

Title: Consultation Stage IA: Green Gas Levy IA No: BEIS021(C)-20-CG Lead department or agency: Department for Business, Energy and Industrial Strategy (BEIS) Other departments or agencies: N/A	Impact Assessment (IA)			
	Date: 6/10/2020			
	Stage: Consultation			
	Source of intervention: Domestic			
	Type of measure: Secondary legislation			
Contact for enquiries: gglconsultation@beis.gov.uk				

Summary: Intervention and Options

RPC Opinion: N/A

Cost of Preferred (or more likely) Option (in 2020 prices)

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

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

To meet our legally binding emissions reductions targets, we need to move away from burning fossil fuels to heat our buildings. Biomethane injection into the gas grid accelerates the decarbonisation of gas supplies, by increasing the proportion of green gas in the grid. This transition is a necessary step towards meeting our carbon reduction targets, including the UK's net zero greenhouse gas emissions target. We are proposing to fund this transition by imposing a levy on gas suppliers, to support biomethane production through the Green Gas Support Scheme.

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

The Green Gas Levy will be a sustainable source of funding for the lifetime of the Green Gas Support Scheme. We have ensured that our levy design, as closely as possible, aligns with the following key principles. The levy must: be compatible with existing processes, be deliverable, take account of lessons learned, reflect the need for predictability of costs, accurately reflect Green Gas Support Scheme costs and minimise opportunities for non-compliance.

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

Option 0 (counterfactual): Do nothing/do not introduce Green Gas Levy

Option 1a (preferred option at launch): Distribute levy costs between suppliers according to the number of gas supply meter points that they serve, with no tiering by gas consumption or consumer type.

Option 1b: Distribute levy costs between suppliers according to the number of gas supply meter points that they serve, with two charging tiers (Tier 1: domestic and micro businesses; Tier 2: remaining non-domestic consumers).

Option 1c: Distribute levy costs between suppliers according to the number gas supply meter points they serve, with three charging tiers (Tier 1: domestic and micro businesses; Tier 2: medium-sized consumers; Tier 3: largest consumers).

Option 2: Distribute levy costs between suppliers according to the amount of gas supplied to their customers. It is the government's intention to transition to a levy following this model in 2024/25, or as soon as practical thereafter.

Will the policy be reviewed? We will consider need for review

Does implementation go beyond minimum EU requirements?	N/A			
Is this measure likely to impact on international trade and investment?	No			
Are any of these organisations in scope?	Micro Yes	Small Yes	Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)	Traded: N/A		Non-traded: 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:



Date:

.....06.10.2020.....

Summary: Analysis & Evidence

Policy Option 1

Description:

FULL ECONOMIC ASSESSMENT

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

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				N/A

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

N/A - The overall costs and benefits of the levy and the Green Gas Support Scheme are covered in the 'Future support for low carbon heat' consultation stage impact assessment¹. This impact assessment covers how these costs are recovered and distributed.

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

N/A

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				N/A

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

N/A

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

N/A

Key assumptions/sensitivities/risks	Discount rate
N/A	

BUSINESS ASSESSMENT (Option 1)

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

¹ Future Support for Low Carbon Heat Consultation: <https://www.gov.uk/government/consultations/future-support-for-low-carbon-heat>

Executive Summary

1. This impact assessment is part of the Proposals for a Green Gas Levy.¹
2. In the March 2020 Budget, it was announced that the government would introduce a Green Gas Levy to fund a new support scheme for biomethane injection into the gas grid. On 28 April 2020, the government launched the Future Support for Low Carbon Heat consultation, which set out proposals for the Green Gas Support Scheme, in which it was noted that a consultation on the Green Gas Levy would be published in due course.²
3. The Green Gas Support Scheme is expected to open to new applications in autumn 2021 and run until autumn 2025, when the scheme will close to new applications.
4. The Green Gas Levy is expected to launch in autumn 2021, with the first levy payment from suppliers expected to be collected in April 2022. Levy payments will be collected for the duration of Green Gas Support Scheme tariff payments, which with the indicative 15-year tariff length will end in 2040. A decision on tariff length will be included in the government response to the Future Support for Low Carbon Heat consultation.
5. We propose that the levy costs are distributed across suppliers according to the number of meter points served, which means that the charge for each meter point would be the same regardless of gas consumption or meter type. This is Option 1a.
6. Under our proposed approach, Option 1a, we estimate the policy impact on the average domestic gas bills to be around £1.40 per annum in the first year of the scheme, before rising to around £6.90 per annum at the peak in 2028 under the per meter approach. This equates to less than 1% of the average household gas bill in 2028.
7. Our estimates show that the impact of the levy on fuel poverty metrics, such as the average fuel poverty gap and the Low Income High Costs indicator, is minimal.
8. A robust cost control framework will be put in place to ensure costs and bill impacts do not rise unexpectedly.
9. At present, a per meter point design for the Green Gas Levy is preferable due to its reduced complexity, and ability to be delivered within the relatively short timescales needed to launch the Green Gas Support Scheme. However, it is the government's intention to transition to a volumetric levy in 2024/25, or as soon as possible thereafter. Option 2 illustrates a volumetric levy.
10. The transition towards a volumetric approach is subject to the current feasibility challenges being overcome and the identification of an approach that avoids distortive effects and does not create disproportionate burdens on market participants, which would negatively impact consumers. We seek to gather views and evidence on how these issues could be overcome through the consultation, and the impact analysis will be updated in due course.

¹ Proposals for a Green Gas Levy Consultation: <https://www.gov.uk/government/consultations/green-gas-levy>

² Future Support for Low Carbon Heat Consultation: <https://www.gov.uk/government/consultations/future-support-for-low-carbon-heat>

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1. Introduction and background

1.1 Problem under consideration

11. To meet our legally binding emissions reductions targets, we need to move away from burning fossil fuels to heat our homes, businesses and industry. Biomethane injection into the gas grid accelerates the decarbonisation of gas supplies, by increasing the proportion of green gas in the grid. This transition is a necessary step towards meeting our carbon reduction targets, including the UK's net zero greenhouse gas emissions target. We are proposing to fund this transition by imposing a levy on gas suppliers, to support biomethane production through the Green Gas Support Scheme.
12. The Green Gas Support Scheme will drive increasing proportions of green gas in the grid and the resulting reduction in emissions will benefit all gas users and society more widely. We expect the Green Gas Support Scheme will contribute 9.7MtCO₂e of carbon savings over Carbon Budgets 4 and 5, and 21.6MtCO₂e of carbon savings over its lifetime, though this is subject to final policy decisions following consultation. This will have benefits across the economy and serve to reduce our dependence on burning natural gas to heat our buildings. Further information on the Green Gas Support Scheme can be found in Future Support for Low Carbon Heat consultation.³

1.2 Rationale for intervention

13. The production and consumption of natural gas produces a negative carbon externality. Biomethane is a low carbon substitute; however, biomethane has a higher cost of production than natural gas. This is partly due to the emerging nature of low carbon heating, which means that it does not benefit from economies of scale or from mature supply chains to the same degree as conventional technologies. Additionally, the full societal costs of fossil fuel combustion are not reflected in their market prices (examples include the impacts on health and climate change). Therefore, without government support, we would not expect to see any new biomethane capacity development over the period of the Green Gas Support Scheme (GGSS). To address this market failure, the GGSS will subsidise biomethane production, reducing the cost differential between natural gas and biomethane production and hence encouraging deployment of renewable systems.
14. The Energy Act 2008 (section 100) allows the Secretary of State to require the payment of a levy by designated fossil fuel suppliers, where supply is used 'for the purpose of generating heat.' We propose to place a levy on licensed gas suppliers for domestic and non-domestic customers to fund the Green Gas Support Scheme. Given that the benefits of decarbonisation through green gas injection will be shared by all users of the gas grid, it is our view that it is appropriate for gas users to fund the next stage of this transition.
15. Currently, UK industrial and domestic gas prices are relatively competitive; as shown in Figure 1, at the time of publication, they are the second lowest amongst the EU15.⁴
16. In addition, as can be seen in Figure 2, costs imposed by energy and climate policies form a larger portion of electricity prices than gas prices, for both industrial and domestic customers.

