Minutes

Making a positive difference for energy consumers

Minutes of the ECO4 Innovation Technical Advisory Panel 13

From: Reuben Privett	Date: 30 April 2025 Time: 09:00 – 12:30	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

Hunter Danskin, DESNZ

Christopher Parfitt, DESNZ

Charlie Murphy, Ofgem

Eric Baster, Ofgem

Sidhartha Tibrewal, Ofgem

Andy Morrall, Ofgem

Reuben Privett (Chair), Ofgem

2. Introductory remarks by the Chair

2.1. The Chair welcomed all panel members and attendees to the meeting.

2.2. A panel member raised that it may be beneficial to have representatives from organisations involved in the standards mentioned in article 34(2)(e) attend the meeting to provide relevant input.

3. Innovation Measure Application: Grant ASHP

3.1. The application is for an ASHP that comes with remote monitoring and a data plan for 12-years, a 12-year parts-and-labour warranty and servicing plan. The ASHP uses either R32 or R290 refrigerant. The application is for a substantial uplift.

3.2. No issues were raised with the standards or comparable measure.

3.3. The TAP highlighted the need to understand why the alarm log was not checked during the annual servicing. They also required further clarification on whether operational support was provided to the customer and whether comfort settings were checked. This is

particularly important in circumstances where a high level of customer churn can be expected, and where customers may not be familiar with the operation of a heat pump.

3.4. The TAP acknowledged the potential for a positive environmental impact of remote monitoring if call outs were reduced by 80%, as highlighted in the application.

3.5. The TAP discussed the benefits of remote monitoring providing a proactive rather than reactive maintenance, enabling the measure to be remediated more quickly if issues occur.

3.6. The TAP agreed the application had several positive aspects including provision of a data SIM for 12 years, the evaporator anti-corrosion protection spray for heat pumps near the coast and the drain condensation check during servicing.

3.7. The TAP was of the view that the service provision was equivalent to what was provided on the previously approved innovation measure.

3.8. The TAP sought clarity on how communication would be made with the household, specifically on how the four attempts to contact the household to inform them annual servicing is due would be made.

3.9. The TAP was of the opinion that a reasonable length of time should be provided to give flexibility and ensure that an annual service is completed before the warranty is invalidated. They noted that it is feasible for people to be in hospital for an extended period and a property could sit vacant for longer than 6 months. Ideally, the warranty would not be invalidated where an annual service is missed for extenuating circumstances. The TAP recognised that if there is a robust approach to ensuring that the homeowner is informed of when a service is due including by sending a letter to the house, it is less likely that the service will be missed.

3.10. The TAP wanted to understand if it was possible to look at historic data to measure heating performance in periods of extreme cold weather when completing the annual service.

3.11. In the Q&A, the TAP questioned why the warranty indicated that Grant would only pay for 50% of the parts on any repairs required. The representative highlighted that this was not the case for an ASHP installed on the ECO scheme and that any warranty would include Grant covering 100% of the costs of any repair or replacement.

3.12. In the Q&A, the TAP asked for more detail on what happens once the initial 12-year free servicing and warranty period finishes, and whether the homeowner is able to extend this provision. The representative indicated that a £200 annual fee covers servicing from a Grant engineer and this would need to be renewed annually. When the system reaches the end of its service life, they will discuss installing a replacement heat pump with the household.

3.13. In the Q&A, the TAP raised two issues regarding the service plan. Firstly, they questioned why the service does not include checking the alarm log. The representative responded that the alarm log is constantly monitored, and any alarms can be dealt with in real time. Secondly, the TAP questioned if support would be provided to households to understand comfort settings. The representative responded that they are looking to make it as simple a process as possible for the household, such as deciding what time the heating should be on at and at what temperature. They will provide a handover document that provides simple instructions on how to use and live with a heat pump.

3.14. In the Q&A, the TAP questioned how the household would be notified that their annual service was due. The representative indicated there was no physical alert on the system and four attempts would be made to contact the household or the landlord of the property

by phone. The TAP noted they would like to see a letter sent to the property to ensure any new households would be aware of the servicing. The representative agreed that a letter would be sent to the household. They also stated that service engineers would visit the property in person as a last resort. The TAP also questioned whether not completing the service within the 6-month period would invalidate the warranty. The representative stated that any missed service would not invalidate the warranty.

