

Minutes of the ECO Innovation Technical Advisory Panel

From: Roisin Curran

Date: 08 September 2020

Time: 9:00am

Location: Conference call

The technical advisory panel (TAP) has been set up to review ECO demonstration and innovation 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 certain ECO 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.

Present

David Glew, Leeds Beckett University

Jason Palmer, Cambridge Energy

Neil Cutland, Cutland Consulting Ltd

Hunter Danskin, BEIS

Eric Baster (Chair), Ofgem

Andy Morrall, Ofgem

Roisin Curran (Secretariat), Ofgem

Introductory remarks by the Chair

The Chair welcomed all panel members to the meeting. Kate Fielding and Kay Popoola sent their apologies.

1. Innovation Measure Application: ArtBrick

- 1.1. The application relates to an EWI system paired with a brick effect render.
- 1.2. The panel were made aware of an on-line article, which has since been amended, stating that the product had previously been delivered under ECO. It was therefore unclear whether ArtBrick was materially different to brick effect renders applied to EWI measures previously delivered under ECO.
- 1.3. The panel considered whether the aesthetic aspect of the product may increase uptake of EWI measures, and considered this to be the main improvement of the product. The panel questioned whether the appearance of a product would meet the criteria of an improvement under ECO3, and deferred to Ofgem for a policy decision.
- 1.4. One panel member requested clarification on how the application of the product would impact standard EWI maintenance such as replacement of silicone seals, and if the product would have to be removed and reapplied in such instances.
- 1.5. The panel noted the lifetime of the product stated in the product certificate is considerably less than the 36-year lifetime of EWI measures in ECO, and would require further information as to how the product would achieve the lifetime of the existing measure.
- 1.6. The panel were undecided if the products in the application could be considered a 'system' as they are separate products, and are applied independently of each other. However, the panel were sympathetic to the difficulties in the product becoming an integral part of a system. The panel referred to Ofgem for a policy decision on this aspect.
- 1.7. One panel member noted that only the safety aspects of the render had been detailed in the application, and felt that if the applicant wished to consider the product as part of a system, the responses should consider the system as a whole.

- 1.8. The panel agreed the product may have a positive impact on those vulnerable to the effects of the cold, as if the aesthetics increased uptake of EWI measures it would increase savings on a national level.
- 1.9. The panel noted the critical issue of whether the product had been applied to previous EWI measures under ECO, and the policy considerations for whether it qualifies as a system, and meets the improvement criteria for innovation measures. If these were found by Ofgem to be satisfied, the panel recommended the application is approved subject to clarifications on the impact of EWI maintenance on the brick effect render, and comparative lifetimes of the products.

2. Demonstration Action Application: HydroMX

- 2.1. The application relates to a fluid for central heating systems, which contains Nano technology aimed at increasing the rate of heat transfer. An application was previously made for the May TAP, and was rejected with merit in a fresh application once the product had concluded the current testing for inclusion in SAP Appendix Q. The applicant has since informed Ofgem they will not be conducting any tests on the product.
- 2.2. The panel again agreed the product was materially different to those currently delivered under ECO as part of boiler installations, and is at TRL9 as it is currently deployed on the market.
- 2.3. The panel did not agree the product is reasonably expected to achieve cost savings, or that the estimated cost saving was reasonable. The additional evidence provided was not considered sufficiently robust to give the panel members a reasonable expectation that a cost saving could be achieved. One panel member noted the data from one of the studies suggested the product actually reduced the heat output and efficiency of the boiler. Another panel member noted the studies seemed to contradict some of the additional claims made by the applicant such as increased specific heat capacity and faster cooling rate. The explanation of how the product was capable of achieving cost savings contained a number of assumptions which were not clearly explained, and the panel remained unconvinced of the products ability to achieve cost savings.

- 2.4. The panel did not assess the monitoring methodology and project costs in detail, however it was noted the project costs, in particular the cost of the product, was quite high and did not represent value for money.
- 2.5. The panel were also unable to comment on the suitability of the proposed sample size due to the expectation that the product would not achieve cost savings.
- 2.6. One panel member noted that mains-pressure central heating systems inevitably leak over time, and the impact of small top ups to the system with normal water were unclear.
- 2.7. The panel agreed there is a risk the product would have a negative impact on fuel poverty and those vulnerable to the effects of the cold due to the high product cost, and potential reduction in heat output and comfort for the householder.
- 2.8. The panel recommended the application is rejected absolutely¹.

3. Demonstration Action Application: Magnatech

- 3.1. The application relates to a magnetic device attached to the fuel intake of a boiler, which claims to alter the composition of the fuel and reduce consumption.
- 3.2. The panel agreed the product was materially different to those currently delivered under ECO, and is at TRL9 as it is currently deployed on the market.
- 3.3. The panel did not agree the product is reasonably expected to achieve cost savings, or that the estimated cost saving was reasonable. The evidence provided was either not relevant to the product operation, or not considered sufficiently robust to assure the panel members a cost saving could be achieved. One panel member questioned why the MSc student reports were stated as available upon request, rather than being submitted with the application.
- 3.4. The panel did not assess the monitoring methodology or project costs in detail, however, commented that potential data protection issues may not have been fully

¹ Further representations were received following the conclusion of the TAP meeting in relation to the Hydromx application. The recommendation of the panel was challenged in those further representations.

considered. It was also noted the panel felt the cost of the product did not represent value for money.

- 3.5. The panel were unable to comment on the suitability of the proposed sample size due to the expectation that the product would not achieve cost savings.
- 3.6. The panel agreed the product would have no impact on fuel poverty and those vulnerable to the effects of the cold, as there is no indication that the product can achieve cost savings.
- 3.7. The panel recommended the application is rejected absolutely.

4. Demonstration Action Amendment Applications

- 4.1. Two amendment applications for previously approved demonstration actions were re-submitted for a second time, and reviewed by the panel.
- 4.2. The re-submitted amendment to the Schneider DA contained greater detail, which was somewhat helpful in understanding the current status of the project. Some important aspects were still unclear, particularly in relation to the variables introduced by the proposed amendment, consideration of the impact these would have on the data, and how this would be addressed. The panel were also uncomfortable with the imperfect matching of the paired dwellings, the proposed manipulation of the data and imputation to determine a cost saving.
- 4.3. The panel were not confident that a reliable result could be obtained from the proposed amendment to the methodology, because of imperfect matched pairs, and considerable variations in the number of TRVs (especially TRVs that are suitable for iTRVs), which will obfuscate, or even contaminate, the results. The panel noted that monitoring with and without the device installed in the same property, may help to eliminate or reduce some of the variables.
- 4.4. Overall, the panel seeks reassurance on how the project team will produce meaningful, robust and useful results from the proposed dataset. The panel agreed to review a final alternative proposition from the applicant, and urged the applicant to consider, and fully detail how useful conclusions would be drawn from the data collected.

- 4.5. The second amendment application, for the Airex DA, provided a draft report of the data collected in order to support the retrospective amendment request, and demonstrate that robust and meaningful results were obtained. The report was strong in some areas but not sufficiently detailed for the panel to provide a recommendation at this time.

5. Date of next meeting

- 5.1. The next meeting of the TAP is on Tuesday 24 November 2020 via conference call.