³ Future Support for Low Carbon Heat Consultation: <https://www.gov.uk/government/consultations/future-support-for-low-carbon-heat>

⁴ The 'EU15' refers to the number of member countries in the European Union prior to the accession of ten candidate countries on 1 May 2004. The EU15 comprised the following 15 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom.

Figure 1: Industrial and Domestic Gas Prices in the EU15⁵

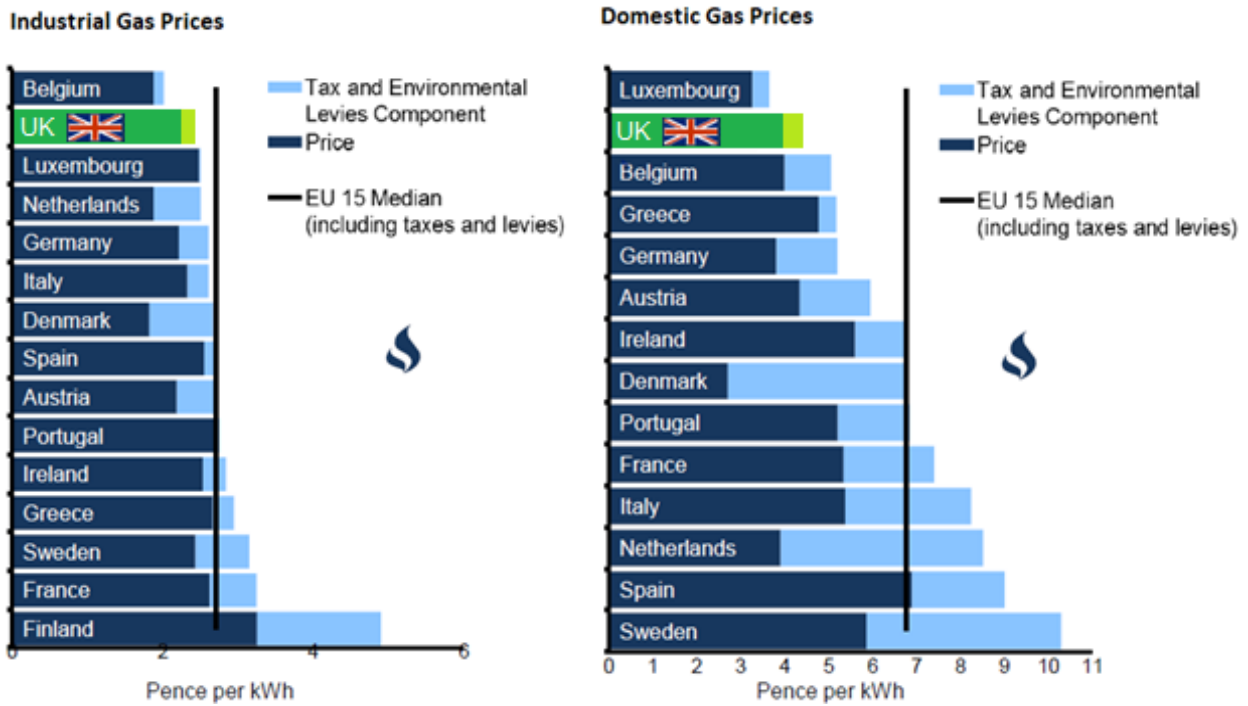
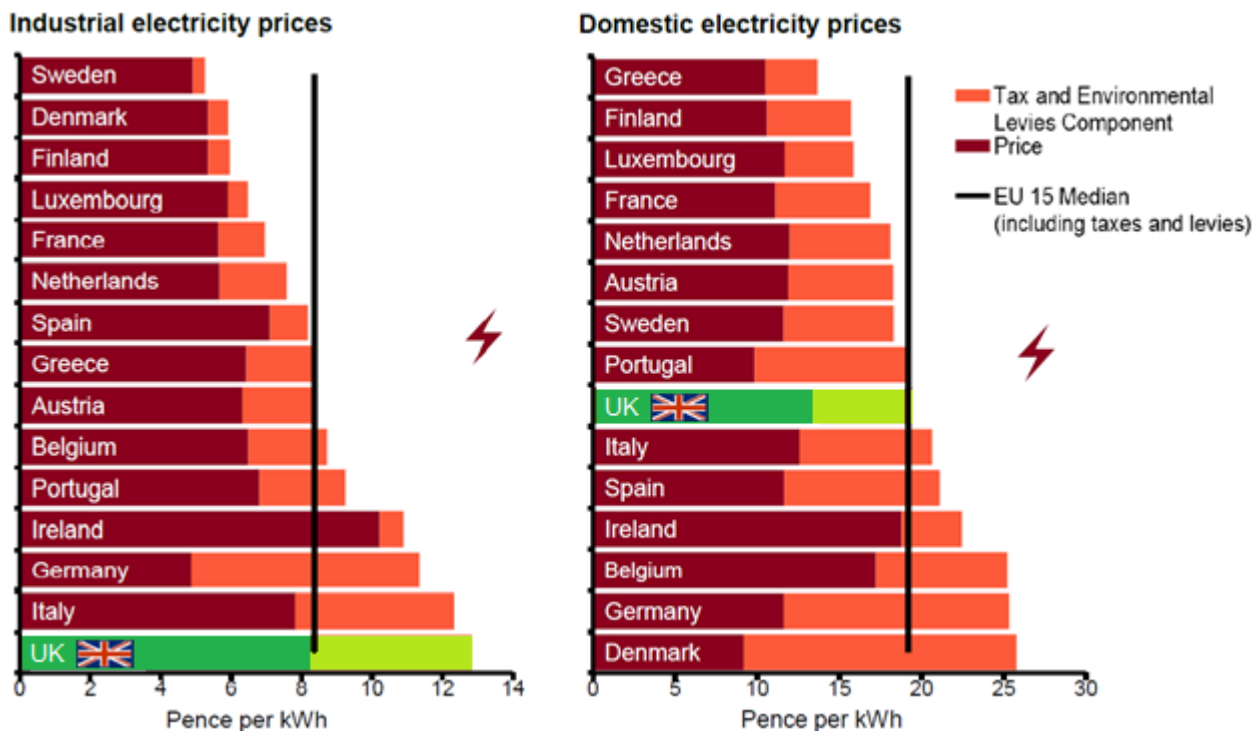


Figure 2: Industrial and Domestic Electricity Prices in the EU15, July-December 2019⁶



⁵ Quarterly Energy Prices: December 2019 <https://www.gov.uk/government/statistics/quarterly-energy-prices-december-2019>

⁶ BEIS (2019) Quarterly Energy Prices: June 2020: <https://www.gov.uk/government/statistics/quarterly-energy-prices-june-2020>

1.3 Policy objectives

17. It is essential that the Green Gas Support Scheme is financially sustainable. We have ensured that our levy design, as closely as possible, aligns with the following key principles. The levy should, wherever possible:

- a) Be compatible with existing industry processes and practices, utilising existing industry data flows.
- b) Be deliverable, in that it must be feasible to implement the financial management systems within the scheme's implementation timescales.
- c) Take account of the lessons learned from other relevant government levy schemes to maximise its efficiency and minimise the administrative burden on all parties.
- d) Reflect the need for predictability of costs for gas suppliers and have sufficient lead time to ensure suppliers can prepare for payment of the levy.
- e) Appropriately reflect Green Gas Support Scheme costs, ensuring no budget deficits.
- f) Minimise surpluses and outstanding cash balances, which in turn will minimise the impact on consumer bills.
- g) Be equitable and proportionate for bill payers.
- h) Minimise opportunities for non-compliance.

