- 36. Primary legislation will not deliver benefits but will enable the benefits of secondary legislation.
- 37. Secondary legislation will enact an economic transfer of the savings due to the EBRS from heat network operators to heat network customers. The expected impact of this is to make heat more affordable to consumers than it would be under 'no legislation' scenario, similar to the impact of separate interventions capping the domestic price of gas will have on domestic gas boiler customers. The main benefits of this will be reducing the risk of negative health and wellbeing consequences for heat network customers arising from unaffordable heat. In particular for vulnerable people, a lack of heating can cause serious negative consequences including death.
- 38. Another key impact of the policy is distributional. Heat network customers may not benefit equally from other proposed interventions relating to domestic or wholesale gas prices. This legislation seeks to ensure that that heat network customer bills will be positively impacted by wholesale gas price interventions.
- 39. The creation of a reliable database through reporting requirements will allow heat network customers eligible for support schemes to be identified.

Wider impacts

Interactions with other policy

40. There is a significant dependency of this legislation on the implementation of the Energy Bill Relief Scheme and other areas of the Energy Prices Bill. This legislation seeks to ensure that support set out in the Energy Prices Bill will reach eligible heat network customers.

Equalities assessment

- 41. Legislation is seeking to address equity issues with allocation of energy bill support. The intended effect of the policy is to support customers on heat networks who would not receive the existing proposed support.
- 42. An equality impact assessment of the policy has been carried out. The equality implications will be kept under review to consider further relevant evidence as it becomes available. The evidence for the equality assessment has been based on the current population who are on heat network customers. This assessment found:
- The elderly are more vulnerable to fuel poverty, both for economic and health reasons.
 The Heat Network Consumer Survey (2017) found that more heat network consumers are elderly compared to non-HN consumers (44% to 15%), and the 2022 HNCS' initial findings do not indicate that this has changed significantly.
- Households with a black, Asian or minority ethnic household reference person (HRP)
 were more likely to live in a high rise flat. For example, 3% of households with an Asian
 HRP and 7% with a black HRP lived in a high rise flat compared with 1% of households
 with a white HRP. This suggests non-white ethnicities may be overrepresented amongst
 heat network customers.
- 43. The Equalities Impact Assessment recommended:

 "Having considered the above impacts, we recommend that we proceed with this policy.

 Overall, these measures will reduce customers' bills, and give those customers more information and power to challenge suppliers via the Energy Ombudsman if those suppliers fail to comply. These measures will lead to immediate short term benefits to consumers over the winter, and negative impacts considered in the analysis are either

already mitigated or relate to a need for further regulation in the long term, rather than the existing policy."

Small and Micro Business Assessment (SaMBA):

- 44. Legislation will impact all heat network operators, some of which will be small or micro businesses.
- 45. The make-up of the heat networks market is varied. There are known to be 14,000 heat networks that are in scope of regulation, around 12,000 of these are communal network (serves only one building) and around 2,000 are district heat networks (serves multiple buildings). In total there are roughly 2,800 suppliers². There is an uneven distribution regarding the amount of heat networks that each supplier owns, and how many consumers are served by each heat network.
- 46. Most heat networks in the Heat Network (Metering and Billing) Regulations (HMBR) data have relatively few customers, with 81% of heat network suppliers supplying fewer than 100 consumers and with 86% of operators operating fewer than ten heat networks. However, this does not necessarily mean these heat suppliers are small and micro businesses³ as they may manage a heat network alongside other business functions. For example, a large shopping centre may employ many people but have few registered heat customers. The data collected through the HMBR does not cover the size of heat network operators, and therefore it's not possible to be exact in this estimation.
- 47. In an attempt to overcome this evidence gap, we have carried out analysis on Companies' House data using a sample of around 700 organisations listed as the heat suppliers in the HMBR notification data. The information on the size of the organisation in the Companies House data was found to be incomplete, though of those records where the organisation size was identified, the majority were classed as small or micro businesses. While this finding is not conclusive, it reinforces the likelihood that a large proportion of the organisations in the scope of the regulation could be small and micro businesses.
- 48. As larger businesses will likely have better ability to absorb the proposed requirements, the legislation will place disproportionate costs on small and micro businesses. However, this is believed necessary in order to achieve the policy objectives. It is not believed appropriate to fully exempt small and micro businesses from these requirements as it is important to ensure all customers receive the proposed support, especially given that a significant number of heat network customers likely have their heat supplied by small or micro heat network operators.

Key Limitations, Risks and Uncertainties

- 49. There is uncertainty associated with the final scope and approach to regulation, due to the policy being at primary legislation phase. In addition, there is inherent uncertainty in regulating a market which currently does not have significant regulation, such as uncertainty over the current size of the heat network market.
- 50. The required pace of policy development has meant that not all costs and benefits have been quantified. The costs which are believed to be the largest have been estimated.
- 51. The significant variation in heating efficiency, contractual arrangements and business structure across the heat network sector introduces significant complexity in how the measures will apply to different heat networks. Though the design of the policy seeks to allow for heat network operators to account for the circumstances of their network, this creates uncertainty in the quantification of sector wide costs and benefits.

² Based on analysis of: Energy Trends, Experimental Statistics on Heat Networks (2018) < https://www.gov.uk/government/publications/energy-trends-march-2018-special-feature-article-experimental-statistics-on-heat-networks. > Heat suppliers in this context are defined as the organisation who submitted the notification.

³ Micro business is defined as having up to 10 employees, small business has up to 49 employees. According to Companies House: < https://www.gov.uk/annual-accounts/microentities-small-and-dormant-companies >

52. There is a significant dependency of this legislation on the implementation of the Energy Bill Relief Scheme and other areas of the Energy Prices Bill. This legislation seeks to ensure that support set out in the Energy Prices Bill will reach heat network customers.

Monitoring and Evaluation

53. A plan for monitoring and evaluating the impacts of legislation will be developed and set out with secondary legislation.

