

Guidance

ECO3 Guidance: Notification of demonstration actions v1.0 (draft for comment)

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In order for the notification of a demonstration action to be considered complete, suppliers must provide information, in addition to the data provided in the standard notification template, relating to delivery of the measure.¹ This document is intended to be used alongside the ECO3 Guidance: Innovation², and specifically relates to the additional information required at notification for demonstration actions.

It is the responsibility of each supplier to understand the provisions of the Electricity and Gas (Energy Company Obligation) Order 2018 (the ECO3 Order) and how these provisions apply to them. This document is not intended to be a definitive guide to these provisions.

¹ Article 24(1)(c) of the ECO3 Order.

² Can be found at: <https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation>

DRAFT

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Related Publications

The Electricity and Gas (Energy Company Obligation) Order 2018:

<http://www.legislation.gov.uk/uksi/2018/1183/contents/made>

The Electricity and Gas (Energy Company Obligation) (Amendment) Order 2019:

<http://www.legislation.gov.uk/uksi/2019/1441/contents/made>

ECO3 Guidance: Delivery:

<https://www.ofgem.gov.uk/publications-and-updates/energy-company-obligation-2018-22-eco3-guidance-delivery>

ECO3 Guidance: Supplier Administration:

<https://www.ofgem.gov.uk/publications-and-updates/energy-company-obligation-2018-22-eco3-guidance-supplier-administration>

ECO3 Guidance: Innovation and associated documents:

<https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation>

ECO3 Monitoring:

<https://www.ofgem.gov.uk/publications-and-updates/eco3-monitoring>

1. About this draft guidance for comment

Purpose of this document

1.1. This draft for comment guidance allows stakeholders to review the proposed changes and is a “live” document which should be used as guidance until our final version 1.0 is published.

1.2. We have published this document on a draft for comment basis to seek views on the clarity and format of this document. On that basis, we would like to seek feedback on the following questions:

1. With regards to the overall tone of the guidance, is the draft guidance easy to read and understand? Are there any sections which could be better explained?
2. Is the draft guidance user friendly?
3. Are there any sections of the draft guidance which are ambiguous?
4. Any further comments?

1.3. You may provide suggestions for changes or improvements to this draft guidance during a four week review period from 31 July 2020. Any responses should be made in writing by email to eco@ofgem.gov.uk by 28 August 2020, and clearly identify the related paragraph number.

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2. Introduction

General Requirements

2.1. Unlike standard ECO measures, demonstration actions involve performance monitoring to evaluate the effectiveness of the measure at achieving space heating cost savings. When notifying a demonstration action, suppliers must submit the findings of this performance monitoring, and other information including the cost of delivering the demonstration action.

2.2. There are six components that are required as part of the notification of a demonstration action:

1. Notification of Measures
2. Summary report
3. Independent report
4. Technical monitoring report
5. Project costs incurred by the supplier
6. Installation dates and addresses

2.3. These components, which are described more fully in Chapter 3 of this document, must be uploaded to Ofgem's secure file sharing service as a 'notification pack' before the notification deadline. For demonstration actions, this is the end of the month following the month in which the planned performance monitoring was completed. For further information on notification requirements, please see Chapter 6 of the ECO3 Guidance: Innovation.

2.4. The rules regarding late measures (automatic extensions and applications for extension to the notification deadline) apply in the same way to demonstration actions as other measures notified under the scheme. We understand that the notification deadline does not allow much time for data analysis and completion of the final report, and would therefore encourage suppliers to apply for extensions to this deadline if required. Suppliers should refer to Chapter 7 of the ECO3 Guidance: Supplier Administration³ for further information on these requirements.

³ Can be found at: <https://www.ofgem.gov.uk/publications-and-updates/energy-company-obligation-2018-22-eco3-guidance-supplier-administration>

Publishing of Information

2.5. Some of the above components provided for notification of a demonstration action will be published on the Ofgem website.⁴ These will include:

1. Summary report, including total costs incurred by the supplier, and a summary of the breakdown of these costs.
2. Independent report

2.6. Templates are provided for the summary report, project costs, and technical monitoring report. These templates can be found in the 'ECO3 Innovation: Demonstration action notification templates' document on our website⁵. The requirements for these components are described in further detail in Chapter 3 of this document. The full project costs template, and technical monitoring template will not be published. Suppliers must share the completed technical monitoring template with both TrustMark and ATMA.

2.7. If the independent report contains any personal information such as property addresses, we may ask for this to be redacted prior to publishing the document.

⁴ Article 24(2) of the ECO3 Order.

