

Minutes of the ECO4 Innovation Technical Advisory Panel 12

From: Reuben Privett

Date: 09 April 2025

Time: 09:00 - 13:00

Location: Conference call

A technical advisory panel (TAP) has been set up to review innovation measure applications and make recommendations to Ofgem to approve or reject applications. It is formed by a number of independent panel members, with its Chair and Secretariat function provided by Ofgem. The TAP makes recommendations to Ofgem to approve or reject IM applications. It does not, in and of itself, make any decisions to approve or reject such applications. Accordingly, these minutes provide a summary of each discrete review undertaken by the TAP as discussed by TAP members during group meetings. The TAP review is limited to the material submitted by applicants at application stage, or in subsequent correspondence, and these minutes provide a summary of the opinions offered by TAP members on the material submitted insofar as they inform the eventual recommendation made by the TAP. These minutes are reviewed by the TAP members prior to publication. These minutes do not represent a formal statement of opinion by Ofgem in regard to any product, measure, or application received by Ofgem in relation to ECO. Applicants who wish to challenge the opinions contained within these minutes may contact Ofgem directly.

1. Present

Adrian Hull, (Panel Member) THS Inspection Services Cliff Elwell, (Panel Member) University College London David Glew, (Panel Member) Leeds Beckett University Jason Palmer, (Panel Member) Cambridge Energy Kay Popoola, DESNZ



Hunter Danskin, DESNZ Christopher Parfitt, DESNZ Charlie Murphy, Ofgem Eric Baster, Ofgem William Denham, Ofgem Andy Morrall, Ofgem Reuben Privett (Chair), Ofgem

3. Introductory remarks by the Chair

- 3.1. The Chair welcomed all panel members and attendees to the meeting. The chair highlighted the risk that applications were beginning to be received with the apparent intent to undercut the improvements demonstrated by previously approved innovation measures. This includes where shorter durations of servicing or warranties have been outlined, where additional improvements are not made. The TAP agreed that this risk of approving innovation measures which are inferior to those which have already been approved would be counter to the intent of the mechanism. The TAP expressed the view that where an application is made which seems to intend to undercut an already approved innovation measure, it would not be approved at the same uplift level.
- 3.2. The Chair also noted that some of the applications to be reviewed in this meeting contained similar improvement claims as applications which have previously been approved, highlighting that the same considerations should be made to ensure consistent decision making.



4. Innovation Measure Application: Ideal ASHP

- 4.1. The application is for an ASHP which comes with a wraparound support package that consists of an installation and commissioning check, a 7-year parts-and-labour warranty and 6 annual services. The application is for a substantial uplift.
- 4.2. No previous history related to the application was raised by the chair. The chair noted similarities between this application and previously approved ASHP innovation measures.
- 4.3. The TAP noted that the application assumed a lower weather compensation curve resulting in a 45° C flow temperature would be sufficient to heat the home. This may not always be the case where heat emitters are not large enough or where the home has too great a heat loss. They also noted that numerous factors determined the efficiency of the system and while a commissioning check may increase confidence that the flow temperature can be achieved, it did not guarantee this.
- 4.4. The TAP highlighted that the evidence provided appeared to show 8-10% of installations of this product may not have been appropriately commissioned which does not reflect well on the accreditation of installers.
- 4.5. The TAP was of the view that most heat pumps will perform adequately for at least the first 7 years of operation and that the improvement offered by a 7-year warranty and service plan was significantly smaller than 12-year servicing plans which were previously approved.
- 4.6. The TAP acknowledged that the Ideal service plan included servicing the water cylinder (absent from the previous approval), however, it was noted that water cylinders are more reliable and require less servicing.