2. Policy Options

18. The policy options considered in this impact assessment are:

- a) Option 0 (counterfactual): Do nothing/do not introduce Green Gas Levy
- b) Option 1a (preferred option at launch): Distribute levy costs between suppliers according to the number of gas supply meter points that they serve, with no tiering by gas consumption or consumer type.
- c) Option 1b: Distribute levy costs between suppliers according to the number of gas supply meter points that they serve, with two charging tiers (Tier 1: domestic and micro businesses; Tier 2: remaining non-domestic customers).
- d) Option 1c: Distribute levy costs between suppliers according to the number of gas supply meter points that they serve, with three charging tiers (Tier 1: domestic and micro businesses; Tier 2: medium-sized customers; Tier 3: largest consumers).
- e) Option 2: Distribute levy costs between suppliers according to the amount of gas supplied to their customers. It is the government's intention to transition to a levy following this model in 2024/25, or as soon as practical thereafter.

19. This impact assessment sets out our proposals for implementing a per meter point approach, option 1a, in autumn 2021. At present, a per meter point design for the Green Gas Levy is preferable due to its reduced complexity, and ability to be delivered within the relatively short timescales needed to launch the Green Gas Support Scheme. It is important to launch the Green Gas Support scheme in autumn 2021 to avoid a hiatus in biomethane deployment that could lead to lost carbon savings, as well as job losses and damage to the UK biomethane industry.

20. However, in the long term, a volumetric levy provides a fairer distribution of costs, as those consuming more gas pay more towards the greening of the gas grid. It is the government's intention to transition to a volumetric levy, as illustrated in option 2, in 2024/25, or as soon as possible thereafter. We are currently seeking views on how feasibility challenges to adopting a volumetric approach to levy design can be overcome.

21. A per meter point approach and a volumetric approach are set out in full as separate options. This is both because the date of any transition cannot be guaranteed at this time, as it is subject to the feasibility challenges being overcome, and to allow for the direct comparison of the impacts of the approaches and an assessment to be made of them.

22. A consultation and impact assessment on the move to a volumetric levy will take place ahead of any such move, in addition to which further details on how such a levy might be implemented are being sought through the accompanying consultation.

23. Table 1 sets out how these options relate to the key principles of the levy; the options are also described in more detail below. Each principle is rated on a red-amber-green scale, based on how well it meets the principle (with green indicating good alignment, and red indicating poor alignment). The reasoning is presented below.

Table 1: Options and key principles of the levy

		Option 1a <i>Preferred option</i>	Option 1b	Option 1c	Option 2
Key principles of the levy	Compatibility with existing processes	Green	Green	Green	Amber
	Deliverability for GGSS launch in Autumn 2021	Green	Amber	Amber	Red
	Taking account of lessons learned	Green	Green	Green	Green
	Predictability of costs	Amber	Amber	Amber	Red
	Appropriately reflected GGSS costs	Green	Green	Green	Amber
	Minimise surpluses and outstanding cash balances	Green	Green	Green	Amber
	Be equitable and proportionate for bill payers.	Amber	Amber	Amber	Green
	Minimise opportunities for non-compliance	Green	Green	Green	Green

24. Options 1a, 1b and 1c use the number of meters served by each supplier to distribute costs, a standard way of allocating market share within the industry and for which Ofgem have access to timely and accurate data, allowing accurate allocation of levy costs with existing systems. Under Option 2, levy rate for a given year would be calculated based on a forecast of gas demand and, under existing processes, it can take up to three years for accurate meter readings to be received. This would mean that complex and frequent reconciliations could be required under a volumetric approach, potentially spanning several scheme years. As such, Option 2 is not as readily compatible with existing processes, though we are seeking input through the consultation to understand how to address this issue and implement a volumetric approach in 2024/25, or as soon as possible thereafter.

25. Option 1a would be simplest to implement from a supplier and systems perspective, as the levy rate would be applied uniformly across all meter points. The additional complexity from tiering, in option 1b and 1c, adds some challenge to ensure delivery on time. Finally, there is a significant chance that a volumetric approach, as in Option 2, that

is able to accommodate the necessary issues would lead to our implementation deadlines being missed. This would mean the launch of the Green Gas Support Scheme would need to be delayed, leading to potential lost carbon savings and damage to the UK biomethane industry. This is the primary reason for implementing option 1a initially, so that time is available for proper implementation of option 2, with option 1a being deliverable in the meantime.

26. It is our assessment that, given yearly gas supply can vary by as much as 10% from expected trends, a volumetric approach may need to collect substantial headroom to cover any reduction in gas demand to minimise the risk that the levy fails to recover full Green Gas Support Scheme costs. By comparison, a per meter point approach would provide more certainty on costs for suppliers and, in turn, their customers, than a volumetric approach, as it would be calculated on meter point data as opposed to gas demand. This is because the total number of meter points and the number of meter points served by individual suppliers varies significantly less than yearly gas demand⁷. We are seeking input on how the cost uncertainties of a volumetric approach might be addressed through the accompanying consultation.
27. However, options 1a, 1b & 1c decouple gas consumption from the cost of the levy to the consumer. As such, those who are consuming the most fossil fuels do not contribute more to making the gas grid green under these options. As domestic and micro-business consumers typically consume less gas than other businesses, this approach is expected to distribute cost disproportionately on domestic and microbusiness consumers when considering gas consumption. Under option 2, consumers are charged in accordance to their gas usage, avoiding this issue and ensuring a more equitable distribution of costs. This increased equity of cost distribution is a key driver for a transition to Option 2.
28. Each option would be backed by a robust enforcement and compliance regime to ensure non-compliance was minimised.

Option 0 (counterfactual): Do nothing/do not introduce Green Gas Levy

29. In this impact assessment, the quantified impacts of imposing a Green Gas Levy are estimated against a counterfactual where there is no levy and therefore no support mechanism for biomethane injection into the gas grid following the Non-Domestic Renewable Heat Incentive (RHI) scheme.⁸

Option 1: Distribute Green Gas Levy between suppliers according to the number of gas supply meter points that they serve.