3.15. In the Q&A, the TAP questioned if historic heat pump data could be recovered to analyse heat performance and household comfort over a longer period. The representative indicated that an SD card could be installed with every heat pump to provide this data. After the meeting, the TAP agreed that this should be required to enable servicing to function as effectively as possible.

3.16. The TAP was of the view that the application demonstrated a substantial improvement over the comparable measure, and recommended approval for a 45% uplift.

4. Innovation Measure Application: Soltherm Modulus External Wall Insulation (EWI)

4.1. The application is for an EWI system that utilises 3-D scanning and offsite manufactured componentry.

4.2. The Chair highlighted that a previous iteration of the product was approved as IM001 but due to significant material changes in the KIWA certificate a reapplication is necessary to assess whether a reasonable explanation of an improvement is demonstrated against the comparable measure.

4.3. The TAP highlighted issues regarding the comparable measure. They highlighted the product is compared to both the previous iteration of the product and brick slip EWI systems (rather than the standard EWI method using render). As a result, it was not possible to have meaningful direct comparison. They noted that a comparison against a rendered and textured solution would be more appropriate, given a standard brick slip system is uncommon in practice.

4.4. The TAP noted that a reasonable level of evidence has been provided when comparing this iteration of the product to the previous iteration. However, the evidence provided to compare against a standard EWI system is limited.

4.5. The TAP noted that the evidence provided did not incorporate time taken to organise the system on site and that this is likely to be a significant consideration when determining the total installation time.

4.6. The TAP noted that the installation process would still be affected by weather including during the installation of mineral wool. As a result, any benefits of installing in rain and cold conditions would be minimal.

4.7. The TAP noted that any benefits from 3D laser scanning, and use of computer design software needs to be evidenced more comprehensively. They highlighted that use of laser measuring tool is becoming increasingly more common in the market. Therefore, any potential time and material wastage savings need to be more clearly demonstrated for this measure. This should be compared to a textured render finish.

4.8. Equally, these time savings should include the impact of any breakages on site, or errors in the prefabrication which require a new piece to be constructed. Evidence should be provided to demonstrate the frequency that these errors occur. Equally, the evidence

provided related to installation on timber buildings rather than masonry which may have an effect on installation time.

4.9. The TAP discussed the 2-week training programme provided by Soltherm for installers. They agreed that EWI requires a high level of skill to install compliantly, and that using less skilled installers was not an inherent benefit.

4.10. The TAP noted a number of issues relating to the installation methodology. These include the use of combustible XPS insulation material at openings which could limit the application of the system, potential spot point thermal bridges for which evidence has not been provided to show there is no risk, and lack of detail around the treatment below the damp proof course.

4.11. The TAP was of the opinion that the application has some merit and they are supportive of applicants of previously approved measures returning with the evolution or improvement of a product. However, there was a lack of evidence to show an improvement over the comparable measure, including improvements relating to robustness once installed, and necessary detailing around windows and doors.

4.12. The TAP recommended the application should be rejected for a 25% uplift, but recommended that a future application could be made if the issues raised are addressed.

5. Innovation Measure Application: Trianco Sunamp ASHP

5.1. The application is for an ASHP which uses R290 refrigerant with a built-in SIM with free-to-end-user data and free manufacturer diagnostic support for 10 years. The heat pump is installed with an externally located Sunamp hot water heat battery which removes the

need for a water cylinder to be installed in the home. The application is for a substantial uplift.

5.2. The TAP agreed to review the application without consideration of whether the legislative requirements have been met with regard to the measure being an MCS certified product and agreed that this is a decision which must be made by Ofgem and consistently applied across all similar applications.

