Title: ECO 3: Improving consumer protection

consultation IA

IA No: BEIS006(C)-19-EEL

**RPC Reference No:** 

Lead department or agency:

Department for Business, Energy and Industrial Strategy

Other departments or agencies:

Impact Assessment (IA)

Date: 17/07/2019

Stage: Consultation

Source of intervention: Domestic

Type of measure: Secondary

Legislation

**Contact for enquiries:** 

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Summary: Intervention and Options

RPC Opinion: RPC Opinion Status

Cost of Preferred (or more likely) Option (in 2016 prices)

Total Net Present Social	Business Net Present Value	Net cost to business per year	Business Impact Target Status
-£163m	-£163m	£56m	£196m

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

The Each Home Counts review was launched in 2015 to consider issues relating to consumer advice, protection, standards and enforcement in relation to home energy efficiency and renewable energy measures in the UK. The review was in response to too many instances of poor-quality installations that can create problems with the integrity of buildings; exacerbate issues such as damp and mould leading to health problems, which in turn lead to the need for expensive remedial work. Systemic failures across the market, including gaps in standards and skills, risk destroying consumer and investor confidence in energy efficiency retrofit.

An independent review 'Each home counts' has made recommendations concerning consumer protection and building standards in relation to energy efficiency measures installed to domestic properties in Great Britain. The review has a total of 27 recommendations and sets out a new quality and standards framework for all those operating in the sector. The government is taking forward these recommendations by proposing a new delivery framework to protect consumers and improve the quality of retrofit installations. These proposals will impose a small additional upfront cost to business of £3.1m and additional delivery costs of £200m. The benefits (not quantified in this assessment) are expected help mitigate these costs to some extent by improving consumer protection, reducing remedial work and achieving higher standards of design and performance of installation.

#### What are the policy objectives and the intended effects?

A regulatory amendment is due to come into effect in October 2019 stipulating that the majority of measures delivered under the current Energy Company Obligation (ECO3) must be delivered by TrustMark registered businesses (exceptions are DHS and Demonstration Actions). Companies participating in delivery of ECO 3 subsidised measures will therefore need to sign up to a TrustMark Government Endorsed Quality scheme. TrustMark defines the framework and standards scheme providers and their registered businesses must meet. The framework covers consumer protection and a data warehouse to capture details of energy efficiency measures installed under ECO.

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

The EHC Review detailed findings and recommendations for action developed through engagement with several hundred stakeholders, including trade bodies, energy providers, manufacturers, installers, trainers, standards bodies and consumer groups. Following the Review, the government has worked closely with industry to turn the recommendations into tangible outputs aimed at driving up quality, consumer protections and skills. This was taken forward through the EHC Implementation Board who hamessed industry working groups to turn the recommendations into practical solutions. The industry led EHC Implementation Board, with the support of BEIS, established that TrustMark (2005) Ltd were best placed to take forward the development of this new quality mark framework under its Master Licence Agreement held by BEIS. In March 2018, the government consulted on including the quality mark in ECO3 as the method of demonstrating installer eligibility and as a keyway of improving the installation and consumer protection standards of ECO measures. The responses to the consultations howed overall support for the introduction of both a new EHC quality mark and new technical standards into ECO3 once finalised. The alternative being no regulation and continuing to accept poor quality installations in some cases.

The new TrustMark Government Endorsed Quality's cheme was launched by BEIS Minister Claire Perry during Green Great Britain week in October 2018. The new technical standards (PAS 2035) are due to be published in May 2019.