30. Under Option 1, gas suppliers would be levied according to their share of the overall gas market. This would be determined by the number of meter points on the gas network supplied by each supplier.⁹ The annual levy rate would be set approximately six months in advance of the first scheme year, based on maximum projected costs of the Green Gas Support Scheme and the total number of meter points in the market, and three months in advance of future years. For future years, the timing of the levy rate setting

⁷ Between 2009 and 2018, the average consumption of gas by both domestic and non-domestic users decreased by an average of 1.4% each year, with the year-year on change varied between +3.7% and -8.1%. Trends in numbers of meters in this period, however, were significantly more consistent, with an average of a 0.8% increase each year and the year-on-year change varying between 0.3% and 1.4%. (Source: BEIS (2019) Sub-national gas consumption statistics, 2005-2018: <https://www.gov.uk/government/statistical-data-sets/gas-sales-and-numbers-of-customers-by-region-and-local-authority>)

⁸ Changes to the Renewable Heat Incentive (RHI) schemes: <https://www.gov.uk/government/publications/changes-to-the-renewable-heat-incentive-rhi-schemes>

⁹ Data on the number of meters held by each supplier will be provided to Ofgem, at the beginning of each quarter to align with the payment cycle. See the Financial Management section of the Proposals for Green Gas Levy consultation for more details.

process would align with Ofgem's calculation of the price cap. Three tiering options have been considered:

- a) **Option 1a (preferred option):** Flat rate across all gas consumers.
- b) **Option 1b – two tiers:**
 - i. Tier 1: domestic consumers and microbusinesses (up to 73,200 kWh/annum).
 - ii. Tier 2: remaining non-domestic consumers (above 73,200 kWh/annum).
- c) **Option 1c – three tiers:**
 - i. Tier 1: domestic consumers and microbusinesses (up to 73,200 kWh/annum).
 - ii. Tier 2: medium-sized non-domestic consumers (73,200 kWh/annum to 732,000 kWh/annum).
 - iii. Tier 3: large non-domestic consumers (above 732,000 kWh/annum).

- 31. The tiers align with End User Category (EUC) bands, which is a categorisation system for meters already used within the industry. Up to 73,200 kWh/annum covers the vast majority of domestic users and micro gas-use businesses, while the division above and below 732,000 kWh/annum are standard segmentations between small and large meter points.
- 32. These options are presented as, following investigation, they were found to be possible to implement and avoid any particular groups of non-domestic customers paying a significantly disproportionate amount relative to their gas use.
- 33. See the Proposals for a Green Gas Levy consultation document for further information on the per meter point approach, including proposals for timings of payments and notice for suppliers.

Option 2: Distribute levy according to the amount of gas supplied to their customers.

34. Under Option 2, suppliers would be levied according to the amount of gas supplied to their customers. There are three approaches to this, dependent on the approach used to determine gas consumption, which are set out below. For the purpose of this impact assessment, it is assumed the Supply Meter Point Annual Quantity approach will be used. Should another approach be pursued, there may be impacts on administration burdens and impacts on specific consumer groups. Further evidence regarding these approaches, and which is best suited, is being gathered through the consultation process.
35. The approaches are:
- a) **Formula Year Annual Quantity (FYAQ)** - Each gas meter has a Formula Year AQ (FYAQ) assigned to it, which is the estimated annual consumption of the meter point that is fixed for the year on 1 April, with adjustments only allowed for in rare circumstances. This is a measure of estimated annual consumption based on historical metered volumes and adjusted to the seasonal normal demand. Under this approach, the levy charge would be calculated for each meter point based on the FYAQ for that meter on a certain date, which would apply for the whole levy year.
 - b) **Supply Meter Point Annual Quantity** - Each meter point also has a Supply Meter Point AQ ('Rolling AQ') assigned to it, which is the estimated annual gas consumption for that meter that – unlike the FYAQ – is updated monthly based on the receipt of meter readings (where provided). Under this approach, the levy charge would be calculated for each meter point based on the updated Rolling AQ for that meter each month or quarter (depending on final design), rather than being fixed for the year. For those meters where monthly readings are not provided, the Rolling AQ would remain based on estimates.
 - c) **Consumption data** - This approach would involve charging the levy based on actual consumption, using data from the gas settlement process. Where daily meters are in place, this accurate daily data would be used. However, for non-daily sites, settlement would, at present, need to rely on the AQ, in the first instance, given the amount of time it can take for some meter readings to be submitted.
36. Under both the Supply Meter Point Annual Quantity approach and the consumption data approach, it is likely that the levy would become simpler to calculate and administer over time as the smart meter roll-out continues its progress towards market-wide coverage.
37. See the Proposals a Green Gas Levy consultation document for further information on the volumetric approach, and the comparative advantages and risks of each approach to determining gas usage.

3. Analytical Approach

38. This section outlines the evidence base on which impacts of the policy proposal have been modelled.

3.1 Evidence base

39. The data sources used to assess the impact of the Green Gas Levy are:

- a) **Projected gas consumption** – BEIS Energy Emissions Projections¹⁰ are used to estimate future gas consumption for households and businesses, this is then used to calculate the expected bill impacts of the levy.
- b) **Projected gas meter numbers** – Historical trends as described in published sub-national gas consumption data¹¹ have been projected forwards using ONS household projections¹² for domestic meters and projected gas consumption for non-domestic meters¹¹.
- c) **Projected gas prices** – Gas prices used in this analysis are based on BEIS fossil fuel price projections.¹³ This is used to estimate the expected gas price impact of the levy.
- d) **Annual levy cost profile** – The levy cost profile is based on spend estimates of the Green Gas Support Scheme presented in the Future Support for Low Carbon Heat Impact Assessment.

40. All prices in this analysis have been converted into 2020 prices using the GDP deflator.¹⁴

3.2 Key assumptions

41. Below are the key assumptions used in estimating the impact:

Assumption	Description
Gas suppliers will pass on costs to their customers in the same way as the charges are set.	The levy imposes a charge on gas suppliers which we assume will be fully passed on to bill payers, and in the same way it is set. However, The Energy Act 2008 (section 100), which provides the power to set this levy, does not include powers to dictate how suppliers pass costs on to their customers.
Current trends in gas consumption continue for the duration of the scheme	The analysis conducted to date on price and bill impacts is based on projections of gas consumption under current policies and current average gas consumption.
Suppliers excluded from being required to pay the levy form a negligible portion of the market	A gas supplier will be subject to full levy costs if any proportion of their gas falls within the definition of fossil fuel in s.100 Energy Act 2008 (and accordingly within the definition of 'natural gas' in the Energy Act 1976). This follows the same principle as levies applied on the electricity side and avoids market distortion. If a gas supplier is

¹⁰ Energy and emissions projections: <https://www.gov.uk/government/publications/updated-energy-and-emissions-projections-2018>

¹¹ Regional and local authority gas consumption statistics: <https://www.gov.uk/government/statistical-data-sets/gas-sales-and-numbers-of-customers-by-region-and-local-authority>

¹² Household projections for England:

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/householdprojectionsforengland>

¹³ Fossil fuel price assumptions: <https://www.gov.uk/government/publications/fossil-fuel-price-assumptions-2019>

¹⁴ GDP deflators: <https://www.gov.uk/government/collections/gdp-deflators-at-market-prices-and-money-gdp>

supplying 100% green gas (and none of the gas they supply falls within the s.100 definition of “fossil fuel”), they would not be subject to the levy, as they would not be encompassed by the s.100 definition of a ‘designated fossil fuel supplier.’ Currently, the portion of the market served by such suppliers is negligible; however, it is possible this market share may grow over time. The potential impact of this will be looked at in more detail in the final stage IA.

Each gas customer has one gas meter point

Options 1a, 1b & 1c divide the costs of the levy by the number of meters. For the purposes of calculating impacts on customers for these options, it is assumed each customer has one meter. Some larger customers will have more than one meter per premises, and so will see larger impacts from the levy. The effect of this is expected to be small as these customers inherently consume large amounts of gas, meaning the levy rate under option 1a is a negligible impact on their bills and the tiered options of 1b and 1c consider consumption per meter point.

4. Impacts Appraisal

42. This section of the impact assessment sets out the costs and distributional impacts of the Green Gas Levy.

4.1 Policy costs and administrative burden

43. The estimated levy profiles to support the Green Gas Support Scheme, based on different deployment profiles and tariffs outlined in the Future Support for Low Carbon Heat consultation, are shown in Table 2. We are currently gathering information on the estimated administrative cost of a volumetric approach to Ofgem.

