

Working paper #4: Treatment of environmental and social obligation costs under the default tariff cap

This is the fourth of our working papers relating to the default tariff cap. It discusses how costs associated with suppliers' environmental and social obligations might be treated under the cap.

Date 19 April 2018
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1. Executive summary

- 1.1. The Domestic Gas and Electricity (Tariff Cap) Bill proposes to create a new duty on Ofgem to design and implement a price cap for domestic customers on a Standard Variable Tariff or other default tariff (the 'default tariff cap'). This document is part of the series of working papers¹ that we are issuing to explain how our thinking on the design of the default tariff cap is evolving as we gather views and evidence. These papers will be followed in May by a formal policy consultation summarising our overall thinking.
- 1.2. In our first working paper² we discussed how we might assess suppliers' costs of environmental and social obligations were we to set the level of the cap using a bottom-up cost assessment.³ In working paper 5, published alongside this paper, we discuss how differences in environmental and social obligations costs could be a factor that we would look to control for, were we to use an updated 'reference price' approach to setting the cap.
- 1.3. In this paper we review suppliers' environmental and social obligations in more detail, and provide an update on our emerging thinking on a selection of issues relating to how these costs could be treated: both when setting the initial level of the default tariff cap, and when updating it over time. Note that we have not drawn any firm conclusions at this stage – and the views set out in this paper are all subject to change as our evidence gathering continues, and when we come to consider the overall design of the cap in the round.
- 1.4. Our current view is that for the majority of schemes, suppliers are unlikely to have material control over the cost of complying, and the per-MWh or per-customers charges will be the same (or very similar) for all obligated suppliers. Where this is the case, we would expect to set the level of the cap based on an estimate of the market-wide average cost of each scheme for an obligated supplier. We explore different sources of data we could use for these purposes in the paper.

¹ [Ofgem \(2018\), Update on our plans for retail energy price caps, p3.](#)

² [Ofgem \(2018\), Working paper #1: setting the default tariff cap, p7.](#)

³ We set out the four approaches we are considering for setting the initial level of the cap: option 1 - a basket of market tariffs approach, options 2 & 3 – reference price approaches and option 4 – a bottom-up cost assessment.

- 1.5. We think that suppliers may have some material control over the costs of complying with the Energy Company Obligation and – to a lesser extent – the Renewable Obligation scheme. We have requested information from suppliers in relation to the historic costs of these schemes, and will use this to continue to investigate the extent of variation between companies.
- 1.6. The costs of all of the schemes, except for the Warm Home Discount, vary in proportion to the amount of electricity (for the Energy Company Obligation, electricity or gas) a supplier's customers use. We would therefore expect to design the variable and fixed component of any allowance for environmental and social obligation costs within the cap to reflect this.
- 1.7. We have considered the forecast data available in relation to each scheme. The Office for Budget Responsibility data used to update the level of the existing safeguard tariffs has a number of advantages. It provides a single source of information on the expected future costs of the majority of the schemes affecting suppliers' costs. It is published on a predictable basis and in a pre-prescribed format, allowing the process for indexing this element of the cap to be specified in detail in the licence condition, and reducing uncertainty for companies. However, we are continuing to consider whether any changes should be made were we to use this data to update the level of the default tariff cap, and discuss three possible amendments at the end of the paper.
- 1.8. We invite comments on all issues raised in this paper. Please submit these no later than **3 May** to our mailbox: retailpriceregulation@ofgem.gov.uk.

2. Context

Scope of this paper

- 2.1. This document is the fourth in a series of working papers that we have issued to explain how our thinking on the design of the default tariff cap is evolving as we gather views and evidence.
- 2.2. The main purpose of the paper is to provide an update on our emerging thinking on a range of issues relating to the treatment of the costs of suppliers' environmental and social obligations. This will feed into our consideration of how the initial level of the cap might be set were we to use a competitive reference price or bottom up approach (options 2, 3 and 4 in our first working paper). It will also inform the approach we take to updating the level of the cap over time.
- 2.3. We have received a range of stakeholder comments in response to our previous consultations with respect to the treatment of these costs. These are summarised in Appendix 1, and have informed the discussions in this paper.
- 2.4. In this paper we largely focus on the expenditure suppliers incur in meeting their obligations under the different schemes, rather than the costs of administration (eg the IT costs associated with data matching customers for the purposes of paying WHD rebates). We do not discuss the smart meter rollout in this paper.

The existing safeguard tariffs

- 2.5. As described in our December consultation⁴ the level of the existing safeguard tariffs for prepayment customers and customers receiving warm home discount is set with reference to the CMA's competitive benchmark. This benchmark was based on the

⁴ [Ofgem \(2018\), Providing financial protection to more vulnerable consumers](#)

average direct debit price of two mid-tier suppliers in 2015, subject to a number of adjustments.

- 2.6. One of the adjustments made by the CMA was to control for the difference in the costs the benchmark suppliers incurred in relation to social and environmental programmes as a result of their smaller size. To achieve this, the environmental and social costs reported by the benchmark suppliers for financial year 2015 were compared to those reported by the six large suppliers (all fully obligated under the various schemes), and the benchmark was then adjusted to reflect the difference between the two.
- 2.7. The level of the existing safeguard tariffs is also updated to reflect trends in the costs of environmental and social obligations over time. Specifically, for electricity, the cap is updated using trends in Office of Budget Responsibility (OBR) forecasts of environmental levies for each financial year. For gas, the level of the policy costs component of the cap is indexed to the Consumer Price Index (CPI). Note that for both gas and electricity, the weight given to these costs when indexing the cap is based on their share of total costs, taken from the consolidated segmental statements of the six large suppliers in financial year 2015.

3. Domestic suppliers' environmental and social obligations

- 3.1. Energy suppliers are subject to a number of environmental and social obligations, designed to achieve a variety of different policy goals. In most cases, these obligations result in additional charges to suppliers, which are then passed on to gas and electricity customers via their energy bills.
- 3.2. The charges to suppliers associated with environmental and social obligations accounted for approximately 15% of an average domestic electricity bill in 2016, and 2% of an average gas bill – amounting to around £91 for a dual fuel customer.⁵
- 3.3. There are seven schemes which were in operation at 31 March 2018, and which directly result in additional expenditure by domestic suppliers. These include:
 - policies supporting low carbon and renewable energy, including the renewable obligation (RO), contracts for difference (CfD), and feed-in tariffs (FiT).
 - capacity market (CM) payments, designed to ensure security of supply.
 - delivering energy efficiency measures under the energy company obligation (ECO) scheme.
 - warm home discount (WHD) rebates paid to fuel poor customers.
 - assistance for areas with high electricity distribution costs (AAHEDC, previously known as the 'Hydro benefit scheme') which aims to reduce electricity prices in areas of high distribution costs (currently Northern Scotland).
- 3.4. Note that the capacity market scheme does not target environmental or social policy aims per se, and we have in the past treated this as part of a supplier's wholesale energy costs.⁶ Therefore, while we consider it alongside environmental and social

⁵ Estimates of the breakdown of bills (and details of the assumptions used to prepare these) are taken from our website [here](#). See Table 1 in our [first working paper](#) for estimate of cost per dual fuel customer in £. Note that in both cases, these estimates do not include the cost of schemes affecting electricity generators' costs (eg the carbon price floor), nor costs associated with the smart meter rollout. They also do not take into account other effects of the programmes (eg the effect of energy efficiency measures on reducing consumption, and so bills).