This consultation advocates a regulatory amendment to enable the incorporation of TrustMark Government Endorsed Quality scheme and PAS 2035 into the current energy company obligation. Alternative options haven't been developed at this stage because the preferred option is predicated on the independent review findings and prior consultation.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: July 2019

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

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		
SELECT SIGNATORY:	Date:	

-£163m

**Discount rate** 

Summary: Analysis & Evidence

**Description:** 

**Best Estimate** 

installers to have to be TrustMark registered businesses to deliver eligible ECO3 measures

#### **FULL ECONOMIC ASSESSMENT**

Price	PV Ba	ase	e Time <u>Net Benefit (Present Value (F</u>			esent Value (PV))	<u>))</u> (£m)	
Base Year	Year		Period	Low:	Optional	High: Optional	Best Estimate:	
` '			al Transition				Total Cost (Present Value)	
Low		Opt	ional		Optional		Optional	
High		Opt	ional		Optional		Optional	

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

Businesses engaged in delivering energy efficiency measures and claiming subsidy from the energy company obligation are the main affected group. Businesses will pay an annual subscription charge of £40 plus any additional administrative costs imposed by their scheme provider. Scheme providers will pay a one off £2,000 lodgement fee to TrustMark when they first join. Businesses will need to upskill retrofit coordinators and deliver retrofit measures inline with the TrustMark framework.

Delivery costs are expected to increase by an average of £350 per measure reflecting additional assessment, design and evaluation requirements.

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

Time it takes business to become familiarised with new TrustMark framework.

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

Description and scale of key monetised benefits by 'main affected groups' None.

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

The TrustMark framework is designed to protect not just consumers but also help businesses ensure they're aware of the wider risks around retrofitting a domestic building. The framework will help to ensure installers implement an appropriate design specification and complete post installation checks. This should lead to less remedial work which will save business money.

#### Key assumptions/sensitivities/risks

The additional costs imposed by PAS 2035 affecting the cost of upskilling, design evaluation and specification of the measure and associated works to be carried out. A further consideration is the extent to which the PAS 2035 standard is adopted amongst the supply chain and whether this could lead to fewer participants in the market.

## **BUSINESS ASSESSMENT (Option 1)**

Direct impact on business (Equivalent Annual)			Score for Business Impact Target
Costs:	Benefits: Net:£56m		(qualifying provisions only) £m:
			£196m

# Table of Contents

lm	pact Assessment (IA)	1
Su	ummary: Intervention and Options	1
RP	PC Opinion:	1
	ummary: Analysis & Evidence Policy Option 1	
1.	Problem under consideration and Rational for intervention	6
2.	Policy Objective	6
3.	Counterfactual	7
4.	Analytical Approach	7
5.	Assumptions	g
	5.1 Direct costs to business	9
	5.2 PAS 2035:2019 technical requirements	10
6.	Cost Impacts	13
7.		
8.	Risks	15
9.	Small and micro business impact	16

### 1. Problem under consideration and Rational for intervention

The UK is facing a significant but exciting infrastructure challenge: the retrofit of its housing stock to meet government ambitions for fuel poverty and carbon reduction and the desire for everyone to live in warm, comfortable and energy-efficient homes.

In July 2015, the Secretaries of State for the Department of Energy and Climate Change (DECC), now part of the Department for Business, Energy and Industrial Strategy (BEIS), and the Department for Communities and Local Government (DCLG) jointly commissioned an 'Independent Review of Consumer Advice, Protection, Standards and Enforcement' for home energy efficiency and renewable energy measures in the United Kingdom (the Review<sup>1</sup>).

In the past, energy efficiency interventions were not always well-targeted to suitable properties and, in a minority of cases, poor practice and sub-standard work was carried out. Ofgem's Technical monitoring Report showed that 6.9% of the almost 1.5 million measures installed during the first ECO period between January 2013 and March 2015 were inspected. Of these, 9.9% did not meet the necessary installation standards in the first instance and required additional work to be undertaken. The majority of these failures are not thought to be due to intentional poor performance, but the result of gaps in standards or training provided.

The review identified a set of recommendations designed to improve consumer protection, advice, quality and standards, skills and training, compliance and holistic consideration of the property. The review recommended a quality mark for the domestic retrofit sector is established to work in conjunction with other brands and indicate the holder is delivering to best practice standards in the sector. To obtain the quality mark, installers, designers and assessors will need to show they have been certified by an approved certification body and meet the requirements of three key elements of the quality mark: a Code of Conduct; defined Codes of Practice and standards; and a Consumer Charter.