⁵ <https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation>

3. Notification Requirements

Section summary

There are six components required as part of the 'notification pack' in order for a demonstration action to be notified. These components are listed below, along with further information on each, describing how they should be completed and notified. A 'notification checklist' outlining these components can also be found in Chapter 4 of this document. With the exception of the 'notification of measures', all of these components should be uploaded to the Innovation folder on Ofgem's secure file sharing service.

Notification of Measures

3.1. Demonstration action measures (including any control properties) must be notified per property using the notification template, in the same way that standard measures are. Further information on notifying completed measures can be found in Chapter 7 of the ECO3 Guidance: Administration. Some of the fields on the notification template must be filled out differently for demonstration actions – these additional requirements are outlined below, and are included in the data dictionary⁶.

- Measures which are part of a demonstration action should be notified with a unique 'Measure_Type' specific to that demonstration action. This will be confirmed with the supplier following the approval of a demonstration action, and will be of the format 'DA_[name of demonstration action]'. Any control properties, which do not have the measure installed, should be notified as 'DA_[name of demonstration action]_Control'.
- Because standard scoring methods don't apply to measures delivered as part of a demonstration action, the 'Scoring_Method' field should be notified as 'DA'.
- Demonstration action measures are considered complete when the planned performance monitoring is completed.⁷ The 'Date_of_Completed_Installation' for these measures should be filled out using the date on which the planned monitoring was completed.

⁶ <https://www.ofgem.gov.uk/publications-and-updates/eco3-data-dictionary>

⁷ Article 24(3)(a) of the ECO3 Order.

3.2. One of the key differences between standard ECO measures and demonstration actions is the way in which they are scored for the purposes of notification. If approved, the demonstration action is awarded an LBS score based on the lower of the 'estimated' and 'actual' cost of delivery x 5.2.⁸ We anticipate that the total awarded LBS score will be divided by the number of properties in the sample (including control group if applicable) for notification of measures. Further information on calculating the LBS score for demonstration actions can be found in paragraphs 4.3 – 4.5 of the ECO3 Guidance: Innovation.

Summary Report

3.3. The demonstration action summary report (template in 'ECO3 Innovation: Demonstration action notification templates'), is intended to provide a condensed overview of the completed demonstration action. This will be assessed by Ofgem to ensure the DA has met the regulatory requirements. We recommend that the summary report is completed by the author of the independent report, as both will be published on the Ofgem website following notification of the demonstration action. The word count specified in the summary report template is intended to be used as a guide.

Independent Report

3.4. The independent report is required to allow the validity of the findings in the summary report to be thoroughly evaluated. It should include the usual scientific conventions, such as error bars and referencing sources. It should also include information on the methodology used to monitor, collect, and analyse the data, as well as limitations of the work⁹.

3.5. The independent report must be prepared by a person who is not a participant in the application, or a connected person.¹⁰ The report must include the author, and date which the report was completed.

⁸ x 6.24 if the criteria in paragraph 4.1 of the ECO3 Guidance: Innovation are met.

⁹ https://www.scribendi.com/academy/articles/format_a_scientific_paper.en.html

¹⁰ A connected person is deemed to be any person connected to a participant within the meaning of section 1122 of the Corporation Tax Act 2010(a).

3.6. For publication purposes, please ensure the title has the following title format:
Independent Report for ECO3 Demonstration Action – [name of demonstration action].

3.7. The independent report will be assessed by Ofgem, alongside the rest of the notification pack, in order to determine whether the notified demonstration action can be approved. The panel may also provide a recommendation on the validity of the findings. This assessment will consider the validity of findings, taking into account how closely the agreed monitoring plan has been followed. Whether or not the expected cost savings are achieved will not impact approval of the demonstration action.

3.8. The full report including detailed data and analysis must be provided, and must include information on the following three key areas:

1. Performance Monitoring Methodology
2. Analysis and Results
3. Discussion and Conclusion

3.9. This list and the sections below are non-exhaustive, and are intended to provide information on the core requirements of the report. The report can follow any scientific structure as long as these requirements are met. Additional information can be included to support the submission, or improve learning in the relevant field. We may also request further information on any areas that need further specification.

Performance Monitoring Methodology

3.10. One of the key aspects of a demonstration action is the performance monitoring methodology. In order to successfully notify a demonstration action and receive the associated score, the agreed methodology must be followed to completion. We will only approve the demonstration action notification if we are satisfied that the project was conducted in accordance with the agreed methodology. We understand that issues may arise during the delivery of a demonstration action which could affect how closely the agreed performance monitoring can be followed. If such issues do arise, we urge suppliers to contact us as soon as possible before there is any deviation from the agreed methodology. An application for an

amendment to an approved demonstration action¹¹ can be made, although amendments may not be approved, particularly if these do not meet the criteria in the ECO3 Order.