⁶ See for example our Supplier Cost Index

obligations for the purposes of this paper – and it is currently categorised as such in the large suppliers’ consolidated segmental statements – this does not necessarily reflect how this element of costs will be labelled when setting the default tariff cap.

- 3.5. As shown in Table 1 below, most of the schemes apply to electricity suppliers; and for two of them (WHD and ECO) energy suppliers incur costs relating to the scheme only when they reach a participation threshold.

TABLE 1: Threshold levels and obligated suppliers under existing social and environmental schemes as at 31 March 2018

Scheme name	Participation Threshold	Obligated suppliers
Renewable Obligation	None	All licensed electricity suppliers
Feed-in-Tariffs	250,000 or more domestic electricity customers to be a mandatory licensee. All electricity suppliers are required to make payments into the FITs levelisation fund ⁷	All licensed electricity suppliers
Contracts for difference	None	All licensed electricity suppliers
Capacity Market	None	All licensed electricity suppliers
Warm Home Discount	250,000 or more domestic gas and electricity customers ⁸	All electricity suppliers meeting the threshold criteria – although note that the obligation is based on the number of electricity <u>and gas</u> customers of those companies. Also includes some voluntary participants.
Energy Company Obligation	250,000 or more domestic gas and electricity customers and supply more than 400 gigawatt hours of electricity or more than 2,000 gigawatt hours of gas to deliver energy efficiency measures	All electricity and gas suppliers meeting the threshold criteria
Assistance for areas with high electricity distribution costs	None	All licensed electricity suppliers

- 3.6. We have reviewed the key features of each scheme, focusing in particular on:

- whether suppliers have influence over the costs of complying with the scheme;
- what information is available to understand the future costs of each scheme; and
- whether the cost of complying with the scheme for each supplier varies with the volume of energy supplied, or number of customers.

- 3.7. Details of our review are set out in Appendix 2. We also provide a summary of our findings in Table 2.

- 3.8. The review in this paper has focused on forecast data from ‘official’ sources – ie estimates published by public bodies – although we note that third party forecasts of scheme costs also exist. We have requested from suppliers details of how they forecast the costs of these schemes. This evidence has not informed this working paper, but we will draw on it as we continue to develop our views in this area.

⁷ Suppliers with fewer than 250K customers can opt to be a ‘voluntary licensee’. A ‘voluntary licensee’ is subject to the same obligations as a mandatory licensee.

⁸ Note that in assessing whether a supplier is obligated under WHD and ECO, dual fuel customers are counted twice.

TABLE 2: **Summary of costs to suppliers under each scheme**

	<i>Are the costs within suppliers' control?</i>	<i>What data is available on future costs?</i>	<i>Do costs vary with volume?</i>
<p>Renewable obligation Under the RO, suppliers have an obligation to source an increasing amount of electricity from renewable sources. Suppliers can meet their obligation by presenting certificates bought from generators or making payments into a buy-out fund.</p>	<p>The main drivers of the cost of the scheme – the level of the obligation and the buy-out price – are both outside of supplier's control. However, suppliers have some flexibility over how they meet their obligation.</p>	<ul style="list-style-type: none"> • Obligation level and buy-out price known in advance • OBR forecasts of total scheme costs 	<p>Yes – a supplier's obligation is based on its share of total eligible electricity supplied in a given obligation period.</p>
<p>Feed-in-tariffs Under the FiT scheme, owners of small-scale low- carbon generation receive payments for electricity they export to the grid. To fund the scheme all electricity suppliers are required to make payments into a levelisation fund.</p>	<p>The main driver of the costs of the scheme to suppliers will be the level of the tariffs, which are set by BEIS, and so outside of suppliers' control. The levelisation fund is designed to ensure that all suppliers pay the same in £/MWh.</p>	<ul style="list-style-type: none"> • OBR forecasts of total scheme costs • Government impact assessments 	<p>Yes – a supplier's obligation is based on its share of total eligible electricity supplied in a given obligation period.</p>
<p>Contracts for difference CfDs are designed to give greater certainty and stability of revenues to low-carbon electricity generators. The payments to generators are funded via a compulsory levy on all electricity suppliers</p>	<p>Charges set by Low Carbon Contracts Company (LCCC) and BEIS - suppliers have no control over the costs of complying with the scheme.</p>	<ul style="list-style-type: none"> • LCCC forecasts of quarterly charges • OBR forecasts of total scheme costs 	<p>Yes – suppliers charged on a £/MWh basis.</p>
<p>Capacity Market The CM is intended to ensure that there is sufficient electricity capacity to meet demand. The scheme is funded via charges to suppliers.</p>	<p>Charges set by LCCC and BEIS - suppliers have no control over the costs of complying with the scheme</p>	<ul style="list-style-type: none"> • Total value of capacity payments known following T-1 and T-4 auctions • OBR forecasts of total scheme costs 	<p>Yes – suppliers charged on a £/MWh basis.</p>
<p>Energy Company Obligation Under ECO, suppliers have an obligation to meet targets for installing energy efficiency measures to eligible domestic consumers.</p>	<p>Suppliers cannot influence the carbon reductions or bill savings they are required to deliver. However, they do have material control over how (and when) they meet their obligation.</p>	<ul style="list-style-type: none"> • BEIS impact assessments 	<p>Yes - a supplier's obligation is based on its share of gas and electricity supply by obligated companies in the period.</p>
<p>Warm Home Discount Under WHD, suppliers provide support to customers at risk of fuel poverty through a rebate of £140 to eligible customers.</p>	<p>Total target spending as set in the legislation will determine the number of rebates to be paid. Suppliers will not be able to influence these costs.</p>	<ul style="list-style-type: none"> • Total target expenditure known in advance • OBR forecasts of total scheme costs 	<p>No – obligation based on a supplier's share of domestic customer accounts.</p>
<p>AAHEDC The scheme reduces prices for domestic consumers in areas with high electricity distribution network costs.</p>	<p>Charges set by National Grid – suppliers have no control over the costs of complying with the scheme.</p>	<ul style="list-style-type: none"> • National Grid data 	<p>Yes – suppliers charged on a £/MWh basis.</p>

4. Our current view

- 4.1. In this section we set out our current view on a selection of issues relating to how we would expect to treat the costs associated with these schemes under the default tariff cap. Note that we have not drawn any firm conclusions at this stage – and the views set out in this paper are all subject to change as our evidence gathering continues, and when we come to consider the overall design of the cap in the round.

Use of benchmarking

- 4.2. Our current view is that suppliers are unlikely to have material control over the cost of complying with five of the schemes (see Figure 1). We do consider that suppliers may have some material control over the costs of complying with the ECO and – to a lesser extent – the RO scheme.

FIGURE 1: Summary of controllability of costs

<p>No material control over the cost of complying with scheme:</p> <ul style="list-style-type: none">• Feed-in-Tariffs• Contract for difference• Capacity Market• Warm Home Discount• Assistance for areas with high electricity distribution costs	<p>Some material control over the cost of complying with scheme:</p> <ul style="list-style-type: none">• Renewable Obligation• Energy Company Obligation
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- 4.3. For those schemes where suppliers do not have control over their costs, were we to calculate an allowance for these costs (either under a bottom-up approach, or for the purposes of adjusting a reference price) we would expect to do so based on an estimate of the market-wide average cost of each scheme for an obligated supplier. Because these costs will not vary materially between obligated companies (on a £/MWh or £/customer basis), this approach should allow obligated companies to fully recover the costs of these schemes.
- 4.4. We will continue to consider the extent of control that suppliers have over the costs they incur in relation to the RO and ECO schemes – and what this means for how these costs might be treated. In doing so, we will draw on the information we have requested from suppliers in relation to the costs of these schemes.