In order to meet the review's recommendations, the government is consulting on changes to the Energy Company Obligation by making it mandatory for suppliers to register to the TrustMark Government Endorsed Quality scheme as a route for demonstrating compliance with technical standards and consumer advice and protection.

### 2. Policy Objective

A regulatory amendment is planned for October 2019 stipulating all measures delivered under the current Energy Company Obligation (ECO3) must be delivered by TrustMark registered businesses. Companies participating in delivery of ECO 3 subsidised measures will therefore need to sign up to a TrustMark Government Endorsed Quality scheme. TrustMark defines the framework and standards scheme providers must meet. The framework covers consumer protection and a data warehouse to capture details of energy efficiency measures installed under ECO. A key requirement on TrustMark registered businesses is that all energy efficiency measures must be installed to current applicable Publicly Accessible Standards (PAS). Measures installed under the existing ECO 3 scheme are already required to be installed to current PAS standards but this impact assessment considers the changes arising from the requirements of the new PAS standard covering project assessment, advice, design and post installation review.

<sup>1</sup> https://www.gov.uk/government/publications/each-home-counts-review-of-consumer-advice-protection-standards-and-enforcement-for-energy-efficiency-and-renewable-energy

- The current PAS 2030:2017 sets out how the installation of specific energy efficiency measures should be carried out in existing domestic buildings. This will be superseded by PAS 2030:2019 which will provide updated technical building specifications.
- A new PAS 2035:2019 standard will run alongside PAS 2030:2019 and cover the whole lifecycle of a retrofit project, from the initial engagement with a client, through assessment, design, install and evaluation stages that should be undertaken to ensure suitable energy efficiency measures are installed correctly to the right premises.

The TrustMark framework is designed to ensure companies are aware of their responsibilities to customers and the standards that energy efficiency measures must meet. A 19-month transitional period will run from the 31st May 2019 to 31st December 2020 to allow companies to begin adopting the new PAS 2035:2019 and PAS 2030:2019 standards. All measures delivered after 31st December 2020 must be compliant with PAS2035:2019 and delivered by an installer certified to PAS 2030:2019.

### 3. Counterfactual

This impact assessment is considering the change in cost of delivering ECO 3 arising from the new TrustMark framework and PAS 2035:2019 technical requirements. This assessment is estimating any change in cost of delivering the scheme compared to the current predicted deliver cost that accounts for carryover and current phase 1 delivery (the counterfactual). The counterfactual assumes ECO 3 will cost £2.01bn to deliver.

### 4. Analytical Approach

Costs to business arising from the TrustMark framework (explained in section 5.1) will impose new costs that were not accounted for in the Oct 18 ECO 3 Final Stage Impact Assessment.

The costs associated with PAS2035:2019 technical requirements (explained in section 5.2) are another potential new cost to business and these are considered alongside **current phase 1 delivery costs** and **carryover** from ECO 2. Current phase 1 delivery costs are lower than predicted in the Oct 18 Final Stage Impact Assessment. Carryover is the excess action suppliers delivered against the ECO2 obligation<sup>2</sup> that can count towards their ECO 3 obligation target. The ECO 3 obligation is likely to cost less than previously predicted because the Oct 18 Final Stage Impact Assessment did not account for carryover. This means cost increases from PAS2035:2019 technical requirements are likely to be mitigated to some extent by carryover and current delivery prices.

The analytical approach to calculating the combined impact of updated delivery prices, carryover and PAS2035:2019 technical requirements is made by considering the delivery price and remaining obligation in each phase of ECO 3.