Title: Energy Bill Relief Scheme (EBRS)

IA No: BEIS065(F)-22-NZBI

RPC Reference No: RPC-BEIS-5234(1)

Lead department or agency: Department for Business, Energy and

Industrial Strategy (BEIS)

Other departments or agencies: N/A

Impact Assessment (IA)

Date: 12/10/2022

Stage: Development/Options

Source of intervention: Domestic

Type of measure: Primary legislation

Contact for enquiries: energybill2021@beis.gov.uk

Summary: Intervention and Options

RPC Opinion: Awaiting Scrutiny

Cost of Preferred (or more likely) Option (in 2022 prices)

Total Net Present Social Value	Business Net Present Value	Net cost to business per year	Business Impact Target Status
NQ	NQ	NQ	Qualifying provision

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

The UK is currently experiencing an unprecedented rise and volatility in non-domestic energy bills driven by rising global energy prices. The scale of price increases and volatility in energy prices creates an undue burden on businesses, as well as the public and third sectors. While fluctuations in prices are a normal part of markets functioning, the current and projected levels of these are unprecedented. This creates unnecessary risks for businesses navigating investments and employment decisions. Government intervention is needed to protect businesses, workers and consumers from economic and welfare losses.

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

The high-level objectives of intervention are to:

- i. Support economic growth
- ii. Prevent unnecessary insolvencies of businesses unable to pay their energy bills
- iii. Protect jobs from termination due to energy bill costs
- iv. Limit inflation caused by increasing energy bills and knock-on impacts on prices of labour, goods and services The intended effect of the policy is to provide immediate relief on energy costs this winter, while a review is conducted of where there may be a case for further support beyond March 2023.

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

While energy bill saving measures such as improving energy efficiency have a role in addressing rising energy costs in the long term, no combination of demand reduction measures can feasibly deliver a reduction in costs at sufficient scale to deliver the policy objectives in time for this coming winter other than direct support. As such, on 8 September 2022, the government announced the Energy Bill Relief Scheme to provide a level of support linked to the market prices being faced by different consumers. This option for direct support has therefore been considered against a counterfactual of doing nothing.

Is this measure likely to impact on international trade and investment? Yes / No					
Are any of these organisations in scope?	Micro Yes	Small Yes	Me Yes	dium	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)		Traded: NQ		Non-t	raded:
Will the policy be reviewed? It will be reviewed. If applicable, set reviewed.	to: January 3	022			

Will the policy be reviewed? It will be reviewed. If applicable, set review date: January 2022

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:

Jan lun y Date:

11 October 2022

Summary: Analysis & Evidence

Policy Option 3

Description: Introduce the Energy Bill Relief Scheme, which provides reductions in gas and electricity costs per MWh for non-domestic consumers according to the timing and type of energy contract they are on.

FULL ECONOMIC ASSESSMENT

Price Base	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)				
Year	Year	Years	Low: Opti	ional	High: Optional	Best Estimate: N/A	
COSTS (£m)	Т	otal Transition	A	Average Ann	ual	Total Cost	

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	NQ		Optional	NQ

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

The primary cost of this intervention will fall on the Exchequer in the form of a transfer to non-domestic consumers. We estimate HMG will pay £29bn to non-domestic electricity and gas suppliers to cover the difference between market wholesale and Government-defined 'supported prices'. Suppliers will incur familiarisation and admin cost to comply with this intervention. The estimated cost of this is £5m-£15m, with a central estimate of £10m.

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

Any increases in energy consumption will lead to social costs from increased carbon emissions as well as air quality impacts. We have however not estimated for this assessment. However, as an illustration of the potential impacts, we estimate that an increase of 1% in energy demand compared to 2019 levels will lead to a net social cost of around £340m due to carbon and air quality impacts.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	0		0	0

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

The assessment does not include any monetised benefits.

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

The most significant non-monetised impact is the avoidance of firm closures and redundancies. The benefits of avoiding closures will accrue to business, while the benefits of avoided redundancies will provide broader benefits to society.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

The largest most significant source of uncertainty is the size of the overall relief. This represents a significant risk to the Exchequer. The uncertainty is driven by a number of things, including the future prices of energy, scale of demand for the duration of the intervention as well as the nature of existing contracts. The most notable risk is of fraud as well as the ability for suppliers to deliver the intervention in time across all non-domestic consumers.

BUSINESS ASSESSMENT (Option 4)

Direct impact on busine	ess (Equivalent Annual)	Score for Business Impact Target (qualifying provisions	
Costs: NQ	Benefits: NQ	Net: NQ	only) £m:
			N/A

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1. Introduction

- On 8 September Government announced a new six-month scheme the Energy Bill Relief Scheme (EBRS)

 to protect all businesses and other non-domestic energy users, including the public and voluntary sector organisations from soaring energy costs. This support will be equivalent to the Energy Price Guarantee put in place for households.
- 2. The EBRS will provide support to suppliers to enable them to provide a p/kWh price reduction for all businesses, public and third sector organisations whose current gas and electricity prices have been significantly inflated due to unprecedented price rises. The price reduction will be linked to the wholesale element of a non-domestic gas and electricity bills, as it is in the wholesale market where the price rises have predominantly been and unlike the domestic retail market there are a large range of non-domestic energy contracts on the market, with suitability varying hugely by organisation, meaning that targeting retail prices would not be desirable nor practical.
- 3. HMG will determine the level of price reduction which suppliers will be required to apply to businesses based on defining an affordable wholesale gas and electricity price ('Supported Price') for the period of EBRS support and comparing this to the relevant forward wholesale market prices to calculate the amount of support provided to suppliers to enable a reduction in the unit price charged to customers.
- 4. The price reduction will apply to the actual gas and electricity consumption of an eligible business during the EBRS period, which will run for six months from a retrospective date of 1st October. A review will be held after three months, with decisions being taken by the end of the initial six-month EBRS period, on whether the scheme should continue beyond the initial six-month period and, if so, in what form. Price reductions will not be applied retrospectively to cover costs incurred before the start of the EBRS period, on 1 October. The relevant price reduction for each business should be automatically applied to their bills by their supplier based on their contract type and start date.
- 5. The EBRS will utilise existing energy system mechanisms to limit the level of market disruption caused by interventions; the aim is for the competitive supply market to continue as it would have done before the energy crisis.
- 6. For EBRS to provide support to non-domestic consumers using alternative fuels to gas and electricity, an alternative fund is proposed. Evidence on determining the level of support for these consumers is set out in Annex A.