Setting the baseline level of the cap

- 4.5. One approach to setting the level of the default tariff could would be - like the existing safeguard tariffs – to set the initial level of cap for a historic baseline period, and then update it over time.
- 4.6. Based on our work to date, we consider there are three different sources of information that could be used to calculate the historic costs of the schemes for the purposes of setting an initial baseline if this were required within our chosen cap design. We summarise these options in Table 3.
- 4.7. In principle it would be possible to use different options for different schemes – ie to use a combination of supplier data, OBR estimates, and scheme administration data. The key consideration would be which options would lead to the most reliable estimate of costs for each of the schemes.

TABLE 3: Options for calculating the historic costs of each scheme for the purposes of setting the baseline

Option	Description	Advantages	Disadvantages
1. Supplier data	The costs of each scheme for a given financial year would be estimated using information collected from suppliers on the costs of the different programmes. This is the approach used by the CMA in setting the level of the existing safeguard tariffs (see paragraph 2.6).	<ul style="list-style-type: none"> Costs of all schemes will be for a consistent period (ie a supplier's financial year) Estimates would reflect all costs to suppliers (ie including suppliers' own administration costs) 	<ul style="list-style-type: none"> There may be differences in the accounting treatment of the costs between suppliers The costs of the schemes may not have been fully reconciled at the time accounts are prepared There may be differences in supplier financial years, reducing comparability
2. OBR data	The costs of each scheme for a given base period would be estimated using the OBR 'outturn' data.	<ul style="list-style-type: none"> All costs will cover the same period (running Apr – Mar) 	<ul style="list-style-type: none"> Significant lag (outturn data for 2017/18 not expected until November 2018) Doesn't include all relevant schemes (eg ECO, AAHEDC)
3. Scheme administration data	The costs of each scheme for a given base period would be estimated using administration data on either the total costs of each scheme (for FIT, WHD, ECO, CM), or the specific charges to suppliers (eg the buy-out price for RO, the ILR for CfD, the tariff rate for AAHEDC).	<ul style="list-style-type: none"> Provides greatest control over how the costs of each scheme are treated 	<ul style="list-style-type: none"> Data will be available for different periods for different schemes, depending on how the obligation is set May require use of forecasts where final scheme costs not known

How policy costs vary with consumption

- 4.8. We have considered the extent to which the costs of the different schemes vary with a customer's consumption. We have found that the costs of each of the schemes vary in proportion to the amount of electricity (for ECO, electricity or gas) a customer uses, with the exception of the WHD, where a supplier's obligation depends on the number of customer accounts.
- 4.9. Our current view is that if we were to use a bottom-up approach to estimating the cap, we would expect the allowance for environmental and social obligation costs to vary with consumption in a way that reflects how suppliers' obligations under the different schemes are calculated (see Table 4). This means that we would expect to set any allowance for environmental and social obligation costs at nil and typical consumption – and for single and multi-register electricity meters – in a way that reflected the different consumption of these groups.
- 4.10. Similarly, were we to use an indexing approach to update the level of the cap, we would intend to set any weights that were used to reflect how these costs vary with consumption. For example, our current view is that we would expect to give trends in policy costs a greater weight when updating the level of the cap for multi-register tariffs, and a smaller weight when updating the level of the cap for nil consumption.

TABLE 4: Basis for the calculation of allowances for social and environmental schemes

	Allowance calculated on a £/customer basis	Allowance calculated on a £/MWh basis
Electricity	WHD	FiT, RO, CM, CfD, ECO, AAHEDC
Gas	WHD	ECO

4.11. We note that for capacity market payments, a supplier’s costs will also depend on the profile of its customers’ demand (and in particular the proportion of this that takes place in peak winter periods). We will therefore consider whether different allowances should be set for single- and multi-register customers to reflect their different consumption profiles.

Obligation thresholds

4.12. Our current view is that we would expect to set the level of the cap in a way that reflects the policy costs that would be incurred by a fully-obligated supplier in steady state (ie where their obligation reflects their market share in the relevant period). This is consistent with the approach taken in the existing safeguard tariffs.

4.13. With respect to the concerns raised by a number of stakeholders in relation to the participation thresholds used for the ECO and WHD schemes, we note that consultations are currently open on the future of both schemes – including on the use of thresholds.

Updating the cap using cost forecasts

4.14. The costs of the schemes vary significantly over time, and much of this expenditure is outside of suppliers’ control. It is therefore likely that we will design the cap to reflect these trends.

4.15. In most cases, the full costs to suppliers will not be known in advance. We could therefore either use forecasts to update the level of the cap, or design the cap to pass-through costs after they’ve been incurred. As a general principle, we continue to take the view that where possible costs should be recovered in the period in which they are incurred.

4.16. We think that the OBR data used to update the level of the existing safeguard tariffs have a number of advantages over possible alternatives. It provides a single source of information on the expected future costs of the majority of the schemes affecting suppliers’ costs. Unlike – for example – cost estimates in impact assessments, it is published on a predictable basis and in a pre-prescribed format. This enables us to specify the process for indexing this element in detail in the licence condition, which reduces uncertainty for companies.

4.17. Suppliers have raised a number of concerns around the use of the OBR forecasts. We note that many of these points were considered by the CMA in reaching its final decision. For example, the CMA concluded that the exclusions of ECO and the EII from the methodology would act in opposite directions, and largely balance each other out.

4.18. We nevertheless will continue to consider whether any changes to the use of OBR forecasts might be justified. The three main adjustments that we are considering are:

- **Converting the OBR forecasts to £/MWh or £/customer estimates.** This would be achieved by taking the relevant forecast of total scheme cost, and dividing by an estimate of total eligible supply. Note that eligible supply will generally not be known in advance. The best source of information is likely to vary from scheme to scheme. In some cases, the best source might be eligible supply for previous scheme years.
- **Adding an explicit forecast for ECO.** This would be based on the recently published BEIS impact assessment (which includes estimates for the total costs of the scheme for future scheme years, as set out above) – or any successor document. Again, this could be converted to a £/MWh estimate using estimates of total eligible supply.
- **Adding an explicit allowance for AAHEDC.** This would be based on the draft or actual charge for the period in question as published by National Grid (where available), or historic trends (where the charge has not yet been published).

5. Next steps

- 5.1. We welcome feedback on this working paper by **3 May 2018**. Please e-mail any submissions to: retailpriceregulation@ofgem.gov.uk. We will consider any feedback and summarise this in our policy consultation.
- 5.2. The working papers published today are the last ones we intend to publish before the policy consultation in late May. That document will summarise (and provide stakeholders an opportunity to comment on) our current position on the overall approach to setting the cap - including areas which have not been the subject of a working paper. We are grateful to those who have taken the time to respond to our working papers to date.