Table 1: ECO phases

ECO 3 PhaseConsiderationsObligation delivery lifetime bill savings (LBS) £mPhase 1 (3 Dec 18 - 31 Mar 19):Current delivery cost (17 pence)£505m

<sup>&</sup>lt;sup>2</sup> https://www.ofgem.gov.uk/publications-and-updates/energy-company-obligation-eco2-final-determination-report

Phase 2 (1 Apr 19 – 31 Mar 20):	Transition to PAS 2035:2019 starts on 31st May 2019 (ECO 3 IA predicted 24 pence)	£2,303m
Phase 3 (1 Apr 20 – 31 Mar 21):	Transition to PAS 2035:2019 ends on 31st Dec 2021 – delivery costs expected to increase to 30 pence (ECO 3 IA predicted 26 pence).	£2,303m
Phase 4 (1 Apr 21 – 31 Mar 22):	All measures adopt PAS 2035:2019 and cost 31 pence (ECO 3 IA predicted 27 pence)	£2,303m
Total during entirety of ECO 3	See section 5	£7,288m (+carryover of £965m)

Delivery prices in each of the 4 ECO phases listed in table 1 have been updated to account for current phase 1 delivery prices, the transition to PAS 2035 during phase 2 and 3 and post transition (phase 4).

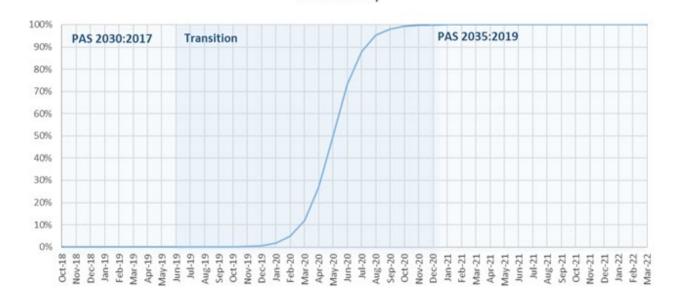
The analytical approach considers changes in the cost of ECO 3 by multiplying the price with obligation delivery in each phase.

The obligation achieved in each phase is calculated based on current achievement to date and what remains of the £8.253 obligation target after phase 1 achievement and ECO 2 carryover has been deducted. The remaining obligation has been split evenly across the remaining phases.

The delivery prices in phase 2 and phase 3 were calculated by assuming a proportion of measures are delivered to the new PAS 2035:2019 framework at a cost of 31 pence. The remainder are delivered at the previously forecast prices assumed in the Oct 18 ECO 3 Final Stage Impact Assessment. The proportion of measures adopting the PAS 2035:2019 framework is illustrated in Figure 2:

Figure 2: PAS2035 Transition – Proportion of measures adopting the new standard

Transition to PAS 2035 (Proportion of delivery complying to new framework)



The updated delivery price of 31 pence in phase 4 was calculated using the Affordable Warmth model (AW). The AW model is an Excel based micro simulation model that simulates delivery of energy efficiency measures to households in England. The model simulates uptake based on the relative cost effectiveness of single or packages of measures and chooses the

most cost effective mix until a target spend of £640m per annum is achieved. The cost effectiveness of measures is the ratio of their capital cost divided by their notional lifetime bill saving (LBS)³. The AW model has been updated to account for the additional delivery costs arising from the PAS2035:2019 framework (listed in section 5: table 4). By holding the obligation target fixed⁴ the model estimates any increased cost of delivery. The AW model does this by calculating increases in the marginal price paid to achieve a given spend or obligation target. The modelling results show the impact of PAS2035:2019 technical requirements will increase the marginal price from 27 pence to 31 pence in phase 4.

The above analytical approach was used to calculate the cost impacts presented in section 6.

### 5. Assumptions

Section 5.1 explains the direct costs to business arising from the TrustMark framework. Section 5.2 explains the costs of PAS 2035:2019 technical requirements that may affect delivery costs and section 6 explains how these cost impacts feed into the EANDCB calculation presented in section 7.

#### 5.1 Direct costs to business

There are upfront costs that businesses engaged in the Energy Company Obligation will need to meet in order to subscribe to the new Trustmark framework.