- 4.7. The TAP noted that the warranty explicitly notes that it is invalidated if an annual service is missed. There is a risk that the warranty could be voided if there was a change in the household and the new occupier was unaware of the free annual servicing. It was raised that previously approved measures still maintain their warranty even if the annual service is missed.
- 4.8. The TAP noted an issue regarding the installer registering an installation paying for the service plan and extended warranty within 60 days. The TAP was of the view that there was a risk that installers could register the heat pump and claim the innovation uplift without enacting the service plan. This would leave the end-user without the warranty or service plan. Reference was made to previously approved measures which require upfront payment to instigate the warranty and service plan. The TAP was of the view that this loophole should be closed to require upfront payment.
- 4.9. The TAP discussed contacting the household to book the annual servicing, highlighting three attempts would be made to contact the household by phone. It was highlighted that with previous applicants, the TAP has required different forms of communication to be made, including a letter. This would reduce the risk associated with occupancy churn.
- 4.10. The TAP highlighted that Wi-Fi was required for the data module, which must be fitted and remain connected to the internet for the duration of the warranty and service agreement. The TAP noted this could lead to issues if there was a change in the household or a change in Wi-Fi provider, with householders unintentionally voiding their agreement by briefly not having Wi-Fi. The TAP recommended a data sim should be provided for the duration of the warranty to ensure connectivity throughout the warranty period and that an alert system should be put in place to alert the household if Wi-Fi disconnects.



- 4.11. The TAP discussed the use of R32 refrigerant which has higher global warming potential (GWP) than R290.
- 4.12. The TAP was of the opinion a QR code should be added to the system, which leads any new occupier to a page that allows them to directly register their details. This would align with previous applicants.
- 4.13. No Q&A was held for this application.
- 4.14. The panel recommended that the measure should be rejected for a substantial innovation measure. The TAP recommended that the measure is approved as a standard innovation measure, subject to clarifications being addressed adequately.

5. Innovation Measure Application: Aira ASHP

- 5.1. The application is for an ASHP with a 10-year service and maintenance plan included at no cost to the occupier. The measure also comes with 10-years of remote monitoring support, data plan, and warranty. The system can be optimised with time-of-use (TOU) tariffs which may lead to additional space heating cost savings.
- 5.2. No previous history related to the application was outlined by the Chair.
- 5.3. The TAP raised no concerns with the installation standards or comparable measure.
- 5.4. The TAP discussed the increased annual cost savings claim and were in consensus that improvements related to specific tariffs would not be accepted because there is no guarantee that the homeowner would have this type of tariff and savings were not guaranteed. The TAP also noted that the customer is responsible for contacting the manufacturer to trigger tariff optimisation and this meant even where a TOU tariff was



present, there was an onus on the end-user to ensure the savings were achieved. The TAP was clear that claims around tariff-based savings would continue to be discounted in the future for other applications.

- 5.5. The TAP also noted that the evidence provided to support this claim was not detailed enough to enable an assessment of whether it was reasonable. They noted that no detail was given in relation to the assumed tariff used, including that the comparison was between another heat pump on a regular tariff versus the heat pump under application with tariff optimisation on, using a TOU tariff.
- 5.6. The TAP discussed the 340% performance guarantee and were of the view that this could be an improvement, depending on how this functioned in practice. Insufficient detail had been provided to demonstrate how this guarantee would work. They were of the view that an explanation of both how this guarantee functions, and how remediation takes place where the performance is not at 340%, would be required to consider this an improvement.
- 5.7. The TAP also discussed the 10-year comfort guarantee and were of the view that this had little value as it was guaranteeing the minimum internal temperature required by MCS. The TAP also noted that the guarantee was offered commercially by the manufacturer for 15 years.
- 5.8. The TAP discussed the service plan, including that the servicing was undertaken once every two years rather than annually. They noted that the inclusion of remote monitoring would not necessarily ensure equivalence between this biennial servicing and annual servicing as some physical defects (eg leaves blocking the filters or blocked condensate removal) could only be identified in-person. These areas which are not specifically related to performance are unlikely to be remediated. The TAP would like to see more detail on



the thresholds before interventions are made, and when in-person visits would be required.