APPENDIX 1: Summary of stakeholder views to date

General comments

- 6.1 One supplier said that it should be possible to estimate an allowance for environmental and social obligation costs based on historic data combined with forecast trends in these costs over time. It considered that the calculation will need to take account of the fact that obligation periods typically straddle companies' accounting years, and if companies front- or back-load their delivery of the obligations, costs may not be evenly distributed between years.
- 6.2 Another supplier said that it is important that the allowances assumed for these schemes exactly mirror the costs that suppliers incur for effectively administering these programmes and acting as a tax collecting authority. It considered that for the ECO and WHD schemes there is a risk that clarity over the cost of the schemes will not be available until after the cap level has been set.

Approach under the existing safeguard tariffs

- 6.3 One supplier warned against using the same methodology to calculate the allowance for environmental and social costs as was applied in the existing safeguard tariffs as it believed that the caps included insufficient allowance in the cost stack for policy costs, in particular the low carbon obligation schemes.
- 6.4 A number of suppliers flagged the impact on suppliers' costs of the falling base across which the costs of the different schemes were collected, and highlighted that this was not captured in the index used to update the existing safeguard tariffs. The examples highlighted were:
- The impact of the growing market share of small suppliers who are wholly or partially exempt from some obligations;
 - The impact of the exemption of Energy Intensive Industries (EII) from both the Renewables Obligation and Feed-In Tariffs schemes.
 - The impact of falling consumption.
- 6.5 To address this point, one respondent suggested Ofgem define a second index that relates to the size of the obligated customer base for ECO and WHD, and use this to proportionately increase the portion of the policy costs that corresponds to these schemes. Other stakeholders highlighted that Ofgem already collects data relating to policy costs on a per customer basis through the Supplier Cost Index.
- 6.6 One supplier recommended there be updates to the base period data used to update the level of the cap, to reflect revisions to the OBR estimates of outturn costs (e.g. FIT costs were reduced by the OBR for 2015-16).
- 6.7 Two suppliers considered that there is a flaw in the current methodology within the Economy 7 benchmark, as a result of the assumption that policy costs are the same for an Economy 7 customer and a standard electricity meter customer. It was noted that this assumption is not reflective, due to policy costs being largely variable based on consumption, and Economy 7 customers being high consumers.
- 6.8 One party argued that there were flaws in the CMA's calculations in relation to the split between fixed and variable costs for 'Policy' costs and 'Other' costs for

electricity, noting that as a result, the cap for low consuming customers will be up to £20 higher than it ought to be in 2018/19.

- 6.9 Some suppliers argued that the OBR forecasts used to update the existing safeguard tariffs do not include all of the policy costs which an efficient supplier faces and that over time there will be an unsustainable divergence between actual and forecast costs.

Participation thresholds

- 6.10 A number of suppliers commented on the participation thresholds for the WHD and ECO schemes, and their impact on the default tariff cap.⁹ Specifically:
- one supplier considered that there is distortion in the market as a result of small suppliers being exempt from ECO and WHD and considered it important that this distortion was corrected prior to setting any price cap;
 - another supplier considered that the introduction of the cap makes policy costs exemptions untenable;
 - a supplier and industry body considered that the cap should be applied to all suppliers fairly and that required an approach which recognised that fact that some suppliers are exempt from social and environmental obligations costs; and
 - another supplier considered that even if even if mid-tier suppliers were fully obligated, they may still incur a lower average cost per customer as a result of their growth rate and the significant lag between measurement of market share and delivery of obligations. Similarly, if large suppliers were losing market share, they will incur a higher cost per customer than a company with static market share.

Feed-in Tariffs

- 6.11 One party said that levelisation does not account for all of the costs in managing the FiT scheme, with insufficient allowance for administration costs. It also said that the actual rate (i.e. £/MWh) of FiT for a charging year is known six months after the delivery period following the annual levelisation process.
- 6.12 It considered that it is important to capture uncertainties within the FiT cost forecast used when setting the cap so that an accurate view of this charge is reflected within this process. It said that a recovery mechanism would further mitigate these risks.

Energy Company Obligation

- 6.13 One supplier told us that it agreed with our initial assessment (in working paper 1) that most environmental and social obligation costs are outside of suppliers' control, but that ECO may constitute an exception to this, as an area in which suppliers have some discretion around expenditure. However, it cautioned against any attempt to benchmark suppliers' costs for ECO as it considered that it would carry significant risks.
- 6.14 One supplier said that, in the case of the ECO scheme, historic information on average realised costs across the industry is not a reasonable approach to take to

⁹ As noted in para 4.13, BEIS is current consulting on threshold levels for both the ECO and WHD schemes.

setting the initial level of the benchmark. It added that the economics of ECO3 will be materially different to previous ECO schemes.

- 6.15 One supplier said that the cost allowance for ECO will need to reflect the anticipated potential change in the regulatory regime and that it has the potential to increase costs for energy suppliers materially as they seek to identify and engage specific groups of fuel poor consumers who would benefit from the ECO3 scheme.
- 6.16 Three suppliers considered that the cost allowance for ECO should be based on the BEIS Final Impact Assessment (IA). In their view, this would be to assume (as per BEIS's forthcoming impact assessment) that total scheme costs are £640m per annum up to 2022. This cost should then be used to derive a per customer ECO allowance assuming average levels of consumption.

Hydro benefit

- 6.17 One supplier said that a specific allowance should be set for the hydro benefit under the default tariff cap. It added that the exclusion of this scheme from the process used to index the existing caps may have been relatively immaterial for the prepayment safeguard tariff, but that would no longer hold for a wider SVT cap.

Capacity Markets

- 6.18 One supplier commented on the omission of the capacity market in the prepayment safeguard tariff calculation and considered that this will need to be addressed as part of the default tariff cap.

Error correction mechanism

- 6.19 One supplier commented on the use of a correction factor to adjust the level of the price cap to reflect divergences from actual costs incurred. It considered that any "reopeners" should be automated as far as possible and include:
- any material changes in the nature or cost of existing obligations (this should include changes in the cost per customer resulting from changes to share of scheme costs that must be recovered from price capped consumers); and
 - any new environmental or social obligations that are introduced in the future.
- 6.20 Two other suppliers also commented on the need for an error correction mechanism and considered it important to ensure that suppliers are not unfairly penalised from under-recovering these Government programmes. One supplier said that in the case of FIT, suppliers do not know their actual share of the scheme liability until up to 18 months after the event.

APPENDIX 2: Review of schemes

Renewable Obligation

- 7.1 The RO supports large-scale renewable electricity projects in the UK. It places an obligation on UK electricity suppliers to source an increasing proportion of the electricity they supply from renewable sources¹⁰. The RO scheme closed to all new generating capacity on 31 March 2017.
- 7.2 The obligation is set annually by the government, for the period from 1 April to 31 March. The obligation level is published at least six months prior, by 1 October of the previous year.
- 7.3 Renewable Obligation Certificates (ROCs) are issued to operators of accredited renewable generating stations for the eligible renewable electricity they generate. ROCs can be traded between parties.
- 7.4 Suppliers can meet their annual obligation by presenting ROCs, making a payment into a buy-out fund for each ROC that they do not present or a combination of the two.¹¹ The buy-out price-per-ROC is set annually by Ofgem. The administration cost of the scheme is recovered from the fund and the remainder is distributed back to suppliers in proportion to the number of ROCs they produced in respect of their individual obligation.
- 7.5 Table 2 shows the buy-out price for the RO scheme in each year since 2014/15, together with the level of the obligation set by BEIS. Combining these values shows the cost a supplier would have incurred, per MWh supplied, had it met its obligation exclusively by paying into the buy-out fund. The table shows that the costs of the scheme have been increasing over time.