- 1. Scheme providers will pay a one off lodgement fee of £2,000 with TrustMark to signup certified businesses to the TrustMark standard.
- 2. TrustMark will charge an annual subscription of £40 per individual registered business.
- 3. Scheme providers may charge additional admin fees for signing businesses up to TrustMark but these are uncertain and not quantified in this assessment.
- 4. Businesses claiming ECO subsidy towards the cost of measures will need to lodge details of the measure on Trustmark's data warehouse at a cost of £10 per measure. These lodgement costs will run in parallel to existing Ofgem reporting mechanisms during the transition, meaning they will be an additional cost to business but replace existing reporting mechanisms after the transition.

BEIS estimate around 2,300 business engaged directly in the delivery of ECO measures will be affected by these additional costs.

Table 2: Annual costs to business arising from TrustMark

2019	2020	2021	2022	Total
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<sup>&</sup>lt;sup>3</sup> https://www.ofgem.gov.uk/publications-and-updates/eco3-deemed-scores

 $<sup>^4</sup>$  The PAS 2035 framework will affect all measures delivered in the  $4^{th}$  phase of the ECO scheme. The assumed LBS target in the  $4^{th}$  phase was £2.2bn and this was used to calculate the increase in delivery cost.

Measures lodged on TrustMark data					366,000
warehouse	1,300	162,000	162,000	41,000	
Lodgement costs	£13,000	£1,620,000	£0 - s	ee footnote <sup>5</sup>	£1,633,000
Subscriptions	£324,000	£324,000	£324,000	£324,000	£1,295,000
Onboarding for					£200,000
Scheme providers		£200,000			
Nominal cost to			£324,000	£324,000	£3,128,000
business	£337,000	£2,144,000			

The estimated direct cost to business (excluding delivery) arising from the new TrustMark framework is £3.1m (£2.6m present value). Section 5.2 discusses the impact of PAS2035:2019 on delivery costs.

#### 5.2 PAS 2035:2019 technical requirements

The technical requirements of PAS 2035:2019 will impose new activities on installations of energy efficiency measures. The specific activities that installers complying to PAS 2035:2019 will need to consider are listed in Table 3. PAS 2035:2019 will require varying levels of assessment of a property's suitability for retrofit energy efficiency measures and comprise the following steps:

- I. Overseeing the assessment of dwellings;
- II. specification and evaluation of energy efficiency measures for installation; and
- III. subsequent monitoring and evaluation in accordance with PAS 2035.

The extent of the assessment is categorised by 3 pathways listed in table 3:

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<sup>&</sup>lt;sup>5</sup> Costs arising from lodgement of measures on TrustMark's data warehouse will add to business cost during the transition but should be cost neutral (non additional) from 2021 onwards because TrustMark will take over technical monitoring from Ofgem.