5.3. The TAP noted that some parts of the system would inevitably have to be situated indoors and may need to be checked in the event of a service. These may include expansion vessels, particulate filters, or the filling loop. The TAP noted that where ASHPs are installed outside the home, it is likely that this will be in a back garden and often access would need to be granted by the homeowner. The TAP highlighted that the servicing guide stated that a responsible adult must always be present in the property during servicing, which negated claims that this measure would be able to be installed without the homeowner present. Finally, the TAP was of the view that the in-home display would need to be disabled during servicing and it was not clear that this could be done without access to the home. The TAP noted that given these points, there was no improvement demonstrated in relation to ease of servicing by having the water provision equipment situated outside the home.

5.4. The TAP agreed that there was some benefit related to the installation of the heat battery outside the home, including that this would likely be less disruptive during the installation process. However, this reduced disruption may not be significant given the main flow and return from the heat battery will have to pass through the wall and therefore cause a different disruption to a conventional installation. Equally, it is unlikely that this would be installed in homes without a hot water tank, but which did have an existing hydronic heating system.

5.5. The TAP discussed whether there was an improvement demonstrated by the reduced extent of pipework required to be installed in the home. They noted that this is only really an improvement where an existing hydraulic system is being replaced, given there would be significant disruption caused by the installation of a wet heating system.

5.6. The TAP agreed that the removal of the water cylinder inside the home, with hot water services being provided from an outdoor unit, would have some value for the end user.

5.7. The TAP noted that given the weight of the Sunamp system, it cannot be suspended above the ground and therefore would only suit ground floor flats or where there is sufficient space on a balcony. They noted that there was a maximum pipe length of three metres and therefore it is not feasible for a ground mounted heat battery to be installed to serve a flat above the ground floor.

5.8. Equally, it was agreed that there is limited space on balconies, and this space is valuable for the homeowner. Therefore, relocating the heat battery to these spaces does not serve as an improvement. Installing an extra unit outdoors would also require additional planning considerations and this may reduce the chances of being installed in these situations. The TAP noted that the space required for the heat pump and water tank would still be relatively substantial outdoors considering the clearances which reduced the extent of this improvement.

5.9. The TAP noted the evidence provided in relation to heat losses only referred to installations where the heat battery was installed indoors, and this calculation does not include heat losses from internal and external pipework. As such, this evidence did not support the claimed improvement. They were concerned that the heat losses where the measure is installed outside together with lost 'gains' from an equivalent internal cylinder

may result in increased costs of heating when compared to an internal water tank. This may lead to increased overall costs of heating.

5.10. The TAP noted that the efficiency figure being cited was for a low flow temperature however the application was specific to high temperature heat pumps therefore it is unlikely that this operating temperature could be achieved in practice.

5.11. The TAP discussed the claims around the heat battery producing more hot water for its size compared to a regular system. They noted that the evidence provided showed that it was likely more hot water would be produced, but that this was not as much as claimed. Additionally, this information did not account for heat losses associated with the heat battery being installed outside.

5.12. The TAP accepted that there was a lower risk of legionella given the lack of stored water, which may mean that the heat battery and heat pump can be run at lower temperatures. If this offsets increased heat loss externally, the applicant should provide evidence of this.

5.13. The TAP was of the view that the smaller size may enable the installation of heat pumps in homes with less space, where this was installed inside.

5.14. The TAP was of the view that there may be instances where a hot water tank is no longer present in a home and the installation of a tank would cause significant disruption. The installation of a heat battery outside the home would likely make it possible to install heat pumps in homes where there had previously been resistance.

5.15. The TAP noted that the application also included the functionality included in the previously approved IM028, such as remote monitoring for 10-years, an extended warranty, and data provision. They noted that the previous application was approved as a

standard innovation measure and that this application would be scored consistently with that application.

5.16. The TAP was of the view that the application did not demonstrate a substantial improvement over the comparable measure. However, they were in consensus that the application has potential for an improvement over the comparable measure, subject to adequate responses being provided to clarifications. They noted that this was subject to an Ofgem decision on whether the legislative requirements have been met by the measure under application.

6. AOBs

6.1. The TAP commented that the applications which have been passed to them on this occasion have tended to contain more of the relevant information that is necessary for them to come to a recommendation on each application.

7. Date of next meeting

7.1. The next meeting of the TAP is scheduled for 9 July 2025. The dates of future TAP meetings are available on our website.