2. Proposed Legislation

- 7. The EBRS primary legislation for Great Britain and for Northern Ireland will provide the broad framework for the scheme, with the detail necessary for implementation set out in regulations. We expect provisions in regulations to include powers to:
 - Establish scheme eligibility;
 - Establish scheme rules applicable to different types of non-domestic customers and energy supply;
 - Application of price reduction on energy consumed before the bill commencement date;
 - Delegation of functions, including establishing a scheme administrator;
 - Duties of person(s) under the scheme;
 - Powers or duties related to information-gathering;
 - Modifications to energy contracts;
 - Enforcement.
- 8. The legislation as drafted will require suppliers to apply the price reduction to each eligible customer. This is subject to enforcement by Ofgem or by UREGNI for Northern Ireland. The risk of the supplier not passing on the benefit of the scheme has been identified, and options are being explored to mitigate this through legislation, including:
 - A clawback clause and possibility of a proportionate fine so HMG can directly recover defrauded funds and/or levy fines against suppliers.
 - Specifications around data required incorporated into legislation to ensure suppliers provide HMG with sufficient data to identify businesses and allow validation of funding.
- 9. Where suppliers are unwilling to offer fixed price contracts or offer unaffordable terms, for example because they are considered poor credit risks, and suppliers do not take the appropriate steps to offer reasonable contracts, legislative powers may be taken to compel suppliers to do so.
- 10. The impacts assessed in this document represents our current understanding of the secondary legislation. Where necessary, we will update the evidence ahead of the enactment of any secondary legislation.

3. Problem Under Consideration & Rationale for Intervention

- 11. The UK is currently experiencing an unprecedented rise and volatility in non-domestic energy bills driven by rising global energy prices. Following the announcement that Nord Stream flows would not resume as scheduled, Q4 2022 gas prices closed at 411p/therm (21/09/2022), nearly 10 times higher than the Q4 2021 levels. Prices are not expected to return to pre-crisis levels until around 2025 when new gas sources come online.
- 12. The scale of price increases and volatility in energy prices creates an undue burden on businesses and puts pressure on public and third sector organisations. While fluctuations in prices are a normal part of markets functioning, the current and projected levels of these are unprecedented. This creates unnecessary risks for businesses navigating investments and employment decisions. Businesses need increased certainty and time to adapt their operations and optimise their decision making. An intervention is needed to protect businesses, workers and consumers from economic and welfare losses.
- 13. Evidence from the economic literature suggests that negative impacts of unemployment can persist for the individual as well as the economy^{2 3}. This is referred to as a scarring effect. The evidence finds that unemployment at some point in a person's life, particularly at the beginning of a working career, tends to increase the probability of unemployment in the future, and can permanently reduce income as well. The negative impact of this effect could be an unintended consequence of not taking action to limit increases and volatility in energy prices.
- 14. In addition to the cost and volatility challenges for non-domestic consumers, they also face a different level of risk of securing energy supply. Energy suppliers have no obligation to provide energy to the non-domestic retail market. This means some non-domestic consumers could be refused supply, which is especially challenging for new customers without a pre-existing relationship with a supplier.
- 15. Non-domestic consumers are finding it increasingly difficult to secure energy supplies, particularly if they have poor credit histories or are in exposed sectors (hospitality, Energy Intensives) and suppliers cannot or will not bear the risk of entering into contracts with some customers in the current market conditions. In these situations, businesses may end up on 'deemed tariffs' which are expensive and exposed to wholesale price volatility, informal feedback from the industry indicates this could be around 30% of businesses and growing before the introduction of any support.

4. Objectives of the Policy

- 16. The high-level objectives of EBRS are to:
 - i. Support economic growth
 - ii. Prevent unnecessary insolvencies of businesses unable to pay their energy bills
 - iii. Protect jobs from termination due to energy bill costs
 - iv. Limit inflation caused by increasing energy bills and knock-on impacts on prices of labour, goods and services

¹ ICIS NBP Data, Sept 2022

² https://www.bankofengland.co.uk/-/media/boe/files/speech/2020/the-potential-long-term-effects-of-covid-speech-by-dave-ramsden.pdf

³https://ec.europa.eu/social/BlobServlet?docld=13626&langId=en#:~:text=Evidence%20from%20the%20literature%20suggests,and%20having %20lower%20prospective%20earnings

5. Rationale and evidence to justify the level of analysis used in the IA (proportionality approach)

- 17. While energy bill saving measures such as improving energy efficiency can be part of a longer-term solution, no combination of measures can deliver energy cost reductions at sufficient scale to achieve the policy objectives in time for this coming winter. Further, without direct support this winter, there is no other option available to mitigate the immediate knock-on effects of the expected large-scale unemployment that would ensue from the closure of businesses which are unable to pass on higher costs, or rely on discretionary consumer spending. As such, at this stage, the Energy Bill Relief Scheme is considered against the alternative of doing nothing further than the measures already announced in the Energy Security Strategy.
- 18. Given the short time since the scheme's announcement on the 8th September 2022, and the nature of the key benefits and costs of this scheme, only the cost of funding support and have been monetised. Other potentially significant costs and benefits are considered qualitatively in this assessment.
- 19. . The impacts assessed in this document represents our current understanding of the secondary legislation. Where necessary, we will update the evidence ahead of the enactment of any secondary legislation.

6. Options

6.1 Do Nothing (the counterfactual)

- 20. No intervention will mean that energy suppliers would pass through soaring wholesale prices onto non-domestic consumers, and where contracts had already been signed at prices substantially above historic trends.
- 21. In this scenario, we would expect there to be an increase in unemployment as businesses which are unable to pass on higher costs, or that rely on discretionary consumer spending, are forced to close. Manufacturing sectors would in particular be at risk, as they are highly exposed to price pressures through trade, and would therefore be less able to pass on higher energy costs to consumers.
- 22. This would be expected to lead to rises in business closure redundancies and a reduction in longer-term capital investments.
- 23. Further, many organisations in the third sector such as charities, social enterprises and community groups would face budgetary pressures. Without an increase in funding from donors many would likely have to close, forgoing the societal good delivered.
- 24. Public sector organisations will face budgetary pressures that could affect delivery of vital services to the public. This could include use of hospital wards and schools, to heating public swimming pools. It may also lead to decision-making to save energy by limiting services, for example, there may be a risk of schools facing pressure to move to remote teaching for part of the time, with knock on impacts on student learning and childcare.