Table 2: Estimated levy funding profile (£m, 2020 prices)

Figures are rounded to the nearest £5m.

		2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/27 to 2035/36 (total)	2021/22 to 2035/36 (total)
Deployment scenario spending profile¹⁵	Low	< 3	10	30	55	70	870	1,035
	Central	5	20	50	90	125	1,500	1,785
	High	5	25	65	115	165	1,975	2,350
Administrative Costs to Ofgem		< 3	5	5	5	5	25	50

Figures may not sum due to rounding.

44. As discussed further in Section 5, the levy will need to collect payments to cover the maximum spend based on the available forecasts at the time it is set. As such, the costs to be covered are expected to be close to the currently projected maximum deployment early in the scheme, with the projected deployment range narrowing, most likely toward the central scenario, over its lifetime.

45. How the costs of these payments are then divided amongst suppliers varies between the five options, and are set out in Section 4.2.

46. In addition, as set out in detail in the Backdated Payments section of the Proposals for a Green Gas Levy consultation, the first collection of the levy is expected to occur in April 2022, and backdated Green Gas Support Scheme payments will be made in the first quarter of 2022/23, (between April and June 2022).

47. The levy rate is based on the Green Gas Support Scheme projected spend included in the Future Support for Low Carbon Heat consultation and are therefore subject to change. For example, the spend is based on current deployment projections and an indicative 15-year tariff payment period. Changes to the tariff rate, tariff payment period and/or projected amount of biomethane supported would directly impact on the funding required for the Green Gas Support Scheme and the Green Gas Levy requirement, affecting the levy rate.

48. The administration costs presented are highly uncertain, as the detail of the scheme is subject to consultation and further policy development. Administration costs associated with transitioning from option 1a to option 2 in future are also uncertain, therefore are subject to change following further policy development and planning with Ofgem.

¹⁵ See Future Support for Low Carbon Heat Impact Assessment for further information on the Green Gas Support Scheme deployment scenarios.

49. Suppliers will also incur administrative costs through familiarising themselves with the policy, updating systems and engagement to notify customers of the levy. These activities will result in some costs in the run-up to and immediately after the policy comes into effect in 2022. Once the policy is in place, suppliers will also face recurring costs from providing information to Ofgem, making levy payments and lodging credit cover with Ofgem, so that they are able to cover their levy obligations for each quarter.
50. The administrative costs incurred by suppliers will vary between the policy options. Under option 1a, it is expected that each supplier would require the equivalent of 3 to 6 months of one member of full time staff's time to undertake familiarisation activities and the initiation processes for the first payment, and the equivalent of one month's time per year for a member of staff to manage payments. Given the similarities of the mechanisms for options 1b and 1c, it is assumed their administrative burden would be similar. However, as the tiered system has additional complexities for categorising customers, additional set-up time may be required. Under these options, it is expected that each supplier would require between 3 and 9 months for one member of staff for familiarisation, and one month per year for recurring administrative activities.
51. Additionally, there will be an administrative burden associated with transitioning to a volumetric levy. Further information to assess the impact of this will be sought through this consultation process, as well as any consultation on the transition itself.
52. The average annual salary of these staff members is estimated to be around £41,000¹⁶. Under option 1, the preferred, option, a central estimate of the initial administrative costs across all suppliers is £1.4m, and recurring annual administrative costs are £0.3m.
53. We expect gas suppliers to pass through these costs to customers, resulting in an additional bill increase of approximately 7p per customer in 2022, and 1p per customer each year thereafter under the preferred option.
54. Under option 2, it is expected that each supplier would require between 6 and 12 months for one member of staff for familiarisation, and between 2 and 4 months per year for recurring administrative activities, including reconciliation activities. This reflects the greater complexity in the changes required to changes to billing systems ahead of launch and the larger potential need for reconciliation each quarter due to the lag in actual data becoming available. A full breakdown covering each of the options, including low and high estimates, can be found in table 3¹⁷.
55. Although estimated supplier administration costs of this approach are higher, we are considering a transition to a volumetric levy in 2024/25, or as soon as possible thereafter, as a volumetric levy provides a more equitable distribution of costs to consumers in the long run. The policy design however will need to avoid distortive effects and disproportionate burdens on market participants. Furthermore, any additional costs associated with transitioning from option 1a to option 2 are uncertain, therefore we are currently seeking views on challenges to adopting this approach can be overcome.

¹⁶ This estimate is based on the median full time salary of a business and management consultancy consultant, from Annual Survey of Earnings and Hours (ASHE) 2019, Table 16, for SIC code 7022 (Business and other management consultancy activities), converted to 2020 prices:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/industry4digitsic2007ashtable16>

¹⁷ The modelling of these costs has been done in line with the Standard Cost Model for analysing administrative burdens:

<https://ec.europa.eu/eurostat/documents/64157/4374310/11-STANDARD-COST-MODEL-DK-SE-NO-BE-UK-NL-2004-EN-1.pdf/e703a6d8-42b8-48c8-bdd9-572ab4484dd3>

Table 3: Estimated administrative burden on businesses (£m, 2020 prices)*Figures are rounded to the nearest £0.1m.*

	Option 1a		Options 1b&c		Option 2	
	Initiation costs	Recurring annual costs	Initiation costs	Recurring annual costs	Initiation costs	Recurring annual costs
Low	0.6	0.2	0.6	0.2	1.2	0.4
Central	1.4	0.3	1.8	0.3	2.8	0.9
High	2.5	0.4	3.7	0.4	4.9	1.6

4.2 Policy impact on gas bills for households and businesses

56. In this IA, we assume that suppliers pass on all policy costs imposed on them. Since we expect the pass through of costs to consumers, we expect consumer bills to increase.
57. The Green Gas Support Scheme has applications open for four years starting in 2021/22, with an indicative 15-year tariff. Spend on the Green Gas Support Scheme increases during the initial years of the scheme because the first biomethane plants on the scheme ramp up production over time and new biomethane plants begin deploying. Spend is expected to peak at £150m in 2027/28 until 2036/37. Spend is expected to decrease thereafter, as plants that deployed at the start of the scheme stop receiving payments. All plants will have stopped receiving payments by 2040/41, when spend will end. The impact on gas bills for households and businesses will follow a similar pattern.
58. The overall cost and spend profile of the GGSS is not expected to change depending on the levy option chosen.
59. We are proposing that a levy calculated on a flat rate per meter basis is the most appropriate option at scheme launch. This is the only option that has been assessed to be feasible to deliver in line with the launch of the Green Gas Support Scheme, that avoids any particular group of bill-payers being disproportionately affected by higher costs relative to their gas consumption. It leads to the same amount being added to all gas bills. The estimated impact of this proposal is shown in section 4.2.1 below.
60. It is the government's intention to transition to a volumetric levy in 2024/25, or as soon as possible thereafter. This is subject to the current feasibility challenges being overcome and the identification of an approach that avoids distortive effects and does not create disproportionate burdens on market participants, which would negatively impact consumers. Option 2 illustrates a volumetric levy.
61. The estimated annual increase in gas bills and gas prices by affected groups due to the policy are also shown for all policy options. This information is summarised in Table 4 below and assumes a consistent levy policy until payments come to an end in 2040/1. Any changes to the levy design, for example if in future, a transition from a flat-meter approach towards a volumetric levy is proposed, would be subject to a public consultation and further analysis on the expected bill impacts of such changes will be provided.