3.11. To allow a critical evaluation of the overall validity and reliability of the DA, the report must contain a methodology detailing the specific procedures used to collect the data, including:

1. a description of the sample,
2. a breakdown of the monitoring duration,
3. what parameters were monitored,
4. how these parameters were monitored, including frequency,
5. the number of properties monitored,
6. which independent factors were taken into account and corrected for through modelling, and
7. consideration of any other potential bias which may impact the data, and steps taken to minimise its effects.

Analysis and Results

3.12. To meet the legislative requirements for the notification of a demonstration action, the report must set out the performance monitoring results, and information on whether or not the demonstration action achieved cost savings¹² as defined in the ECO3 Order:

"cost savings" means, in relation to a measure—

- a) *the money that would be saved by that measure over its expected lifetime in heating domestic premises to 21 degrees Celsius in the main living areas and 18 degrees Celsius in all other areas; and*
- b) *where the measure also results -*

¹¹ Can be found at: <https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation>

¹² Article 24(1)(c)(iv) of the ECO3 Order.

- i. in savings in the cost of heating water, the money that would be saved by the measure over its expected lifetime in heating water in those premises; or*
- ii. in the generation of electricity, the money that would be saved by the measure over its expected lifetime in generating electricity for use at those premises, excluding any electricity generated for the purpose of heating the premises or for heating water*

3.13. We expect to see the analysis and results from the performance monitoring in a logical sequence to show whether a cost saving in accordance with the definition above was achieved by the demonstration action¹³, along with the statistical significance of the results obtained. To demonstrate this, the report must include information on:

1. the analysis method(s) used, and justification for use of that method being the most appropriate,
2. the results, including graphs and/or tables summarising data collected,
3. How the results were extrapolated if applicable,
4. how the results were compared (eg against a control group or NEED¹⁴),
5. the analysis of the effects of external conditions and bias (eg unmeasured heat gains or losses), and
6. secondary findings (eg additional benefits of the product, such as hot water cost savings, improved comfort, or indoor air quality).

3.14. The detailed data collected for each property must also be provided as an appendix to the report.

Discussion and Conclusion

3.15. The report must also contain an assessment of the effectiveness of the measure at achieving cost savings¹⁵ as defined in the ECO3 Order¹⁶. This should include a discussion of the findings from the analysis of the results, including any external bias that may have impacted

¹³ Definition of cost savings in Article 2 of the ECO3 Order.

¹⁴ The National Energy Efficiency Data-framework.

¹⁵ Article 24(1)(c)(iv) of the ECO3 Order.

¹⁶ Definition of cost savings in Article 2 of the ECO3 Order

the results, and confirmation of any measured cost savings.¹⁷ Any conclusions drawn in relation to cost savings should be well-founded and unbiased, and supported by appropriate evidence.

3.16. The average cost saving figure should be contextualised in relation to the UK housing stock. For example, if only limited archetypes were included in the sample, please explain how representative these results are likely to be for the UK housing stock.

3.17. The report should also contain discussion on the limitations of the demonstration action, including how these may have a bearing on the efficacy of results.

Technical Monitoring Report

3.18. Demonstration Actions are not subject to the standard quarterly technical monitoring process, therefore the technical monitoring report is aimed at testing the appropriateness of the technical and score monitoring questions proposed for the measure. A plan for the technical monitoring of demonstration actions is agreed as part of the application process. Suppliers must provide results and learnings from technical monitoring carried out during the demonstration action. Technical monitoring results should be recorded and submitted using the template provided in the document 'ECO3 Innovation: Demonstration action notification templates'¹⁸, and shared with ATMA and TrustMark.

3.19. The report should also contain discussion around what was learned from conducting the technical monitoring trial. This should include, but is not limited to, how appropriate the questions were, any recommended changes to the questions, and any issues identified through technical monitoring. It may also be useful to include feedback from the technical monitoring agents who conducted the trial.

¹⁷ Article 24(1)(c)(iii) of the ECO3 Order.

¹⁸ Can be found at: <https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation>

Project Costs

3.20. As part of the notification of a demonstration action, suppliers must also provide evidence of the cost of delivering the demonstration action.¹⁹ This must include:

1. the total cost incurred by the supplier in promoting and monitoring the demonstration action,
2. a comprehensive breakdown of this cost, and
3. a signed declaration from an authorised signatory.

3.21. The total cost and breakdown must be submitted using the template provided in the document 'ECO3 Innovation: Demonstration action notification templates', with all relevant costs accounted for. All figures must be in pounds sterling and should include VAT where relevant. The declaration must be signed by an authorised signatory for the company to confirm the costs submitted accurately reflect the costs that were incurred by the supplier.