TABLE 5: Renewable obligation buy-out price, obligation level, and indicative cost to supplier (£/MWh)

Obligation period	Buy-out price	Obligation (ROC/MWh)	Indicative cost to supplier, £/MWh
2014-15	£43.30	0.244	£10.57
2015-16	£44.33	0.290	£12.86
2016-17	£44.77	0.348	£15.58
2017-18	£45.58	0.409	£18.64
2018-19	£47.22	0.468	£22.10

Source: [Ofgem website](#)

Controllability

- 7.6 The main drivers of the cost of the scheme to a supplier – the level of the obligation and the buy-out price - are both outside of the supplier's control. The prices charged for certificates by renewable generators will be constrained to a significant degree by the buy-out price plus the expected recycle value.
- 7.7 As described above the rules of the scheme do allow suppliers some flexibility in terms of how they meet their obligation. As well as deciding how much to rely on the buy-out fund, suppliers also have the ability to carry over a given proportion of

¹⁰ See Ofgem, Renewable Obligation.

¹¹ There is also a provision for suppliers to make a late payment. The late payment cannot be met by ROCs and must be a monetary payment. This monetary payment is subject to interest at 5% above the Bank of England base rate.

certificates from one year to the next (although in practice it has been uncommon for suppliers to rely on 'banked' ROCs to a large degree).

- 7.8 Our current view is therefore that suppliers will have some influence over their costs of complying with the scheme, although the extent of this influence is likely to be limited.
- 7.9 We are considering whether the degree of control is sufficiently material that this should affect the approach we take to setting an allowance for RO costs within the default tariff cap. Data collected previously from the six large suppliers for 2016 suggests that there is some variation in the reported costs of the scheme. We are collecting information for the most recent financial year and for a wider group of companies, and will use this to further examine the extent of variation in costs.

Information on the costs of the scheme for future periods

- 7.10 As discussed above, the obligation level is published at least six months in advance of an obligation period, by 1 October of the previous year. The buy-out price is published in spring, when the average RPI percentage change during the previous calendar year is known (although can be estimated in advance, using inflation forecasts).
- 7.11 The true costs that suppliers will incur in meeting this obligation will not be known until several months after the obligation period has finished. Nevertheless, it is possible to estimate the costs that a supplier would incur were it to meet its obligation by paying into the buy-out fund, using information on the obligation and the expected buy-out price (as per Table 5, above). Given that suppliers have historically chosen to meet only a small part of their obligation by paying into the buy-out fund, we would expect this approach to overstate the true cost that suppliers' incur (by an amount similar to the recycle value).
- 7.12 Alternatively, the OBR publishes forecasts for the total cost of compliance with the RO scheme (in £m), as well as other environmental and social schemes, for a six year period, which it has typically updated twice a year in November and March¹². It is these forecasts which are used to update the existing safeguard tariffs.

Do costs vary with the volume supplied?

- 7.13 A supplier's obligation under the scheme is set in proportion to their share of total eligible electricity supplied in a given obligation period. Since the beginning of the current compliance year (ie from 1 April 2018) this has excluded up to 85% of the electricity supplied to energy intensive industrial customers.¹³
- 7.14 As such, the RO costs incurred in relation to a given domestic customer will be expected to vary linearly with the volume supplied to that customer.

Feed-in Tariffs

- 7.15 The FiT scheme encourages the uptake of small-scale, low carbon electricity generating technologies by household, communities and businesses. Under the FiT scheme, owners of small-scale renewable and low-carbon generation are eligible to

¹² See Economic and fiscal outlook – March 2018. [Supplementary fiscal tables: receipts and other. Table 2.7.](#)

¹³ Please see Ofgem, [Renewable Obligation, guidance for suppliers](#) for further details.

receive a tariff for all electricity generated and an additional tariff for electricity exported to the grid.¹⁴

- 7.16 Tariff rates are set by BEIS. The rates are adjusted annually in line with inflation/deflation, but are also subject to degression, based on deployment levels over fixed periods.¹⁵
- 7.17 To fund the scheme, all licensed electricity suppliers are required to make payments into the Ofgem FiT Levelisation Fund. Table 3 below shows the total cost of the scheme per year and the implied cost of per MWh for the last three years. As shown in the table the cost of the scheme has increased over time. FIT tariff rates have been set for each tariff period until March 2019.

TABLE 6: Feed-in-tariffs, cost of the scheme per year, total electricity supplied and implied cost (£/MWh)

Obligation period	Total costs of the scheme (levelisation fund)	Total relevant electricity supplied- MWh	Implied cost (£/MWh)
2014-15	£865,553,975	290,044,000	£2.98
2015-16	£1,110,044,917	257,509,104	£4.31
2016-17	£1,283,516,404	277,743,406	£4.62

Source: Ofgem Feed-in Tariff Annual Reports, 2015-2017

Controllability

- 7.18 The main driver of the costs of the scheme to suppliers will be the level of the tariffs, which (as discussed above) are set by BEIS, and so outside of suppliers' control.
- 7.19 Suppliers may have some influence over their obligation to the extent that they source electricity from renewable sources outside of the UK (which is exempt for the purposes of levelisation). However, the overall amount of supply that can be exempt in this way is capped (in 2016/17 the cap was set below 3% of total supply), and given this we expect the extent of influence that suppliers have over their costs to be small¹⁶.

Information on the costs of the scheme for future periods

- 7.20 The ultimate cost of the FiT scheme to suppliers in a given year will depend on the scale of payments made to FiT generators, and will not be known until after the end of an obligation period.
- 7.21 Forecasts of the total costs of the scheme for future periods have been published by BEIS in its previous impact assessments.¹⁷ The OBR also publishes forecasts of the total costs of the scheme, and it is these which are used to update the level of the existing safeguard tariffs.

¹⁴ Installations using solar photovoltaic (PV), wind, hydro and anaerobic digestion (AD) technologies up to 5 MW and fossil fuel-derived combined heat and power (CHP) up to 2 kW are eligible for FIT payments, see Ofgem [Feed-in-Tariffs scheme](#).

¹⁵ Deployment is also capped (since 2016) on a capacity basis ie only a certain total capacity of a certain technology can be deployed each quarter.

¹⁶ Smaller suppliers can opt into the scheme or choose not to. Those that choose to are awarded 'qualifying FIT costs' for each installation on their books.

¹⁷ See for example [Periodic Review of FITs 2015 Impact Assessment](#).

Do the costs vary with the volume supplied?

7.22 The obligation of each supplier under the scheme is determined by calculating the amount of electricity supplied to customers in Great Britain by the electricity supplier in the given scheme year, less the amount of electricity it sourced from renewable sources generated outside of the UK and supplied to customers in Great Britain¹⁸ and the amount of FIT generation payments made in the same scheme year.¹⁹ As such, we expect the costs incurred in relation to a given domestic customer to vary linearly with the volume supplied to that customer.

Contracts for Difference

7.23 A CfD is a long-term contract between a low carbon electricity generator and the Low Carbon Contracts Company (LCCC). A generator party to a CfD is paid the difference between the 'strike price' – a price for electricity reflecting the cost of investing in a particular low carbon technology – and the 'reference price' – a measure of the average market price for electricity in the GB market.²⁰

7.24 CfDs are designed to give greater certainty and stability of revenues to low carbon electricity generators by reducing their exposure to volatile wholesale prices, while protecting consumers from paying for higher support costs when electricity prices are high. The CfD scheme became fully operational in 2016/17.