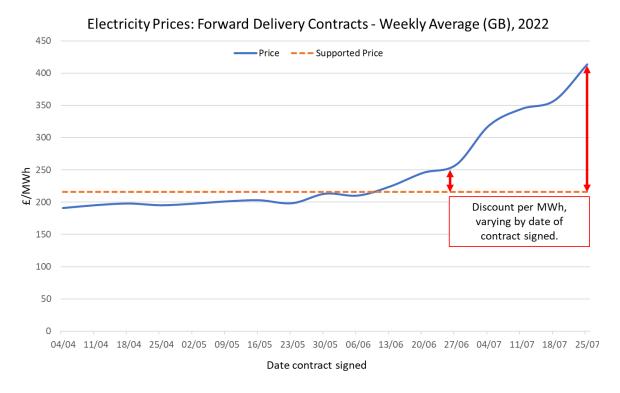
6.2 The Energy Bill Relief Scheme

- 25. The EBRS scheme will provide energy bill relief for non-domestic customers in the UK. Discounts will be applied to energy usage initially between 1 October 2022 and 31 March 2023.
- 26. The EBRS will provide support to suppliers to enable them to provide a p/kWh price reduction for all businesses, public and third sector organisations whose current gas and electricity prices have been significantly inflated due to the energy crises. The price reduction will be linked to the wholesale element of a non-domestic gas and electricity bill, as it is in the wholesale market where the price rises have predominantly been and unlike the domestic retail market there are a large range of non-domestic

energy contracts on the market, with suitability varying hugely by organisation, meaning that targeting retail prices would not be desirable nor practical.

27. To calculate the discount, the estimated wholesale portion of the unit price that consumer would be paying this winter will be compared to a baseline 'Government Supported Price' which is lower than currently expected wholesale prices this winter (see Figure 1) and offers equivalent support to the Energy Price Guarantee for domestic customer.

FIGURE 1: ILLUSTRATION OF DISCOUNT PER MWH FOR FIXED CONTRACTS⁴



- 28. For all non-domestic energy users in GB this Government Supported Price has been set at:
 - £211 per megawatt hour (MWh) for electricity; and
 - £75 per MWh for gas.

⁴ Electricity price data from Ofgem Wholesale Market Indicators "Electricity Prices: Forward Delivery Contracts – Weekly Average (GB)" https://www.ofgem.gov.uk/energy-data-and-research/data-portal/wholesale-market-indicators

7. Analytical Results

- 29. Table 2 summarises the costs and benefits considered in this assessment. As noted above, we have focused on assessing the most significant cost implications of the EBRS, which is the cost to the Exchequer. It has not been possible to monetise the benefits. The largest and most significant benefit is expected to be avoided closures and redundancies. We discuss the details of each impact as well as how we have assessed these in the relevant sections below.
- 30. Where necessary, we will update the evidence ahead of the enactment of any secondary legislation.

TABLE 2: SUMMARY OF MAIN COSTS AND BENEFITS

Agent	Costs	Benefits
Energy suppliers	Monetised - Familiarisation and Administration costs	
Businesses		Not-Monetised - Avoided closures - Value of higher Energy consumption
Government	Monetised - Cost to Exchequer (transfer)	
Society		 Not-Monetised Avoided redundancies Negative externalities Carbon emissions and air quality

7.1 Costs

7.1.1 Cost to Exchequer (transfer)

- 31. This represents the cost HMG will pay out to non-domestic electricity and gas suppliers to cover the difference between wholesale market prices and the supported prices. For the purposes of the appraisal, this is treated as a transfer between government and non-domestic consumers.
- 32. To calculate cost, we assume for illustrative purposes that consumption levels remain consistent with 2019 DUKES⁵. This this was chosen instead of 2020 and 2021 to avoid including the impacts of Covid-19. We then calculated the difference between the projected energy costs and the supported price levels. Based on this, we estimate the scheme will cost HMG £29bn.

7.1.1 Administration and Familiarisation Costs

- 33. The changes to the price of gas and electricity under EBRS will be automatically applied to non-domestic consumers' bills, so there will be no direct administration or familiarisation costs to these non-domestic consumers for the scheme to operate.
- 34. Administration and familiarisation costs will apply to suppliers, who must monitor and implement the changes to the price of gas and electricity made under EBRS. For analysis purposes, these costs have been split into three sections:
 - i. Administrative costs of price updates

⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1094285/DUKES_1.1-

- ii. Administrative costs relating to costs of compliance and monitoring
- iii. Familiarisation costs relating to administrating, compliance and monitoring

Administrative costs of price updates to suppliers

- 35. Suppliers incur administrative costs each time they change prices for consumers. These costs will be incurred by suppliers when they initially adjust prices to the guaranteed level, as well as any future updates made to the price level. These administrative costs include:
 - Costs associated with reflecting changes in prices or discounts in supplier's billing systems
 - Adjusting contracts and notifying businesses of the change
- 36. As part of the 2018 Final Impact Assessment for the Default Tariff Cap, Ofgem launched a consultation to seek evidence to inform their consideration of these sorts of impacts on suppliers in the domestic market. They received a number of cost estimates from suppliers. Costs per customer taken as a weighted average of the data they received ranged from £0.20 to £1.80, with £0.87 as a mid-point.
- 37. Note that this figure relates to the domestic market. There are reasons to suspect that these costs are not directly comparable to the non-domestic sector and could be an underestimate. We have therefore used the upper end of this scale as our low case, with central and high figures reflecting scenarios where this average cost is 2 and 3 times higher (respectively). The reasons for this can include:
 - Some customer accounts relating to a large number of meter points and therefore contracts for example a large pub chain having numerous individual sites and meters. This adds complexity and the time needed to update prices;
 - Some accounts will relate to more complex buildings (e.g. factories), and we lack evidence on the additional complexity this will bring; and
 - Added complexity of non-domestic supplier pricing and contracts
- 38. It is our current understanding that the vast majority of non-domestic customers are currently on fixed tariffs, with only a small proportion on non-fixed tariffs as of August 2022. We can assume that all customers in the non-fixed tariff category will have some aspect of their price changed by their supplier during the policy window.
- 39. Of the remaining customers on fixed contracts, some proportion will have signed their new contracts since April 2022 or will be rolling off between October 2022 and April 2023 and so will be eligible for support and contribute to the administrative cost of changing prices. Extrapolating supplier contract data, a significant proportion of these remaining customers would need to have their price changed before the policy ends in April 2023.
- 40. This would mean an administrative cost for suppliers of changing their customer prices estimated at £6m, ranging from £3m to £9m.