3.22. The breakdown of costs should be split into a sufficient level of detail to determine how much has been spent on each aspect of the demonstration action. The breakdown should be submitted using the template provided, and the costs grouped under the relevant headings.

3.23. The level of detail required in the cost breakdown is similar to that provided in the application, and we would not anticipate a significant number of costs to be itemised under each heading in the template. To provide an example of the level of detail required, under the heading 'Product and installation' we anticipate a breakdown to include the total product costs, the total installation costs, and any costs associated with installer training. For this particular heading a per property cost of installing the product is recommended, as this would be useful for industry if the product were to become an ECO measure.

3.24. If any of these costs differ significantly from what was agreed, the differences must be highlighted, and an explanation provided as to why this is the case. This includes instances where what was agreed has not been delivered (eg sample size) and the costs have not been reduced accordingly.

¹⁹ Article 24(1)(c) of the ECO3 Order.

3.25. Suppliers must satisfy themselves that the costs incurred in delivering the demonstration action are accurate and appropriate. Suppliers may wish to consider implementing a method of assurance, such as an audit, to validate the project costs prior to submission.

3.26. We may on occasion ask for additional information, evidence, or a further breakdown of the costs, particularly where these differ significantly from what is expected.

3.27. Although demonstration actions can be used to collect evidence of energy savings which could be used to apply for SAP inclusion and/or a new score, these applications do not form part of the demonstration action. Activities not related to the demonstration action itself must not be included in the notified costs. Further information on developing deemed scores after the completion of the DA can be found in Chapter 5 of this document.

Installation Dates and Addresses

3.28. As part of notification of a demonstration action, suppliers must submit installation dates and addresses for each property included in the demonstration action.²⁰ This includes installation and removal dates for the monitoring equipment, and installation dates for the measure itself. This information will not be published.

²⁰ Paragraph 6.7 of the ECO3 Guidance: Innovation

4. Notification Checklist

Section summary

The notification checklist should be used by suppliers to ensure the notification pack contains all of the required components. It does not need to be submitted as part of notification.

Component	Relevant paragraphs	Template provided?
Notification of measures	3.1 – 3.2	Yes - https://www.ofgem.gov.uk/publications-and-updates/eco3-notification-template
Summary report	3.3	Yes - https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation
Independent report	3.4 – 3.17	No
Technical monitoring report	3.18 – 3.19	Yes - https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation
Project costs	3.20 – 3.27	Yes - https://www.ofgem.gov.uk/publications-and-updates/eco3-innovation
Installation dates and addresses	3.28	No

5. Approval of Demonstration Actions

Section summary

The assessment and approval process for demonstration actions is more detailed than that of standard ECO measures. This chapter provides a summary of this process.

5.1. Once the demonstration action has been notified, Ofgem will review the information provided before approving any of the measures. During this process, we will compare the notified demonstration action with what was agreed in the application (or any subsequent amendments), and consult the panel members on the validity of the independent report, and the assessment of cost savings.

5.2. This is a more in depth process than the notification and approval of standard measures, so may take longer to be approved. We may also ask for additional information if any aspects of the notification pack need further clarification.

5.3. If any of the information required by the ECO3 Order cannot be provided, there is a risk that the demonstration action may not be approved. If our assessment reveals any errors or discrepancies in the project costs, or if certain costs cannot be evidenced, we may ask suppliers to amend the notified score. If any notified properties receiving the measure do not meet the ECO3 eligibility criteria they will be rejected²¹, and the resulting impact on the awarded score will be assessed on a case by case basis.

²¹ Rejection of measures will follow the 'minded to' process used for standard ECO measures.

6. Next Steps

Section summary

We recognise that following notification of a demonstration action, a supplier may wish to apply for that measure to be included in the ECO scheme as a standard measure going forward. This chapter contains information on how to do this.

6.1. In order for a measure to be delivered as a standard measure under ECO, an appropriate score (based on SAP where possible) will need to be established for that measure.

6.2. To apply for a new score, suppliers must submit an application for an alternative scoring methodology. This process is separate to that of notifying demonstration actions, and further details can be found in Chapter 5 of the ECO3 Guidance: Delivery, under the heading 'Alternative methodologies', and on our website²². We recommend that inclusion in SAP is explored, and where possible achieved, prior to application for a deemed score.

6.3. Scores in ECO are associated with a measure type, rather than a specific product, and alternative methodology applications should be made accordingly. The completion of a demonstration action is not a guarantee that a score will be awarded. Additional evidence to that collected under the demonstration action will be required, for example on measure lifetime, installation standards - and potentially on energy savings, if the data gathered in the demonstration action is insufficient.

²² <https://www.ofgem.gov.uk/publications-and-updates/eco3-alternative-methodologies>