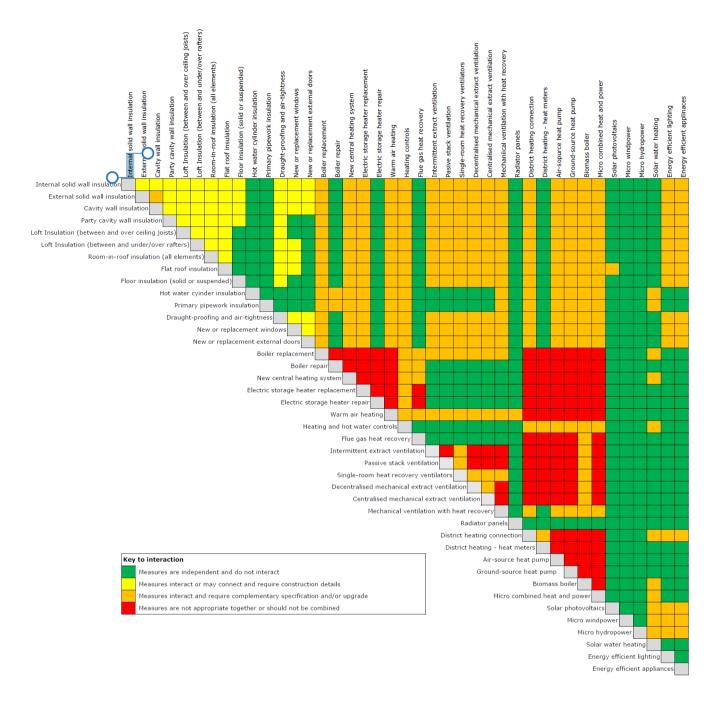
Table 3: PAS 2035 pathways<sup>6</sup>

	Pathway A	Pathway B	Pathway C
Design Assessment	Design by System Specialist/Revie w by Retrofit Co-ordinator	Retrofit co- ordinator	Design by Chartered Architectural Technologist, or Architect plus Structural engineers report if required
Retrofit options	Single recommendati on made to household	Option Evaluation & Agreement	Option Evaluation & Agreement
Overheating Assessment	Retrofit co- ordinator	Retrofit co- ordinator	Retrofit co-ordinator
Air tightness test	Assessment only by Retrofit co-ordinator	Assessment only by Retrofit co-ordinator	Air tightness test undertaken by 3 <sup>rd</sup> party plus any remedial work required (e.g. extractor fan)
Basic Monitoring & Evaluation using questionnaire	Retrofit co- ordinator	Retrofit co- ordinator	Retrofit co-ordinator
Intermediate to advanced monitoring requiring home inspection		5% of measures may require intermediate monitoring and evaluation	2% of measures may require advanced monitoring and evaluation
Total cost per measure	£400	£500	£1,000
Cost per measure excluding technical monitoring <sup>7</sup>	£280	£350	£850

The Pathway that measures fall under depends on the extent to which they interact with other measures being installed alongside them. Figure 1 illustrates the interaction risk level between specific measures.

Figure 1: PAS 2035 Pathway Interaction Matrix<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> Table B.1— Risk assessment table for determining PAS 2035 Pathway



Measures delivered under ECO 3 such as insulation and boiler upgrades will tend to fall under pathway B. The situations in which pathway C will arise are:

- a whole house retrofit project involving 3 or more measures;
- a project involving more than 30 dwellings; or
- a project involving buildings with a protected status.

BEIS have assumed the costs associated with Pathway B will add to the cost of delivering measures when they adopt the PAS 2035:2019 framework. In large scale projects or design specifications that install 3 or more measures pathway C will apply. Large scale projects such as solid wall insulation to housing association properties tend to enjoy economies of scale which are not reflected in our cost assumptions. Therefore, any additional costs arising from

12

<sup>&</sup>lt;sup>7</sup> Technical monitoring is a cost that is already accounted for and currently undertaken by Ofgem. Technical monitoring under PAS 2035 will replace Ofgem's technical monitoring.

<sup>&</sup>lt;sup>8</sup> Reproduced with permission from BSI.

pathway C are expected to either be largely offset by economies of scale or only increase the cost in a minority of cases since whole house retrofit involving multiple measures is uncommon under ECO.

BEIS have discussed the cost of Pathway B with stakeholders and assumed delivery costs will increase by an average of £350 per measure as a result of compliance to PAS2035:2019

### 6. Cost Impacts

This section explains how the cost assumptions described in section 5 impact upon businesses and feed into the EANDCB calculation presented in section 7.

There are two cost impacts to consider:

- i) the direct costs to business of signing up to the TrustMark framework (listed in section 5.1)
- ii) impact to delivery costs of PAS2035:2019 technical requirements (listed in section 5.2)

The direct costs to business arising from the new TrustMark Framework amount to £3.14 over the 3.5 year scheme. The impact to delivery costs from PAS2035:2019 technical requirements amount to £198m. These costs are additional to any of the delivery costs assumed in the Oct 18 ECO 3 Final Stage Impact Assessment and therefore feed into the EANDCB calculation totalling £201.4 million (nominal).