Table 4: Estimated annual increase in gas bills, Options 1a, 1b, 1c & 2 (2020 prices):

		Estimated impact in 2022	Estimated impact at peak (from 2028)
Option 1a	Bill increase per meter (£)	£1.40	£6.90
Option 1b	Bill increase per meter (£)	Tier 1 (Up to 73.2MWh/year)	£6.80
		Tier 2 (More than 73.2MWh/year)	£21.00
Option 1c	Bill increase per meter (£)	Tier 1 (Up to 73.2 MWh/year)	£6.50
		Tier 2 (73.2 to 732 MWh/year)	£21.00
		Tier 3 (More than 732 MWh/year)	£220.00
Option 2	Price increase per MWh (£)	£0.08	£0.36
	Bill increase for an average household (£)	£1.10	£5.10

All bill impacts are rounded to 2 significant figures.

4.2.1 Impact on gas bills: Option 1a (preferred option at launch)

62. Table 5 shows the impact on gas bills under Option 1a. In this case, the levy is distributed between suppliers according to their market share, as determined by the number of gas supply meter points that they serve. This analysis assumes there is no tiering, and so the levy is calculated on a flat rate £/meter point basis. Given its relative simplicity, immediate deliverability, and our priority of ensuring a levy mechanism is in place within the timescales needed to launch the Green Gas Support Scheme, this is our preferred option.

63. Under Option 1a, we estimate the impact on the average domestic gas bills may be around £1.40 per annum in the first year of the scheme. If option 1a is maintained throughout the duration of the scheme, we will expect the impact on domestic bills to rise to around £6.90 per annum by 2028, which equates to around 1% of the expected average household gas bill in 2028.

64. This approach has several immediate advantages over the other options, particularly Option 2:

- a) Option 1 is the simplest option to implement from a supplier and systems perspective, aside from Option 0, Do Nothing, as the levy rate will be applied uniformly across all meter points. Given the limited time to implement ahead of the launch of the Green Gas Support Scheme, the simplicity of implementation at launch is a significant factor.
- b) This approach uses meter point information, which is highly accurate. As a result, there would be no need for reconciliation processes, which minimises administration costs. By comparison, a volumetric approach, as seen in Option 2, would rely upon suppliers being charged based on forecast gas supply, which may require reconciliation once actual gas consumption data becomes available, which in some cases can take up to 3 years to be fully accurate. Input is being sought through the consultation on the implementation of a volumetric approach to help mitigate this impact.

- c) Option 1 provides more certainty on costs for suppliers, and in turn customers, than a volumetric approach, as it would be calculated on meter point ownership as opposed to gas demand. This is because the total number of meter points and the number of meter points served by individual suppliers is less volatile than yearly gas demand. This is explored further in the sensitivity analysis section.
- d) It would be more resilient to market shocks compared to a volumetric approach. Consumption projections based on historic consumption are vulnerable to shocks or structural changes to demand. For example, the recent fall in gas demand as a result of COVID-19 has shown the susceptibility of the calculation to unexpected events, and has led to additional administrative effort to correct AQs as much as possible to manage this variation and try to minimise inaccuracies. Under a volumetric approach this could cause discrepancies between forecasted annual levy costs and actual supply, leading to a potential combination of discrepancies between levy receipts and scheme outgoings, and challenges for suppliers in terms of levy recovery from consumers.
- e) Given that costs would be based on accurate meter point data, rather than gas demand forecasts, the amount of headroom that would need to be factored into the levy rate to account for potential shortfalls would be significantly lower than under a volumetric approach. This would substantially reduce the need to collect additional funds to cover such variability and ensure that the Green Gas Levy more accurately reflects Green Gas Support Scheme costs, while billpayer impacts are kept to a minimum.

65. However, there are also disadvantages:

- a) This approach decouples gas consumption from the cost of the levy to the consumer. As such, those who are consuming the most fossil fuels do not contribute more to making the gas grid green.
- b) Further, from the above point, option 1a does not provide any motivation for behaviour change, to consume less gas, which could further drive down carbon emissions.
- c) As domestic and micro-business consumers typically consume less gas than other businesses, this approach is expected to distribute cost disproportionately on domestic and microbusiness consumers when considering gas consumption. As such, this approach does not distribute the costs as equitably as other options, particularly option 2.

66. As the scheme launches, this is the preferred option, as it provides the most immediate stability and certainty to suppliers and consumers, minimises administrative burdens and is most practical to implement in the time available.

67. However, it is the government's intention to transition to a volumetric levy, as set out in option 2, in 2024/25, or as soon as possible thereafter. This is to distribute costs more equitably and avoids the larger issues with option 2 – principally that it would not be possible to implement in the time available. Additionally, it provides an opportunity to find approaches that mitigate other disadvantages with this approach. This is subject to the current feasibility challenges being overcome and the identification of an approach that avoids distortive effects and does not create disproportionate burdens on market participants, which would negatively impact consumers.

Table 5: Estimated annual increase in gas bills, Option 1a (2020 prices)

		Estimated impact in 2022	Estimated impact at peak (from 2028)
Annual bill increase per meter (£)		£1.40	£6.90
Bill increase (%)	Average household	<0.5%	1.0%
	Business consuming 140 MW/year¹⁸	<0.5%	<0.5%
	Business consuming 1,400 MW/year¹⁶	<0.5%	<0.5%

4.2.2 Impact on gas bills: Option 1b

68. Table 6 shows the impact on gas bills under Option 1b. In this case, the levy is distributed between suppliers according to their market share, as determined by the number of gas supply meter points that they serve. There are two charging tiers, based upon End User Category (EUC) bands, which are in turn based upon annual gas consumption:

- a) Tier 1: Domestic consumers and microbusinesses.
- b) Tier 2: Remaining non-domestic consumers.

69. Tier 1 aligns with lowest band, band 1, the upper end of which is set at 73,200 kWh/year. This tier covers the vast majority of domestic users and micro gas-use businesses. Tier 2 covers all meters in higher bands, consuming more than 73,200 kWh/year.

70. The levy rate for Tier 2 has been set such that none in the tier pay significantly disproportionate amounts compared to their gas use. The remaining costs are divided amongst Tier 1.

71. Under Option 1b, we estimate the impact on the average domestic gas bill may be around £1.40 per annum in the first year of the scheme, before rising to around £6.80 per annum by 2028. This equates to around 1% of the expected average household gas bill in 2028. This is the same as under option 1a, due to rounding.

72. For those consuming more than 73,200 kWh/year, the impact on the gas bill may be around £4.30 per annum in the first year of the scheme, before rising to around £21 per annum by 2028.

73. This approach has many of the same advantages compared to option 2 as option 1a. In addition to these, through the tiering approach, this option reallocates some of the costs from lower gas use consumers to higher use consumers. This helps to better align contributions to the levy to gas consumption.

74. However, as can be seen from the limited reduction in costs for an average domestic household, the impact of this is limited. The reason for this is that 99% of all meters fall into Tier 1, so large increases in costs for Tier 2 are required for substantial change to be seen in the costs for Tier 1.

¹⁸ Example businesses consuming 140 MWh/year and 1,400 MWh/year of gas have been chosen to illustrate the effects on businesses with different scales of gas use, falling within the industry recognised small supply points and large supply points respectively.

75. In addition to this, the system adds administrative burden to suppliers compared to option 1a, and presents a sizable cliff edge between tiers, as the cost of the levy roughly triples from Tier 1 to Tier 2.
76. Due to the additional complexity of this option, its potential administrative burden, issues with creating a cliff edge and only creating a very small impact on domestic bills, this option is not preferable to option 1a.