Administrative costs relating to costs of compliance and monitoring for suppliers

- 41. In order to be compensated for the bill reductions made through the lifetime of the scheme, suppliers will be required to face additional administrative costs. These could include monitoring the number of customer accounts needed to be adjusted, the costs that suppliers have incurred as the difference between their energy costs and the supported price level, and providing evidence that they have complied with the scheme.
- 42. While the exact mechanism through which suppliers will be compensated is uncertain, the costs could have the potential to be large. There is a potential for some suppliers to have systems in place already to make this a fast process, others may be required to take on additional FTE to undertake this task. It is therefore difficult to ascertain a firm estimate for the administration costs associated with this.
- 43. Taking a conservative view of the complexity of this process, and the length of time required to undertake these activities we estimate these costs to be between £2m £5m, with a central estimate of £3m. The low end of this range is based on discussions with industry experts, who suggested that for many suppliers 2FTE could be required over the course of the 6 months of the scheme. As with the other administration costs, we have applied uplifts of +100% and +200% to produce central and high scenarios, to reflect uncertainty in key assumptions (e.g. larger suppliers may require additional FTE).

Familiarisation costs relating to administrating, compliance and monitoring for suppliers

- 44. The policy will require suppliers to incur familiarisation costs in order to be able to reconcile claim the relevant support from government.
- 45. This is estimated to not take a great deal of time for those involved in the administration of the scheme, with these costs estimated to be between £10,000 and £20,000 in total.

TABLE 3: TOTAL SUPPLIER ADMINISTRATION AND FAMILIARISATION COSTS

£m, 2022 prices	Low	Central	High
Administration & Familiarisation	5	10	15

7.1.2 Negative externalities of increased energy consumption – Carbon costs and air quality

- 46. Any intervention to reduce price rises and volatility would be expected to increase energy demand compared to the counterfactual, which would be expected to lead to costs to society from increased carbon emissions and worsening of air quality. However, this intervention will reduce energy prices from otherwise very high levels that would lead to under consumption of energy compared to previous levels. Given the scale of the expected price increases and that the Government Supported Price is still above historic energy price norms, this is consistent with assumptions underpinning the Net Zero Strategy and is not expected to place the UK off track for meeting its carbon budgets.
- 47. The impact on consumption is very uncertain and we have therefore not estimated nor monetised the potential size of any demand response to the proposed intervention. Our best estimate is that our intervention will enable consumers to deal with the unprecedented price rises and volatility and maintain previous levels of consumption in the short to medium term.
- 48. However, the table below provides an illustrative example of the potential costs to society from increased energy consumption. This scenario assumes a 1% increase in energy consumption across all non-domestic consumers. This increase in demand leads to a net social cost of around £340m due to carbon and air quality impacts.

TABLE 4: CARBON AND AIR QUALITY IMPACTS OF INCREASED CONSUMPTION FOR NON-DOMESTIC CONSUMERS

£m, 2022 prices	Carbon Impacts	Air quality
1% increase in demand compared to 2019	£300	£40

7.2 Benefits

7.2.1 Avoided Firm Closures and Redundancies

49. If firms close, we would expect workers to be displaced and wages to follow a lower projected path than if the proposed intervention is in place. This lower wage path is based on 'The Losses of Displaced Workers' BEIS paper⁶. Therefore, a benefit of the scheme is that it keeps firms open and prevents large wage losses for displaced workers.

7.2.1 Inflation Impacts

- 50. At a macroeconomic level, by directly influencing the unit price of energy for non-domestic customers, this intervention could mitigate increases in inflation metrics (CPI, CPIH, RHI) when compared to the "do nothing" scenario. The bundle of composite inputs for businesses, of which energy is a component, will decrease. There will be a delay between input costs falling and lower prices for consumers appearing in National Statistics such as the CPI.
- 51. This is different to Energy Bill Support Scheme (EBSS), which the ONS confirmed on 31 August would be treated as an income transfer. Payments under the EBSS are classified as a current transfer paid by central government to the household sector. This transfer increases household incomes rather than reducing household expenditure and so will not affect the CPI or CPIH. By contrast, the EBRS reduces business expenditure on energy and so will be reflected in national inflation statistics.

7.2.2 Retaining production and investment in the UK:

52. As the price of energy increases, investment, and output decreases, ECB research shows that corporate investment decisions are sensitive to the price of electricity. The EBRS lowers the price of electricity and gas compared to the counterfactual for up to six months.

7.2.3 Mitigate the rise in global emissions:

53. The EBRS reduces the competitive disadvantage faced by UK based companies caused by relatively higher industrial electricity prices. If UK production was to move to countries with lower climate change ambitions or a higher marginal emissions factor, global emissions would be higher than the policy scenario where production remains in the UK. This benefit is not quantified as global emissions are not currently accounted for in green book SNPV calculations.

7.3 Summary of analysis

- 54. The table below sets out the monetised elements of the analysis. The primary monetised impacts estimated cover:
- i. Cost of bill relief (transfer): estimate of £29bn. This is a transfer to non-domestic consumers from HMG. An equivalent benefit less any deadweight loss impacts should be accounted for the purposes of appraising net social impacts, including through avoided firm closures and redundancies.
- ii. Administration and familiarisations costs to suppliers: £10m (£5m-£15m)

7.4 Equivalent Annual Net Direct Cost to Business (EANDCB)

- 55. The direct impact on businesses reflects the administrative burden on suppliers. There is no direct cost to businesses other than suppliers as EBRS is automatically applied to gas and electricity bills and therefore there is no action required from businesses.
- 56. The bill relief provided through the scheme is a transfer from government to businesses and is not accounted for in the figures below.
- 57. The EANDCB and quantified NPV to businesses covers the six-month period the current intervention has been announced to be in place (October 2022 March 2023).