Table 4: Cost impacts from Trustmark and additional delivery costs

	abio ii cost iii pasto ii ciii i i astiiai k aiia additioilai aciii ci y costo							
	Phase 1:	Phase 2: Apr	Phase 3: Apr	Phase 4: Apr	Total during			
	Dec 18 -	19 - Mar 20	20 - Mar 21	21 - Mar 22	entirety of			
	Mar 19				ECO 3			
Direct costs	£337,000	£2,144,000	£324,000	£324,000	£3,129,000			
Additional								
delivery								
costs	£0	£2,700,000	£102,100,000	£93,500,000	£198,300,000			
Total cost								
impact	£337,000	£4,844,000	£102,424,000	£93,824,000	£201,429,000			

Table 5 shows the delivery costs assumed in the Oct 18 Final Stage Impact Assessment and tables 6 and 7 show in turn how updated phase 1 delivery, carryover and PAS2035:2019 technical requirements affect delivery costs.

Table 5: lifetime bill savings, ECO subsidies and price assumed in the Oct 2018 ECO 3 Impact Assessment

Period 1:	Period 2: Apr	Period 3: Apr	Period 4: Apr	Total during
Dec 18 -	19 - Mar 20	20 - Mar 21	21 - Mar 22	entirety of
Mar 19				ECO 3

lifetime bill savings (LBS) £m	£1,265m	£2,488m	£2,297m	£2,202m	£8,253m
ECO subsidy £m	£293m	£585m	£585m	£585m	£2,048m
ECO price per LBS (rounded to nearest penny)	0.23	0.24	0.26	0.27	0.25
ECO Subsidy + admin £m	£320m	£640m	£640m	£640m	£2,240m

Table 5 shows ECO 3 was expected to cost £2.24bn including admin according to the Oct 18 Impact Assessment.

Table 6 provide an updated cost by accounting for carryover from ECO2 and current delivery costs and shows ECO 3 will cost £2.01bn.

Table 6: lifetime bill savings, ECO subsidies and price updated to reflect current delivery costs and over delivery.

	Phase 1: Dec 18 - Mar 19	Phase 2: Apr 19 - Mar 20	Phase 3: Apr 20 - Mar 21	Phase 4: Apr 21 - Mar 22	Total during entirety of ECO 3
lifetime bill savings (LBS) £m	£505m	£2,303m	£2,303m	£2,303m	£7,289m (+carryover of £965m)
ECO subsidy £m	£86m	£541m	£587m	£613m	£1,827m
ECO price per LBS (rounded to nearest penny)	£0.17	£0.24	£0.26	£0.27	£0.25
ECO Subsidy + admin £m	£106m	£596m	£642m	£667m	£2,012m

Energy companies will carry across £965m in LBS claimed for excess measures delivered in the previous ECO 2 scheme. Carryover from the previous scheme means energy companies require just £7.288bn in LBS to meet their ECO 3 obligation, costing £229m less than predicted in the Oct 18 IA which did not account for carryover.

Table 7 below accounts for the additional cost of PAS2035:2019 by assuming the delivery cost of the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> phase of the scheme will increase as measures adopt the PAS 2035:2019 standard (see figure 2 for the assumed adoption profile).

Table 7: lifetime bill savings and ECO subsidy after accounting for current delivery costs and subsequent costs arising from PAS 2035:2019

	Oct 18 - Mar 19	Apr 19 - Mar 20	Apr 20 - Mar 21	Apr 21 - Mar 22	Total during entirety of ECO 3
Lifetime bill savings (LBS) £m	£505m	£2,303m	£2,303m	£2,303m	£7,289m (+carryover of £965m)
ECO subsidy £m	£86m	£544m	£689m	£706m	£2,025m
ECO price per LBS (rounded to nearest penny)	0.17	0.24	0.30	0.31	0.28
ECO Subsidy + admin £m	£106	£599	£744	£761	£2,210

PAS 2035:2019 technical requirements will increase delivery costs by £198m. Taken alongside current phase 1 delivery costs and allowing for carryover from ECO 2 means ECO 3 is now expected to cost energy companies £2.21bn which is approximately the same cost according to the Oct 18 Impact Assessment (£2.24bn).

### 7. Equivalent Annual Net Direct Cost to Business

The estimated total cost to business arising from the new TrustMark framework is £201.4m and a break down by year can be found in table 4. Table 8 presents the discounted figure adjusted to 2016 prices.