Table 6: Estimated annual increase in gas bills by affected group, Option 1b (2020 prices)

		Estimated impact in 2022	Estimated impact at peak (2028)
Annual bill increase per meter (£)	Tier 1 (Up to 73.2 MWh/year)	£1.40	£6.80
	Tier 2 (More than 73.2 MWh/year)	£4.30	£21.00
Bill increase (%)	Average household	<0.5%	1%
	Business consuming 140 MW/year	<0.5%	Up to 1%
	Business consuming 1,400 MW/year	<0.5%	<0.5%

4.2.3 Impact on gas bills: Option 1c

77. Table 7 shows the impact on gas bills under Option 1c. In this case, the levy is distributed between suppliers according to their market share, as determined by the number of gas supply meter points that they serve. There are three charging tiers:
- Tier 1: Domestic consumers and microbusinesses.
 - Tier 2: Medium-sized non-domestic consumers.
 - Tier 3: Large non-domestic consumers.

78. As with option 1b, Tier 1 aligns with the lowest EUC band, band 1, the upper end of which is set at 73,200 kWh/year. Tier 2 covers meters in bands 2 and band 3, consuming between 73,200 kWh/year and 732,000 kWh/year. And Tier 3 covers all meters in bands 4 and above, consuming more than 732,000 kWh/year. As before, Tier 1 covers the vast majority of domestic users and micro-gas-use businesses. The additional segmentation between Tier 2 and Tier 3 are industry standard segmentations between small and large meter points.

79. The levy rates for Tier 2 and Tier 3 has been set such that those at the lower end of the tiers pay an equivalent amount to what they would pay under option 2. The remaining cost were divided amongst Tier 1.
80. Under Option 1c, we estimate the impact on the average domestic gas bills may be around £1.40 per annum in the first year of the scheme, before rising to around £6.50 per annum by 2028. This equates around 1% of the expected average household gas bill in 2028. This is the same as under option 1a, due to rounding.
81. For those consuming between 73,200 kWh/year and 732,000 kWh/year, the impact on the gas bill may around £4.10 per annum in the first year of the scheme, before rising to around £21 per annum by 2028.
82. For those consuming more than 732,000 kWh/year, the impact on the gas bill may around £44 per annum in the first year of the scheme, before rising to around £220 per annum by 2028.

83. This option builds on option 1b, and amplifies both its advantages, in shifting costs onto those consuming more gas, and disadvantages, in further increasing the administrative burdens and creating cliff-edges – particularly the latter, as Tier 3 is around 10 times the cost of Tier 2.
84. While this option has a greater impact on domestic bills than option 1b, this option has the same disadvantages as option 1b and the impact on domestic bills remains small overall. As such, the benefits of this option have been judged as not being sufficient to justify these disadvantages.

Table 7: Estimated annual increase in gas bills by affected group, Option 1c (2020 prices)

		Estimated impact in 2022	Estimated impact at peak (2028)
Annual bill increase per meter (£)	Tier 1 (Up to 73.2 MWh/year)	£1.40	£6.50
	Tier 2 (73.2 to 732 MWh/year)	£4.30	£21.00
	Tier 3 (More than 732 MWh/year)	£44.00	£220.00
Bill increase (%)	Average household	<0.5%	1%
	Business consuming 140 MW/year	<0.5%	Up to 1%
	Business consuming 1,400 MW/year	<0.5%	Up to 1%

4.2.4 Impact on gas bills: Option 2

85. Table 8 shows the impact on gas bills under Option 2. In this case, the levy is distributed between suppliers according to amount of gas supplied to their customers.
86. Under Option 2, we estimate the impact on the average domestic gas bills may be around £1.10 per annum in the first year of the scheme, before rising to around £5.10 per annum by 2028. This equates to less than 1% of the average household gas bill in 2028.
87. The average gas prices for small and medium businesses are expected to increase by around 1%, and between 1% and 2% for Energy Intensive Industries (EIIs)¹⁹ by 2028.
88. The primary advantage of this option is the alignment between gas use and levy cost to consumers. However, as detailed under option 1a, this option exposes suppliers and consumers to the volatility of the gas market and presents a substantial challenge to the key principle of providing predictability of costs and to government in ensuring levies collected meet GGSS budget requirements without significant headroom.
89. In addition, it is more administratively complex due to longer time lags on the availability of accurate gas consumption data, which can be up to 3 years. This requires reconciliation of projections with actual data which is both costly and complicated. The complexity makes this option unlikely to be deliverable in time for the Green Gas Support Scheme launch.
90. As this option is unlikely to be deliverable in the timescales available, as well as providing less certainty in costs to both suppliers and customers and being substantially more burdensome administratively, this option is not preferable to option 1a at launch.

¹⁹ Energy-intensive industries are defined as companies whose energy intensity is more than 3%. This means that their energy costs are at least 3% or more of their total production costs.

91. However, as previously set out, it is the government’s intention to transition to a volumetric levy in 2024/25, or as soon as possible thereafter. This is to distribute costs more equitably and avoids the larger issues with option 2 – principally that it would not be possible to implement in the time available. Additionally, it provides an opportunity to find approaches that mitigate other disadvantages with this approach. This is subject to the current feasibility challenges being overcome and the identification of an approach that avoids distortive effects and does not create disproportionate burdens on market participants, which would negatively impact consumers.

Table 8: Estimated annual increase in gas bills by affected group, Option 2 (2020 prices)

		Estimated impact in 2022	Estimated impact at peak (2028)
Price increase per MWh (£)		£0.08	£0.36
Annual bill increase for an average household (£)		£1.10	£5.10
Price increase (%)	Domestic	<0.5%	1%
	Small Business	<0.5%	1%
	Medium Business	<0.5%	1%
	EII – no existing exemptions	<0.5%	1%
	EII – all available exemptions	<0.5%	2%

4.3 Fuel poverty impact

92. The impact of the proposed levy on fuel poverty is dependent on the size of the increase in gas prices. Households that do not use mains gas to heat their homes will not be affected.

93. Fuel poverty is a devolved issue and each country in Great Britain has its own fuel poverty indicator for measuring the problem. In England, where the Low-Income High Costs (LIHC) indicator is used, we estimate that the impact on the number of households in fuel poverty would be minimal. This is because LIHC is a relative indicator, and changes in gas prices affect gas-using all households, not just those in fuel poverty.

94. The fuel poverty gap is a measure of the depth of fuel poverty in England. Our estimates show that the impact of the levy on the average fuel poverty gap, under all options presented, is minimal compared to the counterfactual scenario where the levy is not imposed.

4.4 Small and Micro Business Assessment (SaMBA)

95. In this SaMBA we have considered the impacts of the levy on both gas suppliers and businesses who will face a higher gas bill due to the levy. For gas suppliers, the make-up of the gas supply market is variable. There is a very uneven distribution regarding the amount of meter supply points that each supplier serves, and while we do not collect data on the sizes of their businesses, we expect that a number of gas suppliers are small or micro businesses.