⁶ Page 97, BEIS Research Paper Number 6, 'The Losses of Displaced Workers', March 2017, prepared by Frontier Economics

58. The Business Impact tests score is based on an annualised impact of the aforementioned impacts.

TABLE 5: EANDCB ALL FIGURES PRESENT VALUE (£M 2020)

Figures (£m 2020 prices, discounted to 2022)	£m
NPV to Business	-10
EANDCB	20
Business Impact Test Score	10

8. Risks and uncertainties

8.1 Size of relief

- 59. The largest most significant source of uncertainty is the size of the overall relief. This represents a significant risk to the Exchequer. The uncertainty is driven by a number of things, including:
 - i. **Future energy prices** this is subject to global commodity price pressures. Costs are most sensitive to wholesale energy price expectations at the beginning of the scheme, from which date we expect a large portion of the market to enter a six-month fixed contract with a fixed level of subsidy based on forward market information at that point. For example, industry feedback suggests that we can expect around 60% of subsidy value to be agreed by 1st October 2022.
 - ii. **Size of energy demand** this can differ from year to year for a number of reasons, including differences in temperatures. We have included sensitivities to test the impact on our central range of differing energy demand, based on quarterly min and max consumption since 2002.
 - iii. The nature of existing contract different types of energy contracts between suppliers and businesses will require different levels of relief. The exact balance across the different contract types as well as the level of energy demand could change the overall level of relief that will be required.
 - iv. **Evidence limitations** Our modelling does not cover the portion of flex contract consumption that might have been hedged in the last six months for delivery this winter or the associated weighted average price this may increase the consumption eligible for a subsidy. Furthermore, some portion of fixed contracts started since April 2022 will have been signed far enough in advance that they will not be eligible for support which means we are likely overestimating this portion of the policy costs.
 - v. **Demand response** it is unclear whether the current conditions as well as this intervention will elicit a change in demand.

8.2 Suppliers are unable to administer discounts on time

- 60. There is a risk to the overall delivery of the scheme and for suppliers to be able to administer the discounts on time for customers. For the suppliers to administer the discount on time there are several internal and external dependencies and risks to consider:
 - i. The scheme needs to be in place and be able to cover bills from 1st October 2022. The scheme therefore needs to be designed in order to cover any customer bills from 1st October to assist businesses and other non-domestic users.
 - ii. Internal delivery The correct legislation needs to be passed and enforcement controls in place, all of which are required to be delivered on time to allow suppliers time to organise the administration of the discounts.
 - iii. External delivery The delivery body will need to ensure they have the correct resourcing and technology available in order to facilitate the scheme, along with a comprehensive understanding

of the legislation. Periodic reviews will need to be established to assess the development and delivery of the scheme.

iv. Suppliers – The suppliers themselves will need to fully understand the scheme and have the resources available in order to administer the discounts

8.3 Fraud risks

- 61. The following current top five risks of fraud have been identified:
 - i. Suppliers could manipulate / falsify the volume of energy supplied to businesses- suppliers overestimating the amount of energy used and submitting figures to intermediaries. This could lead to suppliers fraudulently claiming for energy not used and the supplier receives payment from HMG for energy which was not supplied to a customer.
 - ii. Business submitting false meter readings (over or underestimating) in order to obtain payments under the scheme to which they otherwise would not be entitled-this will result in businesses obtaining public funds to which they are not entitled.
 - iii. Supplier may not pass on the benefit of support scheme to business, despite the supplier having claimed it- this results in the business not receiving the support it is entitled to.
 - iv. There may be mandate fraud in the payment chain bad actors could attempt to contact individuals in the scheme paying bodies to divert funds.
 - v. Use of the scheme for phishing, smishing and ID fraud bad actors could create fake communications purporting to be from the schemes in order to charge individuals for services that are free and/or obtain personal information to commit ID fraud.

8.4 Additionality

62. As the scheme is not targeted, there is a risk of deadweight and lack of additionality of benefits to those with higher energy consumption in particular. It is likely that many businesses receiving financial support in sectors that are less energy-intensive, less trade-exposed and less reliant on discretionary spending would not have been forced to close in the counterfactual do-nothing scenario. Furthermore, while we do hold some information about the ratio of fixed to variable tariffs across the whole economy, we do not have a clear picture of the split within different sectors. It may be the case that a relatively large share of businesses in the same sector are on variable contracts, which would enhance the ability to pass-through costs to their customers and reduce the need for Government support.

8.5 Uncertainty around flex contract hedges

63. There is an uncertainty around the proportion of electricity and gas volume which falls under flex contracts. This volume is not considered to be on a variable tariff based on contract volumes shared by suppliers. It is not clear what proportion of the flex contract volumes should be considered variable, nor the price at which the fixed elements have been set. Further work with suppliers is being undertaken to better understand this portion of the market.

8.6 The intra-sector impact of hedge rates on additionality

- 64. The scheme will be more targeted in sectors where a high proportion of firms are on fixed contracts and only a small number are on variable contracts, and therefore in scope of the scheme.
- 65. As an example, if 80% of pubs are on a fixed contract, and 20% are on a variable tariff, Government support only extends to the un-hedged 20%. At a high level, supporting just 20% of the sector is a much lower cost to Government.
- 66. There would also be significantly less deadweight if a small proportion of the sector was hedged. 20% of pubs could not compete with the other 80% if their input costs were significantly higher because they

would not be able to pass on these costs and would quickly go out of business. By contrast, if 80% of pubs had higher input costs, many of them would likely survive as they could still pass the higher costs on, and the small proportion of fixed cost firms would not be able to force them to close. There would also be local pub markets where consumers that don't want to travel outside their town would have to choose between three pubs that all had the same high prices. The low-cost alternatives would not have access to the consumers in this market.