Table 8. Equivalent Annual Net Direct Cost to Business – 3.5 year appraisal period.

EANDCB annualised costs	Business Impact Target (2016 prices)
£56m	£196m

### 8. Risks

The main risk of the regulatory amendment is discouraging installers to engage in the market for ECO subsidy. This would present a risk to energy companies of meeting their obligation target and should be reflected in upward movement of delivery costs if energy companies fall behind on delivery targets. The current low level of delivery observed in the market is mitigated by carryover from ECO2 and should therefore not undermine the ability of energy companies to achieve their obligation target in the remaining phases of the scheme. BEIS will continue to monitor delivery levels and costs of delivery to ensure the obligation is likely to be met and fall within the spending envelope of £2.24bn.

The Energy Company Obligation requires obligated suppliers to deliver a lifetime bill savings target of £8.253bn over the 3.5 year scheme. Energy companies can choose how to profile delivery during the course of the scheme. Figure 3 illustrates delivery patterns in previous ECO

schemes. A minor risk to consider is the assumed measure delivery profile during the remainder of the 3.5 year scheme. The increased cost arising from PAS 2035:2019 mainly affects the 4th phase of the scheme (Apr '21 – Mar '22) and assumes lifetime bill savings of £2.3bn are achieved at a cost of 34 pence. If delivery is back loaded in the way it was in ECO2 HTH (see figure 2) then this would push up delivery costs if more of the obligation is delivered at this higher price. Sensitivity analysis suggests the overall cost of the scheme would only increase by £30m if LBS delivery in phase 4 was 30% higher than forecast.

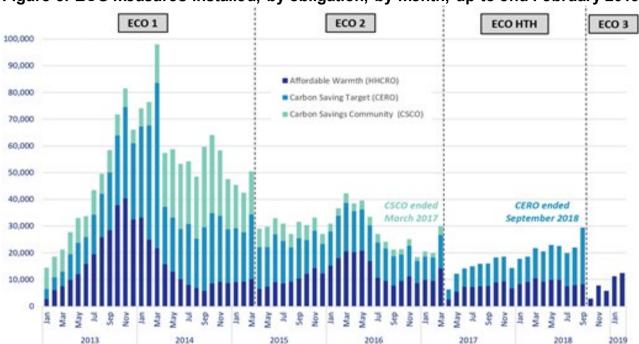


Figure 3: ECO measures installed, by obligation, by month, up to end February 2019

### 9. Small and micro business impact

Installers operating in the retrofit market are likely to be certified by an accreditation association. This means the certification requirements imposed by the TrustMark and PAS 2035 framework will reflect certification practices that are already commonplace in the retrofit market because installers currently have to be PAS 2030:2017 certified to qualify for ECO subsidy toward energy efficiency installation costs.

PAS 2035:2019 imposes a requirement for a retrofit co-ordinator to design and commission appropriate work involving ECO subsidised energy efficiency measures.

Small businesses who wish to bid for work independently will need to appoint at least one member of staff to the role of retrofit co-ordinator. Small and micro sized businesses make up around two thirds of businesses (based on employment) in the supply chain (based on the construction sector). We assume all businesses, regardless of size, contribute to the cost of appointing a retrofit co-ordinator. The cost of upskilling staff who oversee retrofit projects will be spread across the number of measures they oversee since a retrofit co-ordinator will oversee multiple projects. For smaller enterprises with lower volumes of work this would impact upon them disproportionately compared to larger enterprises. However, what tends to happen in practice is smaller businesses work in partnership with larger enterprises due to the complexity around ECO scheme rules. Larger organisations act as intermediaries between installers, local authorities and energy companies wishing to engage in the retrofit market. Intermediaries help to organise installations at scale and route funding

from ECO and local authorities. It's therefore less likely small and micro sized businesses will oversee projects requiring a retrofit co-ordinator but BEIS will test these assumptions during the consultation.

The cost impacts to business presented in the BIT score accounts for TrustMark subscriptions that all businesses operating in the market for ECO subsidised measures are required to pay.