7.25 LCCC obtains the monies to make the required payments to CfD generators via a compulsory levy on all UK-based licensed electricity suppliers (the 'Supplier Obligation'). In addition, the operational costs of LCCC is funded by a statutory levy on all UK-based licensed electricity suppliers (the 'Operational Costs Levy').

7.26 Suppliers are required to pay both a daily applicable Interim Levy Rate (ILR) per MWh, as well as quarterly reserve payments to make up the Total Reserve Amount (TRA). The ILR is determined by LCCC by dividing the total expected net payments to generators in a given quarter by the total expected eligible supply in that quarter. As the realised value of the payments to generators and eligible supply may differ to the expected values, suppliers may make under- or over-payments, which are then reconciled via a quarterly process. As supplier payments can be subject to this uncertainty, the TRA is set and used to ensure that 19 times out of 20, LCCC has sufficient resources to make payments to generators. Table 7 sets out the interim levy rates and operational costs levy since 2016.

TABLE 7: Interim Levy Rates and Operational Costs Levy, 2016/17 and 2017/18

	2016/2017				2017/2018			
	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar
Interim levy rate (£/MWh)	0	0.005	1.016	0.956	1.513	1.553	2.517	3.149
Interim levy rate, in-period adjustments (£/MWh)	n/a	n/a	0.594 (10 Oct) 0.000 (14 Nov)	n/a	n/a	n/a	1.567 (15 Nov)	2.856 (1 Jan)
Operational Costs Levy rate (£/MWh)	0.0509				0.0524			

Source: [EMR Settlement Key Payment Figures](#) for 2016/17 and 2017/18

¹⁸ See Ofgem [Feed-in Tariffs: Guidance for Licensed Electricity Suppliers \(Version 9\)](#), paragraph 9.6.

¹⁹ We note that FIT export payments are not considered although deemed export payments are.

²⁰ See BEIS [Electricity Market Reform: Contracts for Difference](#).

Controllability

- 7.27 The Supplier Obligation is determined by the LCCC according to the methodology set out in the legislation, and suppliers have no control over the scale of these costs. Similarly, the Operational Costs Levy is determined by the legislation, and cannot be influenced by the suppliers.

Information on the costs of the scheme for future periods

- 7.28 Each quarter, the LCCC publishes forecasts of the ILR covering the coming 15 months. These forecasts are based on assumptions about generation start dates and future market prices. It is these forecasts which are used to update the Supplier Cost Index.²¹
- 7.29 The OBR also publishes forecasts for the total cost of the scheme, over a six year period.²² These forecasts are used to index the level of the existing safeguard tariffs.

Do the costs vary with the volume supplied?

- 7.30 The Supplier Obligation and Operational Costs levy are charged on a £/MWh basis, applied to eligible demand in a given period.²³ As such, the costs of the scheme will vary with the volume of electricity supplied to a customer.

Capacity Market

- 7.31 The CM was introduced as part of the government's Electricity Market Reform policy, and is intended to ensure that there is sufficient capacity to meet the government's reliability standard, by incentivising investment in generation or demand-side response.²⁴ The scheme has become fully operational from October 2017.
- 7.32 Under the CM, the capacity needed in a given delivery year (running from 1 October – 30th September) is secured through an auction four years ahead (T-4) and another auction one year ahead (T-1) of the delivery year. In the auctions, parties bid the price for which they would be willing to guarantee a given amount of capacity in the event that the system is tight. The first T-4 CM auction was held in December 2014, for delivery in 2018/19. An auction for securing the entire capacity for delivery in 2017/18 – the first year – was held in January 2017. The aggregate payments for each delivery year are determined by the clearing price of the auction multiplied by the agreed capacity. Electricity Settlements Company (ESC) administers the Capacity market arrangements.
- 7.33 All electricity suppliers are required to fund the Capacity Market (CM) through a combination of:²⁵
- Settlement Costs Levy: monthly payments which cover operational costs incurred by the ESC.
 - Capacity Market Supplier Charge: monthly payments which cover the payments to capacity providers during a delivery year.

²¹ See Ofgem [Supplier Cost Index](#), paragraph 2.41.

This is then totalled for the following 12 months to derive the total per-customer charge.

²² See Economic and fiscal outlook – March 2018. [Supplementary fiscal tables: receipts and other. Table 2.7.](#)

²³ Eligible supply excludes up to 85% of the electricity supplied to energy intensive industrial customers. See [here](#).

²⁴ See BEISS, [Capacity Market](#).

²⁵ See [See G15 – Capacity Market Supplier Payments EMRS Guidance](#).

Controllability

- 7.34 Electricity suppliers have no influence over the monthly charges that they are required to pay as part of the scheme. As described above, payments are largely determined by the clearing price of the auctions and the operational costs incurred by the Electricity Settlements Company.

Information on the costs of the scheme for future periods

- 7.35 The Settlement Costs Levy is updated annually via amendments to the regulations. BEIS recently confirmed the value of these levies for 2018/19, 2019/20 and 2020/21.²⁶
- 7.36 Information on the total payment amount for a given delivery year is published by National Grid following each auction, in the February prior to the delivery period (for the T-1 auction), and in the February four years prior (for the T-4 auction). For the purposes of the Supplier Cost Index, this is combined with estimates of the domestic share of peak demand from National Grid, and historic consumption information to arrive at a monthly £ per customer estimate of the expected cost of the Supplier Charge.²⁷
- 7.37 The OBR also publishes forecasts for the total cost of the Capacity Market scheme over a six year period, which are used to update the existing safeguard tariffs.²⁸

Do the costs vary with the volume supplied?

- 7.38 Under the CM scheme, both the Settlement Cost Levy and the Supplier Charge are based on supply volumes in peak periods (defined as 4pm-7pm on working days between November and February inclusive).
- 7.39 This means that like most of the other schemes discussed in this paper, a supplier's obligation will vary depending on how much electricity a customer uses. Unlike the other schemes, the charges to a supplier will also depend on the profile of their customers' demand.

Energy Company Obligation

- 7.40 ECO is a government scheme that requires suppliers above a given size^{29;30} to deliver energy efficiency measures.³¹ The scheme was launched in January 2013, with the first obligation period running from January 2013 to March 2015. The second period (ECO2) ran from April 2015 to March 2017. The most recent scheme period (ECO2t) commenced on 1 April 2017 and covers an eighteen-month period until 30 September 2018.
- 7.41 Under the ECO scheme, suppliers are given targets for delivering energy efficiency measures to the premises of eligible domestic customers. These measures include

²⁶ [Low Carbon Contracts Company's and Electricity Settlement Company's operational costs 2018/19 – 2020/21](#)

²⁷ See Ofgem, [Supplier cost Index](#), paragraphs 2.11-2.12.

²⁸ See Economic and fiscal outlook – March 2018. [Supplementary fiscal tables: receipts and other. Table 2.7.](#)

²⁹ Companies are obligated if these two thresholds are met:

a. the number of domestic customers is greater than 250,000 at the end of 31 December of the relevant year; and
b. the amount of supply to domestic customers in that relevant year is greater than 2,000GWh of gas or 400GWh of electricity.