8.7 Cost Modelling Assumptions

TABLE 6: SUMMARY OF KEY ASSUMPTIONS

Assumption	Description
Counterfactual consumption	Our counterfactual assumes energy demand remains consistent with 2019 DUKES ⁷ – this was chosen instead of 2020 and 2021 to avoid covid impacts.
Counterfactual prices – Oct-22 to March-23	The counterfactual price assumed for contracts entered into from 1 st October has been based on forward curves produced from ICIS data. The central scenario looks at an average over a 10-day period up to and including 12 th September. However, wholesale energy prices are currently very volatile and uncertain.
Counterfactual prices – Apr-22 to Oct-22	Counterfactual prices for those entering a fix since 1 st April have also been taken from ICIS data, looking at the average price of contracts offered per day from 1 st April to 8 th September for delivery in Winter 22. As only one week of September data was available the level of subsidy for August has been assumed for September – latest data suggests this may be an overestimate.
Seasonality	To estimate eligible consumption this winter, seasonality has been applied to consumption figures based on Energy Trends ⁸ data on average non-domestic quarterly consumption since 2002. Consumption is then assumed constant across months within quarters.
Demand sensitivities	Demand sensitivities have been informed using the min and max consumption for each quarter since 2002.
Policy Response Rate	We do not make any explicit assumptions about how the intervention to stabilise energy prices changes demand. We have assumed business maintain 2019 levels of consumption.
Appraisal Period	The policy is assessed over the six-month period, starting in October 2022. Where appropriate (including on financial calculations) we have accounted for longer time horizons to account for full effects of any impact.
Admin costs	Admin costs have been estimated on a bottom-up basis, using data provided by Ofgem from suppliers. This provides information on various aspects of the administrative burden of the intervention, including the relative time burden of given activities and staffing costs.

⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1094285/DUKES_1.1-alternative_units.xlsx

⁸ https://www.gov.uk/government/statistics/total-energy-section-1-energy-trends

Tariff information on eligible consumption	For the portion of consumption assumed to have entered a fixed contract since 1 st April, we have assumed a linear profile of uptake across weeks. If this profile is more concentrated towards the beginning of this period, the total size of the subsidy will be lower.
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9. Small and Micro Business Assessment (SaMBA)

- 67. The scheme will be available to everyone on a non-domestic contract including businesses, voluntary sector organisations, such as charities, and public sector organisations such as schools, hospitals, and care homes. These consumers will not need to incur any effort cost of getting the relief, ensuring businesses will benefit from the support, regardless of their size.
- 68. There are over 70 suppliers in the non-domestic retail energy market, with around half of these businesses (36) classified as either a small business⁹ or micro business¹⁰ as of September 2022. Of these, they represent just 2% of the total consumer base on variable gas tariffs, and 1% of consumers on variable electricity tariffs.
- 69. To ensure equal treatment for non-domestic consumers and to ensure the full benefits and objectives of the scheme are achieved, HMG will apply this regulation to all non-domestic energy suppliers. This is so that all businesses eligible for government-backed support are able to be supported by this policy. Customers with suppliers that are small or microbusinesses will face high energy prices and are currently placed on high prices variable tariffs. It would not be fair to have the customers of some suppliers protected and others are not.
- 70. In practice, we may expect this measure to impact smaller suppliers proportionately less. SMB suppliers have a large proportion of their customer base on fixed term tariffs, which if agreed before March 2022, and expiring after March 2023, would not be eligible for this policy. Evidence shows that 95% of customers with a supplier that is a small or micro business are on fixed term contracts, compared with 78% for large suppliers.

10. Public Sector Equality Duty

- 71. The scheme is a grant to energy suppliers (businesses) and available to all registered Ofgem suppliers, so there would be no basis for discrimination. The policy is aimed at businesses and not at individuals and the scheme is intended to be broadly applied and does not require active involvement of end energy users.
- 72. If the proposed intervention is implemented, there will be no specific impact on any protected characteristics and thus no unlawful discrimination.
- 73. As the scheme will avert business failures and redundancies (in the do-nothing scenario) it could support equality of opportunity where it disproportionately retains the jobs of people with protected characteristics. Being employed is directly related to people's ability to participate in public life, and unemployment often has a disproportionate impact on the opportunities of minorities both in finding a job and achieving equal pay (scarring), underscoring the importance of maintaining employment for these groups.
- 74. The policy will also support the equality of opportunity for business owners in these sectors, but information on their characteristics, at sector level, is not available.
- 75. Our overall assessment is that we do not have any reason to believe that the scheme will have any differential impacts on individuals or groups with protected characteristics. We will look to gather further

⁹ A business with between 10 and 49 employees (FTE)

¹⁰ A business with less than 10 employees (FTE)

evidence and review this assessment as needed through the accompanying Monitoring and Evaluation plans.

11. Monitoring and Evaluation

- 76. We are planning an approach to monitoring and evaluating the EBRS that is proportional and provides the necessary insights around whether the policy has met its expected objectives.
- 77. We envisage that we will gather data on scheme delivery which will be able to provide insights on the policy's expected early benefits and outcomes. Any initial insight will be expected to feed into the 3-month EBRS review point and help inform decisions being taken by the end of the initial six-month period around how the government will continue to assist the most vulnerable non-domestic customers. An evaluation will also be conducted to understand the delivery of the scheme, its impacts and value for money.
- 78. The EBRS will be delivered through energy suppliers, and as such, there is a need for us to collect scheme data from the suppliers to ensure that we can closely monitor the policy's outcomes. Given the short timescales and the 3-month review point, the frequency of the collection of this scheme data will need to be as close to real-time as possible. Data collected would include (but is not limited to) variables such as non-domestic energy usage (kWh), energy bill amount (£), tariff type, and meter point reference number (MPRN).
- 79. Alongside this monitoring, we intend to conduct a process, impact, and economic evaluation of the EBRS. This evaluation will be commissioned and is expected to start in early 2023. It will use a range of approaches to assess whether the scheme objectives have been met, as well as gathering insight into the implementation and non-domestic/stakeholder response to the scheme. The evaluation approach will require further scoping. The evaluation approach will also need to be flexible to respond to any policy changes, for example, if the 3-month review point led to an extension to the existing scheme for some users, or replacing it with a different one.
- 80. At a high-level, we intend to monitor and evaluate:
- A. **Operational aspects**, to understand the delivery of the EBRS. This will be achieved through a process evaluation that will aim to understand what happened during the EBRS implementation and how the scheme's design and administration has supported delivery of the EBRS' objectives. This will be useful in understanding the process of determining the level of price reduction and ultimately how suppliers worked to deliver the reduced energy prices to non-domestic customers. The process evaluation will also aim to understand any potential delivery issues and burdens and draw out lessons learned from an operational perspective. This work would also investigate the experiences of scheme recipients and explore their understanding and awareness of the scheme.
- B. **Outcomes and impacts** achieved by the EBRS to strengthen predictions around the scheme's benefits and impacts. It is expected that scheme data will be used to monitor the early outcomes and we will also explore wider data sources available. A full impact evaluation will also be scoped to understand, where possible, the additionality of the ERBS on supporting non-domestic customers during the energy crisis and other wider societal and economic impacts.
- C. Value for money of the EBRS, including testing our existing cost assumptions around scheme delivery and costs to suppliers. This evaluation will need further scoping, but it would involve comparing the benefits of the EBRS with its costs. We also intend to explore, where possible, the benefits and costs across different characteristics of the organisations in scope.
- 81. The evaluation will also need to be aware of wider external factors which may influence the success of the scheme. These may include:
- a) The economic context and business uncertainty, given the high rates of inflation;