- 5.9. The TAP was of the view that insufficient evidence had been provided to demonstrate that there was no negative impact of servicing once every two years versus every year.
- 5.10. The TAP discussed the remote monitoring and optimisation and felt the information provided did show that heat pumps require significant numbers of interventions to ensure they are operating as efficiently as possible.
- 5.11. The TAP noted that the 24/7 call centre may be beneficial.
- 5.12. The TAP noted that the heat pump used R290 refrigerant, and that they had previously agreed this was beneficial compared to R32 refrigerant in terms of GWP.
- 5.13. The TAP discussed the fact that the annual servicing provision and remote monitoring were provided for 10 years rather than 12 years provided in previously approved IMs. They were in consensus that a robust performance guarantee and remote monitoring provision with an equivalent service plan to previous applications would be satisfactory to achieve a substantial uplift.
- 5.14. In the Q&A, the TAP asked for more detail on the performance guarantee, including whether the 340% was equivalent to a 3.4 SCOP, how this would be remediated when the performance did not meet the threshold, and whether the score included space and water heating. The representative gave an overview of how the data was created and confirmed that this efficiency relates to space heating only. The representative offered to provide more information in writing after the meeting in relation to the remediation where the performance is below the guaranteed level.



- 5.15. In the Q&A, the TAP asked for an explanation as to why the servicing was only once every two years and whether they had evidence to demonstrate that there are no negative consequences of not servicing annually. The representative offered to provide a response in writing after the meeting.
- 5.16. In the Q&A, the TAP asked how operating issues would be identified through remote monitoring when annual servicing was only conducted every other year, and what thresholds would have to be broken for a visit to be triggered. The representative gave an explanation of how the outliers were detected in each geographical location, but that there are no specific thresholds to be reached before a visit is scheduled.
- 5.17. In the Q&A, the TAP asked for more detail on the number of in person visits avoided by the remote monitoring ability. The representative gave an overview of their support system and escalation process.
- 5.18. The TAP recommended the application may be approved as a substantial innovation measure subject to adequate responses being provided to clarifications.

6. Innovation Measure Application: K Systems EWI

- 6.1. The application is for an External Wall Installation system which is installed using gasfired insulation fixings, designed for typical masonry substrates with an Agrement certificate covering Mineral Wool, EPS and Phenolic Insulation material options.
- 6.2. The Chair noted that the product under application has the same BBA as was approved in Innovation Measure 030 with an optional render layer using cement replacement technology. The measure under application in this meeting does not also include the same material.



- 6.3. The TAP noted the evidence provided to demonstrate time savings was limited and that the time saving put forward did not represent a reasonable improvement. The TAP noted the tests to show time savings had been done on only one substrate and insulation material, and did not take into consideration several important factors such as replacing the gas canister.
- 6.4. The TAP was of the view that the installation of the insulation boards would constitute a minor proportion of the total EWI install, with render coats taking significantly longer.
- 6.5. The TAP noted that using the gas-powered gun will likely increase material costs, with the increasing material costs not offset by any savings from labour cost. They also introduce the need for disposal of discharged canisters which are classified as hazardous waste.
- 6.6. The TAP discussed the different types of fixing used in comparative tests and concluded the fixings were not like for like and therefore no assessment can be made on the extent of the improvement.
- 6.7. The TAP was of the view that evidence had not been provided which clearly demonstrated the fixings had equivalent performance to those within the certification. The evidence compared pull through tests for both types of fixings but not pull-out tests, and therefore did not demonstrate equivalent performance.
- 6.8. The TAP highlighted the lack of qualitative evidence to support the claim there is reduced disruption to the homeowner. This evidence could be feedback from studies, interviews and feedback from tenants' group to support this claim.
- 6.9. The TAP was of the view the evidence provided did not demonstrate an improvement in relation to installer health and safety
- 6.10. No Q&A was held for this application.