96. As it is our expectation that suppliers will pass costs onto their customers, we are not proposing any exemptions from the levy for small gas suppliers. It is our view that small supplier exemptions are more relevant for schemes where suppliers have significant delivery obligations, which would otherwise pose a disproportionate administrative burden on small suppliers. Option 1a, the preferred option at launch, seeks to minimise these burdens on suppliers. Option 2, a form of which the government intends to transition to, will involve greater burdens on suppliers under the current high level design. However, evidence for how to address is being sought as part of the consultation process.
97. The flat rate per meter option proposed will provide a high degree of certainty on costs for suppliers, compared to the volumetric approach. Any disruption or uncertainty resulting from reconciling projected gas consumption, to actual consumption once the data becomes available, would disproportionately affect small gas suppliers.
98. In addition to this, the option 1a reduces administrative costs and burden on suppliers compared to the tiering and volumetric approaches considered (see Table 3), making the levy more manageable for smaller suppliers.
99. Because these costs will be passed through, we have considered the impact on small and micro businesses who consume gas. In this SaMBA we follow the standard gas industry cut-off point of 73,200 kWh to determine whether a customer is domestic or non-domestic. This threshold is widely used, for example in Sub-National Gas National Statistics²⁰.
100. Under option 1a, the expected addition to SaMB bills will represent a small proportional increase. Peak levy costs are estimated to be £6.90 in 2028, leading to a corresponding bill increase of up to 0.5% for small businesses with annual gas consumption over 73,200 kWh.
101. However, there is significant variation in energy consumption amongst the non-domestic sector, and we recognise that gas consumption for some micro-businesses may fall below this threshold. For these businesses, we would expect a bill increase of up to around 1% during the peak period²¹, in line with expected impact on the average household gas bill (see Table 5).
102. Overall, these increases are negligible when compared to total operating costs and turnover and are not expected to impact SaMB competitiveness.
103. Of the range of tiering options considered, we did not find a way to satisfactorily reduce the micro-business bill costs substantially without leading to other businesses paying substantially disproportionate amounts relative to their gas use. This outcome stems from the wide variability in volumes of non-domestic gas use, and the fact that domestic consumers account for 99% of meter points in the UK²².
104. At the peak of the levy in 2028, micro-businesses would save approximately 10p per year under option 1b and approximately 40p per year under option 1c, compared to no tiering. On the other hand, we expect the peak flat rate levy of £6.90 would increase to £21 under option 1b for larger businesses (consuming more than 73.2MWh/year). For businesses consuming more than 732 MWh/year, the levy rate is expected to increase to £220 under option 1c (see Table 4).
105. Under Option 2, as the charge is a consistent per unit charge, the impact on bills for all businesses will be between 1% and 2%, dependent on the base price they pay for gas.

²⁰ <https://www.gov.uk/government/collections/sub-national-gas-consumption-data#methodology>

²¹ This assumes that these micro-businesses exhibit similar annual consumption as domestic customers.

²² BEIS (2013) Regional and local authority gas consumption statistics: <https://www.gov.uk/government/statistical-data-sets/gas-sales-and-numbers-of-customers-by-region-and-local-authority>

Due to the heterogeneity of non-domestic gas consumers, business size is not a well aligned with gas consumption. Under this option, a business consuming 140 MWh per annum would expect pay around £50 per annum, and a business consuming 1,400 MWh per annum would expect to pay around £500.

106. It should also be noted that we do not have the powers to dictate how suppliers pass costs on to their customers under the section 100 Energy Act 2008 powers. Whilst our preferred option will have a larger proportional impact on SaMB gas bills, compared to larger businesses with higher gas consumption, we will implement robust budgetary controls to ensure costs do not rise unexpectedly.

4.5 Uncertainty

107. There are several uncertainties around the impacts of the levy presented in Section 4. These include:

- a) Biomethane production is largely stable and predictable, however available evidence on the uptake of the scheme, and where it falls within projections, will be limited at the start of the scheme as it embeds.
- b) In the near term, gas consumption is subject to significant uncertainty, due to factors including weather effects, housing development and external shocks, such as those seen from COVID-19.
- c) Gas meter point numbers are also subject to uncertainty, though to a much lesser extent, due to facts such as housing developments.
- d) Long term estimates of bill impacts are subject to a high degree of uncertainty due to uncertainty around the type of fuels used in the future as heat is decarbonised at scale. For example, wide scale adoption of non-gas boilers could shrink the levy base.

108. Sensitivity analysis has been conducted to understand the key uncertainties in Section 5.

4.6 Equalities assessment

109. An assessment of the Green Gas Levy against the protected characteristics covered by the Equality Act 2010 has not been made in this impact assessment. We intend to gather further evidence throughout the consultation period. The findings will be presented in the Final Impact Assessment.

4.7 Monitoring and evaluation

110. The Future Support for Low Carbon Heat Impact Assessment outlines our monitoring and evaluation approach for the Green Gas Support Scheme, this will also cover the Green Gas Levy.
111. A robust cost control framework will be put in place to ensure levy costs and bill impacts do not rise unexpectedly. We will continue to monitor potential impacts of this policy on affected groups.

5. Sensitivity Analysis

112. The two major factors that establish the levy rate are the projected Green Gas Support Scheme spend for the upcoming year and the divisor that the cost is spread over – either the total number of meter points in the gas supply market for options 1a, 1b & 1c, or the total gas consumption for option 2. Both figures are subject to a degree of uncertainty - with the levy needing to be set such that it will cover any potential Green Gas Support Scheme spend and have the necessary headroom should the total number of meter points be less than projected, leading to less overall money collected.

5.1 Uncertainty in collection – Money In

113. For options 1a, 1b & 1c, the uncertainty around the total number of meter points in the market over the following year is relatively small. Between 2009 and 2018 the difference from the overall trend year-on-year has been within 1%.
114. Given the importance of ensuring enough money is collected by the Green Gas Levy to cover the costs of the Green Gas Support Scheme an adjustment factor has been applied to the projected number of meters points to account for potential unexpected variations. This is equal to 3 standard deviations of the trend seen over the available data and equates to 1.0%. This margin covers previous observations, as well as covering 99.7% of expected future observations if the variation follows the observed normal distribution.
115. For option 2, the uncertainty around projected gas consumption is markedly higher, given seasonal and annual variations in weather and other factors. Year-on-year change over the same period varied between -8.1% and +3.7%. This, in turn, leads to larger requirements for headroom – with the same 3 standard deviations approach the headroom requirement becomes 10.8%, around 10 times higher.
116. More broadly, it is important to recognise that this analysis is based upon projected gas consumption based under a continuation of current policies and trends. Over a longer time, there may be significant changes to these and attitudes to gas consumption across the system. As such, the projections used to inform the setting of the levy will need to be updated over time to reflect any changes to the underlying system.

5.2 GGSS Budget Projections – Money Out

117. The uncertainty surrounding the Green Gas Support Scheme spend is more complex, especially in the early years of the scheme. Deployment levels, as determined by scheme uptake, and deployment timings will have a measurable impact on early spending, as will variability in ramp-up speeds for individual plants. Evidence on the uptake of the scheme, and where it falls within projections, will be limited at the start of the scheme as it embeds.
118. Some degree of uncertainty around Green Gas Support Scheme spend would remain even after all plants supported under the scheme have deployed. This is because the rate of injection into the gas grid can change in accordance with the variable nature of biomethane production, as well as pauses due to planned and unplanned maintenance.
119. As the funding collected from the levy needs to cover any potential Green Gas Support Scheme spend, these costs will need to be in line with high deployment estimates. However, the low absolute cost of the levy in the early years results in small overall increases in levy costs to account for this.

120. This modelling will be updated as more data becomes available, such as commissioning dates provided with tariff guarantee applications, and more plants come online under the Green Gas Support Scheme, allowing for the projections to be refined and narrowed over time.

5.3 Maximum Levy Collection or Rate

121. In order to give gas suppliers foresight of the maximum costs that they can expect to pay under the per meter point levy design, two options are being considered. One approach would be to publish, in advance of the scheme launch, the maximum amount that the levy could collect in any one year. An alternative would be to publish a maximum possible levy rate. Further information regarding this will be published in the final Impact Assessment.