- b) Interactions with existing non-domestic energy policies;
- c) Wider non-domestic policy landscape.

Annex A: Evidence on determining the level of support for nondomestic buildings using alternative fuels

- 82. While the main EBRS will limit the increase in wholesale gas and electricity prices for non-domestic consumers, we estimate there are around 370,000 non-domestic buildings in the UK which are off the gas grid and that 140,000 make use of alternative fuels11. Most of these use oil, with smaller contributions from LPG, coal and biomass.
- 83. Heating Oil prices have seen a significant increase over the past year, rising by nearly 150%12. Under a "do nothing" approach, these non-domestic consumers would experience higher energy bills which could result in businesses failing with associated redundancies or challenge to delivery of public services. This would also create distortions in heating costs between businesses using gas for heating and those using alternative fuels, creating an unfair competitive advantage, and penalising businesses in areas off the gas grid which are predominantly rural.
- 84. For homes using alternative fuels, the EPG proposes to create an alternative fund with a support level of £100 per home. This is based on the amount of support necessary to limit the increase in the price of heating oil to the same level of increase in gas prices between October 2021 and 2022 under the EPG (130%).
- 85. For non-domestic consumers using alternative fuels we are proposing a similar approach, providing supported aimed at effectively limiting the increase in annual heating oil costs to 130%. This would avoid these non-domestic consumers experiencing significant increases in energy costs and redress any competitive distortions from the EBRS alone.
- 86. Non-domestic buildings have a very broad distribution of fuel demand (e.g. from a small shop to a hospital). This presents more of a challenge for determining the level of support compared to the domestic sector, where the range of fuel demand from homes is relatively narrow. Based on BEIS analysis of non-domestic meter data aiming to identify buildings likely to be using alternative fuels, half have an annual fuel demand of 19MWh or less (roughly equivalent to a 4-bedroom home), requiring an estimated support payment of £125. In contrast, the highest quarter have an average annual demand of 140MWh, which would require a support payment of £900 to limit the proportionate growth in bills to the same level.
- 87. There is still uncertainty as to the exact approach for delivering support payments which may well have implications for the ability to target payments to non-domestic consumers on different fuels and to their level of demand and so the overall cost of support. Two illustrative options are considered:
 - A Local Authority Delivered Scheme:

 An application-based scheme that could allow targeting to just non-domestic consumers using alternative fuels.

- Support could be tiered to better reflect the level of demand, though this depends on what information could be reliably sourced to inform this. It could see a minimum level of support provided to all applicants but with higher support where justified.
- There would likely be familiarisation and admin costs for both LAs to set up and run the scheme as well as for non-domestic consumers to apply

¹² The increase is based on comparison of Aug-Sept 2021 average of BEIS Monthly and annual prices of road fuels and petroleum products - Standard grade burning oil, monthly prices https://www.gov.uk/government/statistical-data-sets/oil-and-petroleum-products-monthly-statistics and September 2022 - Average price for Sept 2022 as of 22/09/22 from Boiler Juice.com https://www.boilerjuice.com/heating-oil-prices/

¹¹ Based on BEIS analysis using 2020 Non-Domestic Energy Efficiency Data Framework, https://www.gov.uk/government/collections/non-domestic-national-energy-efficiency-data-framework-nd-need

- o If a tiered approach was based on floor area, for example where non-domestic buildings using alternative fuels with a floor area of up to 500m2 (comprising around 80% of the stock) received £125 and those with a floor area greater than 500m2 received £1,100, the total cost of support would be around £45m¹³.
- An Energy Supplier Delivered Scheme:
 - This could involve energy suppliers making payments to all non-domestic consumers in areas
 off the gas grid. This would likely involve making payments to many consumers who only used
 electricity, potentially creating significant deadweight.
 - o Payments would likely have to be a single level, resulting in significant over- and underpayment, particularly for consumers with large fuel demands.
 - As outlined in the main EBRS IA, there should not be any administrative burden for businesses and relatively small familiarisation and administration costs for the energy supplier under this approach.
 - If a payment of £125 (reflecting the required support for the median non-domestic demand) was made to all 370,000 non-domestic off gas grid buildings, this would have a total cost of around £45m (though the majority of this would be deadweight given it would be supporting all off-gas grid non-domestic consumers who used electricity regardless of whether they used alternative fuels or not).
- 88. A hybrid approach would deliver a flat rate payment to all off-grid buildings via energy suppliers and top-up payments to higher users via local authorities or another delivery partner. This would reduce the administrative and business burden for the majority of non-domestic buildings and ensure that top-up payments are better targeted at the actual consumption of larger users, with the higher administrative burden limited to a much smaller proportion of the population. If a fixed payment of £150 was made to all non-domestic buildings off the gas grid and the top 10,000 (approximately 7%) of the highest demand buildings using oil received additional support proportional to their fuel demand (£2,200 on average), then total support costs could be in the range of £75-100m when administration costs are also taken into account.
- 89. As with the EPG alternative fund, the calculation of the support payment looks specifically at the trend from Autumn 2021 to prices as they currently stand (September 2022). The level of support will need to be kept under review in case alternative fuel prices move significantly.

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¹³ This is applying support to all 140,000 non-domestic buildings using alternative fuels, so cost could be lower if a scheme allowed for identification of buildings using oil