6.11. The TAP was of the view that the application did not demonstrate a reasonable explanation of an improvement over the comparable measure and should be rejected for a standard uplift.

7. Innovation measure application: Trianco ASHP

- 7.1. The application is for an ASHP with a built-in SIM with free-to-end-user data and free manufacturer diagnostic support for 10 years. 9 annual services are also provided. It uses an R290 refrigerant. The application is for a substantial uplift.
- 7.2. The TAP noted that the servicing period is shorter than previously approved IMs which has a 12-year manufacturer annual servicing package. The TAP outlined a risk associated with a shorter servicing obligation period including that faults are more likely to occur with the product as it ages.
- 7.3. The TAP agreed that the application included other features which were not included in the previously approved IM and therefore were of the opinion that this was not undercutting the approved measure. These additional features would also bring some benefits to the end-user, including remote monitoring capability and free SIM data. The other offerings were deemed sufficient to negate any disbenefits of having a shorter servicing period.
- 7.4. The TAP was concerned that there was a lack of clarity around what happens to the warranty if an annual service is missed due to exceptional circumstances. They were of the view that there should be a degree of flexibility in these circumstances so that a missed annual service would not void the warranty.
- 7.5. The TAP was satisfied with the approach taken to contact the end-user to book the service, including a notification on the in-home display, phone calls, and letters. They felt





that the in-home display could more clearly state that the service would be at no cost to encourage the end-user to book the service when necessary.

- 7.6. The TAP discussed service provision and were of the view that there was no industry standard for what must be covered in a service and that this would often be determined by the warranty underwriter for individual products. However, they were in agreement that the service must not have a broad range of exclusions.
- 7.7. In the Q&A, the TAP questioned whether the warranty would be invalidated where a service is missed due to exceptional circumstances, and whether there would be any leniency on this point. The representative stated that the in-home display would notify the end-user when a service was due and this message could only be removed during a service. They also noted that there was a 3-4 month leeway where a missed service would not impact the warranty. The representative stated that they would add the word 'free' to the servicing message to clarify when the end-user would not have to meet the cost of a service, to increase the likelihood of the service being carried out.
- 7.8. In the Q&A, the TAP questioned which items are included in the service. The representative gave a clear answer on what is included and noted the only exclusion is where biocides are required to be topped up. In this instance, the end-user would be required to meet the cost of the chemicals.
- 7.9. In the Q&A, the TAP questioned the financial mechanism for the manufacturer to ensure finance is in place to meet the costs of servicing for the 10-year period. The representative explained that a separate fund was in place which would only be realised each year to meet the costs. The TAP was satisfied with this answer.
- 7.10. In the Q&A, the TAP questioned how long the warranty could be extended for beyond the initial 10-year period. The representative explained that the typical lifetime of the heat



pump would be 20 years, and it was expected that the warranty could be extended yearly up to this point.

- 7.11. The TAP was of the view that the grace period should be longer for a missed service in circumstances where there is occupier churn, illness, or vacancy. They noted that there were numerous circumstances where an alert to book an annual service could be missed, including where English is not a first language, where the service date coincides with the end of the heating period, or where the occupier is hospitalised for a long period of time. The TAP was of the view that the representative was confident the annual service was rarely missed and therefore missing an annual service should be accommodated.
- 7.12. The TAP was of the view that the application demonstrated a substantial improvement over the comparable measure, and recommended approval for a 45% uplift subject to minor clarifications being addressed satisfactorily.

8. AOBs

8.1. The TAP noted that the transition from PAS2030/2035:2019 to PAS2030/2035:2023 finished at the end of March and that applications should be submitted with reference to the relevant standard. The Secretariat noted that the application form was in the process of being updated to reflect this change.

9. Date of next meeting

9.1. The next meeting of the TAP is scheduled for 30 April 2025. The dates of future TAP meetings are available on our <u>website</u>.