³⁰ A taper mechanism is also currently in place for smaller suppliers. The taper is designed to avoid a cliff edge for newly obligated suppliers, as their obligation is calculated only on their supply volume above the threshold. Smaller suppliers currently benefit from this taper mechanism, which gradually increases their share of the obligation as their supply volumes increase from the equivalent of 250,000 to 500,000 customer accounts.

³¹ See [Energy Company Obligation \(ECO2t\) Guidance: Administration](#) for further details.

the installation of insulation and heating measures, a proportion of which must be delivered in rural areas or to low income and vulnerable households.

- 7.42 As suppliers bear the costs of complying with the scheme, which then they pass through to customer via their tariffs, they should have an incentive to minimise these costs and therefore minimize the cost of the ECO scheme.
- 7.43 We note that the government has recently launched a consultation on the future of the scheme for the period from October 2018 until March 2022.³² Among other changes to the scheme, this consultation proposes that the new ECO scheme will have four phases; a first phase of up to six months and three subsequent annual phases (see Table 8 below). The consultation also sets out BEIS' intention to focus the scheme on "Affordable Warmth", such that low income and vulnerable households are the beneficiaries of measures installed under the scheme.

TABLE 8: Obligation Phases for new ECO scheme

Phase Number	Dates	Length
1	From the start of ECO 3 – 31 st March 2019	Up to 6 months
2	1 st April 2019 – 31 st March 2020	12 months
3	1 st April 2020 – 31 st March 2021	12 months
4	1 st April 2021 – 31 st March 2022	12 months

Source: BEIS Energy Company Obligation ECO3: 2018 – 2022

Controllability

- 7.44 Under the existing scheme suppliers cannot influence the carbon reductions or bill savings they are required to deliver for a given MWh supplied to a domestic customer. There are also various regulations setting out the criteria that an installation must meet in order to count towards a supplier's obligation (including certain minima that must be delivered).
- 7.45 Nevertheless, within the ECO framework, suppliers will retain a significant degree of control over how they meet their obligation. For example, suppliers are able to trade all or part of their obligations between one another^{33;34} Suppliers may also choose to prioritise different types of energy efficiency measures within the constraints of the regulations. Installations could be solely funded by a supplier, or jointly funded with a third party (for instance, local government). Larger suppliers may enjoy greater negotiating power, thus enabling them to reduce their costs. A significant part of the costs of the scheme are likely to be related to the costs of identifying the households to receive the measures – and different suppliers are likely to take different approaches to this exercise.
- 7.46 Suppliers also have discretion over the timing of when they meet their obligations during the period. Figure 2 below shows that total expenditure on ECO measures across all suppliers has varied significant from quarter to quarter across each of the delivery periods (note that the spike in costs in Q4 2013 and Q1 2014 reflect changes to scheme which came into effect on 1 April 2014). There are also likely to

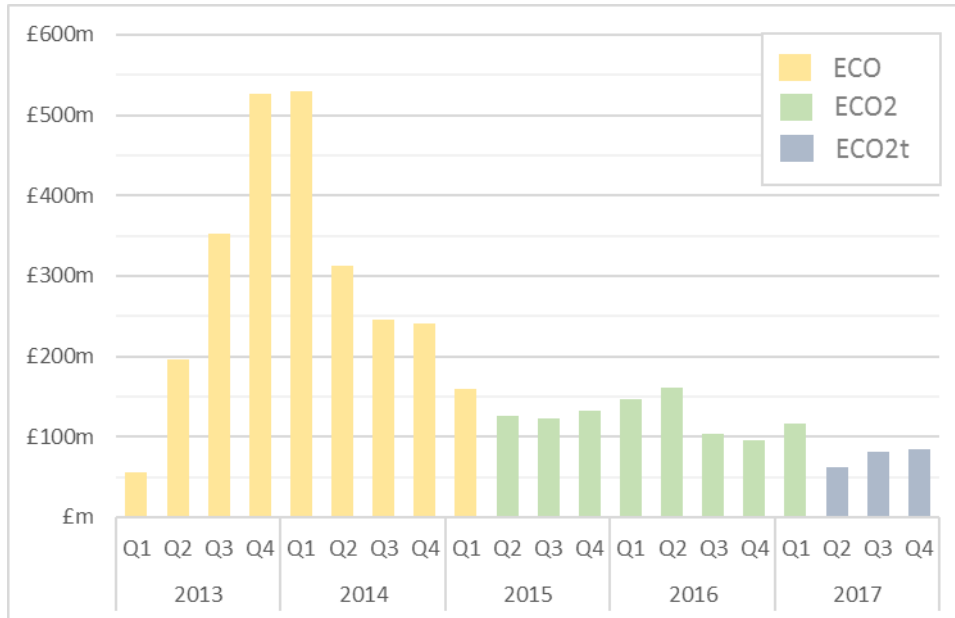
³² BEIS, [Energy Company Obligation ECO3: 2018 – 2022](#).

³³ [See Energy Company Obligation \(ECO2t\) Guidance: Administration](#), Section 7.

³⁴ Similarly, suppliers can buy measures from one another through transfers.

be significant differences between individual suppliers in how they choose to profile their expenditure over the obligation period.

FIGURE 2: Total ECO delivery and administration costs as reported by suppliers, by quarter



Source: [BEIS Household Energy Efficiency national statistics, March 2018, Table 2.8](#)

7.47 Data collected previously from the six large suppliers for 2015 and 2016 suggests that historically there has been material variation between companies in the reported costs of the scheme (in £/MWh). This is supported by data published by BEIS, which shows that – looking across ECO and ECO2 - there is a substantial difference between the average cost of the highest and lowest supplier, particularly for the Carbon Saving Communities and the Carbon Saving Obligation (see Table 9).

TABLE 9: Estimated average ECO delivery costs as reported by energy suppliers, up to end March 2017¹

Obligation	Average cost (all suppliers) ²	Highest average cost (individual supplier) ³	Lowest average cost (individual supplier) ³	Average cost (all suppliers) ⁴	Highest average cost (individual supplier) ³	Lowest average cost (individual supplier) ³
Affordable Warmth	£0.14	£0.16	£0.13	N/A	N/A	N/A
Carbon Saving Communities ⁵	N/A	N/A	N/A	£50.56	£62.59	£36.72
CSCO Rural sub-obligation	N/A	N/A	N/A	£37.30	£62.10	£32.87
Carbon Saving Obligation	N/A	N/A	N/A	£60.47	£66.72	£47.92

Source: [BEIS Household Energy Efficiency National Statistics, March 2018, Table 2.8.1](#)

Notes (taken directly from BEIS publication):

1. Any ECO2 costs reported in months after March 2017 have been included in the figures up to end March 2017.
2. Average cost per £ saved on energy bills for Affordable Warmth ECO measures.
3. Suppliers have delivered different amounts against each obligation. 'Highest' and 'lowest' average costs for individual suppliers should therefore be treated with caution as they may relate to different levels of delivery, different measures installed and different routes of meeting the obligation.
4. Average cost per lifetime tonne of CO2 saved for Carbon Saving Communities and Carbon Saving Obligation. CO2 savings are not adjusted by 15% comfort taking factor.
5. Carbon Saving Communities includes delivery costs incurred through the CSCO rural sub-obligation.

7.48 We are collecting additional information on ECO costs from a wide group of suppliers and covering the most recent financial year. We will draw on this, together with the evidence cited above, to form our view on the extent to which these costs should be considered to be within the companies' control.

Information on the costs of the scheme for future periods

7.49 Forecasts of the costs of the scheme in future obligation period have typically been published by BEIS in its impact assessments.³⁵ It is these forecasts which are used to estimate the costs of the scheme for the purposes of updating the Supplier Cost Index.

7.50 As we noted above, a consultation and draft impact assessment has recently been published for the ECO3 obligation period. According to Government's estimates the new scheme will cost an average of £640m per year in 2017 prices for the period 2018-2022 (average total cost of £2.24 billion over the entire period). This is lower than the annual cost of the current obligation period.³⁶ However, a final impact assessment is not expected until that consultation has closed, and a final decision on the future of the scheme has been made.³⁷

7.51 Note that the costs of the ECO scheme are not included in the OBR forecasts used to update the level of the existing safeguard tariffs.

³⁵ For example, [this](#) document for ECO2t

³⁶ See [BEIS Household Energy Efficiency national statistics, March 2018, Table 2.8](#)

³⁷ [ECO3 2018-2022, Consultation stage impact assessment](#)

Do the costs vary with the volume supplied?

- 7.52 An obligated supplier's obligations under the ECO scheme are calculated based on the amount of gas and electricity supplied by that company to domestic customers in a given delivery period. As such, we expect the costs incurred in relation to a given domestic customer to vary linearly with the volume of gas or electricity supplied to that customer (with the exception of set up costs required to start delivering against ECO).
- 7.53 We note that as part of its consultation on ECO3, BEIS is proposing changes to the taper mechanism. This would lead to some redistribution of the obligations of the scheme between suppliers; however, the scale of a company's obligation would continue to vary in proportion to the amount of electricity and gas supplied by a company, rather than its number of customers.

Warm Home Discount

- 7.54 The Warm Home Discount scheme came into effect on 1 April 2011. It requires energy suppliers with over 250,000 customers to provide direct and indirect support to fuel poor customers or customers at risk of fuel poverty. Some smaller suppliers also voluntarily participate in part of the scheme.
- 7.55 The WHD scheme provides direct support via a fixed rebate of £140 per year to two groups:
- **Core Group**, consisting of those receiving the Guarantee Credit element of Pension Credit. The Department for Work and Pensions works with participating suppliers to identify those who are eligible among their customers. Most Core Group customers are identified in this way, receiving their rebate automatically.
 - **Broader Group**, comprising people who receive certain other working-age benefit payments (or who meet additional supplier-specific eligibility criteria), and who apply for WHD.
- 7.56 The scheme also contains a further component – the 'Industry Initiative' - which allows suppliers to help fuel-poor customers through supplier delivered programmes and/or via third parties. Depending on the obligated supplier's programme and third party provider, it can include providing advice on energy saving, and help with reducing energy debts.
- 7.57 A reconciliation process is used to ensure that scheme costs are shared equitably between those participating in the Core Group element of the scheme, such that no supplier is disadvantaged as a result of having a higher numbers of consumers eligible for the rebate.³⁸ Scheme costs for the Broader Group and Industry Initiative elements of the scheme are set in proportion to each supplier's share of the domestic market.³⁹

Controllability

- 7.58 The total target level of support was set in the original WHD Regulations in 2011, and rises with inflation each year. Table 10 sets out the total expenditure in each year since 2014.

³⁸ Nb administration costs incurred by suppliers for the Core Group element of the scheme are not reconciled

³⁹ At the start of each scheme year, Ofgem notifies suppliers of the minimum amount of spending a supplier must make under the Broader Group and the cap on spending that a supplier can count towards its non-core obligation through Industry Initiatives.

TABLE 10: Target spending for Warm Home Discount for years 2014-15 to 2019-20

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Overall spending target	£310m	£320m	£323m	£329m	£340m	£347m

Source: [Ofgem WHD Annual report – 2016-17 and BEIS, Warm Home Discount Consultation 2018/2019.](#)

7.59 It is this total target spending, together with a supplier’s share of total eligible demand, that will determine the costs incurred by a supplier in meeting its obligation under the scheme. Suppliers will therefore not be able to influence these costs.

7.60 Suppliers are, however, able to provide voluntary support beyond their obligations under the scheme. Any such expenditure would be within their control.

7.61 We note that the government is currently consulting on changes to the Warm Home Discount scheme for 2018-2019.⁴⁰ We do not expect these changes to affect the amount of control that suppliers have over costs associated with the scheme.

Information on the costs of the scheme for future periods

7.62 As set out above, total target expenditure under the WHD is set in advance and rises with inflation. For the purposes of forecasting these costs for the Supplier Cost Index, this is combined with information on the number of domestic customers supplied by obligated suppliers for the most recent period available. Estimates of the future costs of the scheme are also published by the OBR in its forecasts.

7.63 As noted above, the Government is currently consulting on the future of scheme and will consider to what extent the changes proposed to the Industry Initiatives would affect future costs of the scheme and the extent to which suppliers have control over this expenditure.

Do the costs vary with the volume supplied?

7.64 A supplier’s obligation under the scheme is based on its number of domestic customer accounts (with dual fuel counted as two separate accounts) it served at the end of December prior the beginning of the scheme year. As such, the cost a supplier incurs under the scheme will not depend on how much energy a given customer uses.

Assistance for Areas with High Electricity Distribution Costs

7.65 The Assistance for Areas with High Electricity Distribution Costs (AAHEDC) scheme was introduced in the Energy Act 2004. The scheme, previously known as the ‘Hydro Benefit Scheme’, aims to reduce electricity prices for consumers in areas with high electricity distribution network costs (currently limited to the Northern Scotland electricity distribution area).

7.66 All licensed suppliers are obliged to pay to National Grid the tariff set out in their annual Charging Statement. The amount collected is then passed to the relevant distribution network operator.

7.67 Table 11 sets out the level of the charges since 2014. It shows that the value of the charges are small compared to the other costs considered in this working paper.

⁴⁰ [See BEIS Warm Home Discount consultation 2018/19.](#)

TABLE 11: **Draft and Final AAHEDC charges since 2014**

	Year beginning				
	01/07/2014	01/07/2015	01/07/2016	01/07/2017	01/07/2018
Draft charge, p/kWh	0.020213	0.022277	0.023524	0.022214	0.024892
Final charge, p/kWh	0.021361	0.021649	0.023129	0.023116	N/A

Source: [National Grid](#)

Controllability

7.68 The level of the tariff is calculated by National Grid depending on expected demand, its own administration costs (which are indexed to inflation) and any over- or under-recovery from the previous year. Suppliers are not able to influence the level of the charge.

Information on the costs of the scheme for future periods

7.69 National Grid provides a forecast of the energy consumption tariff in March of each year. The final tariff is then published in July and but it is effective from the previous April.⁴¹ It is these forecasts which are used for the purposes of calculating the Supplier Cost Index.

7.70 The OBR does not include estimates of the costs of this scheme within its forecasts.

Do the costs vary with the volume supplied?

7.71 The tariff is set by National Grid on a flat pence per kWh basis. The scale of the cost a supplier incurs will therefore vary depending on how much electricity a customer uses.

⁴¹ See National Grid, 2018, [Assistance for Areas with High Electricity Distribution Costs forecast tariff 2018/19](#).