

Report

May 2015

Peer Review of Recycle and Reward Pilots Monitoring Report

Peer review statement



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1 Peer Review Statement

1.1 Introduction

During 2013, Zero Waste Scotland funded eight Recycle and Reward pilot projects at 12 locations across Scotland. A study was subsequently commissioned by Zero Waste Scotland to undertake Monitoring and Evaluation of the pilots¹, resulting in the publication of an Overview Report and (8) supporting Trial Reports. This work was carried out by SKM Enviros, working in partnership with Nicki Souter Associates.

In order to provide independent verification of the Monitoring and Evaluation approach and findings, Zero Waste Scotland commissioned AMEC to undertake a peer review of the reported outputs. The review was focused on the Overview Report, whilst taking account of the detail contained in four of the Trial Reports². The aim of the peer review was to consider whether, within the practical constraints introduced by real world trials, the approach taken to monitor and evaluate the trials was appropriate. It was also intended to assess whether the conclusions drawn are proportionate to the learning opportunities presented by the trial model adopted.

1.2 Review Findings

The monitoring and reporting of the trial projects is generally considered to be appropriate, given the operational constraints imposed and associated need to be flexible to emerging site-specific challenges and scheme usage levels. The Overview Report is considered to do a good job of demonstrating that an appropriate range of 'success measures' have been considered, incorporating the monitoring of 'hard' quantitative data around waste and recycling at the sites (Strand A) and social research elements including user observation and interview (Strand B). The report draws out the salient results, observations and appropriate caveats, without descending into a level of detail that would make the document onerous to read. The inclusion of the Methodology overview table usefully provides a summary of the range of data sought across all of the trials.

A key conclusion from the peer review is that there exist significant challenges to undertaking robust and consistent Monitoring and Evaluation of trials carried out in real world environments. Projects of this nature are constrained by budgets and deadlines, but the need to engage and achieve buy-in from multiple stakeholders can commonly result in active trial periods being shortened or delivery approaches being revised. It is not practical to exert full control over the influencing variables affecting uptake or to expect to be able to generate a reliable baseline waste profile (due to underlying limitations in waste data quality). The trials covered a diverse range of operating environments, including large retail outlets attracting 'one-off' and infrequent customer visits, higher education establishments with transient, term-based populations and short-lived festival environments. Hence educating potential users of such schemes, embedding correct usage, and monitoring uptake / materials diversion is not straightforward. A number of these issues are covered in greater detail within the bulleted observations below:

- The wide range of trial hosts and reward mechanisms adopted across the pilot projects makes consistent, comparable monitoring and evaluation challenging. As such, it is not appropriate to draw wider conclusions from across the trials in all cases. The report remains focused on the facts of the trials and does not venture into providing wider commentary on Deposit Return schemes, which is considered appropriate given the cited data limitations;
- The backdrop of limited reporting of site-specific waste and recycling data is a common challenge for trials such as this, making it difficult to reliably draw conclusions around the diversion effect of

¹ DEP 001: Monitoring and Evaluation of Deposit Return and Reverse Vending Trials in Scotland

² Covering trials carried out with Glasgow Caledonian University, Heriot Watt University, HebCelt Festival and South Ayrshire (Marr) College

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Recycling and Reward schemes. Individual material streams are rarely weighed at the point of collection and compositional analysis data commonly only exists at a sector (rather than outlet) level. It is thus more likely to be possible to ascertain the weight of the returned items through application of unit weights than to undertake any direct calculations with respect to reductions in weight of other streams collected on site. In general, owing to the low bulk density of the items targeted through the trials and the backdrop of limited total waste arisings data, it is not possible to draw meaningful conclusions on diversion levels on a weight basis. The report appropriately does not seek to do this;

- Many trial sites are not 'closed' systems, meaning items are brought into the study area from outside (that were not purchased on site) and equally may be recycled or disposed of outside the monitored system. Similarly, it is not possible to accurately define the target population of potential users. It is therefore reasonable for the monitoring and reporting of the trial projects to state that it is not feasible to quantify external inputs / losses and population-based uptake levels;
- Through the combination of the overview and the case study reports it appears that appropriate caveats affecting the results have been identified. Where risks have been identified with the data, it is evident that efforts were made to address these, e.g. on HebCelt sample weights of real containers were made to ensure the effect of residual traces of liquids was taken account of in the calculations. Some of these responses were more successful than others, for example the visual inspections and waste composition analyses undertaken on the university sites were less useful overall due to limited sample sizes and the range of external factors affecting the results. It is only by reading the case study reports that some of this detail becomes evident but overall it is felt that an appropriate balance has been struck in the reported outputs;
- The formal monitoring period covered by the trials (from May through to September) meant that the university trial results were not fully representative of normal student usage levels. As such it is useful that Zero Waste Scotland extended its own monitoring of these trials into the autumn term, which in the case of the Heriot Watt trial identified sustained increased usage levels. Future monitoring of such schemes should take account of these patterns in order to provide a representative indication of results across the whole academic year. Where it is not possible to provide monitoring over sufficient periods, it may be advisable to identify alternative trial hosts; and
- It is considered appropriate to seek a 'blended' set of conclusions that combines the findings of the Strand A and Strand B Monitoring and Evaluation activities, rather than relying on them in isolation. The Strand B results come from intense periods of survey or observation over shortened timeframes, typically towards the end of the trial. Hence they cannot be considered to reflect the time-based changes that are apparent in a number of the trials (especially those at educational establishments).

It is felt by AMEC that the Overview Report does a good job of presenting a balanced perspective on the challenges associated with evaluating the success of the trials, and the impact on the monitored data. Whilst some of the monitoring was insufficient to generate reliable data, there is evidence that the contractors sought to address data gaps through alternative means. Given the level of variability in the gathered evidence from the trials and issues with data quality, it is considered appropriate that the conclusions drawn are presented as theme-based observations rather than direct recommendations.

At the outset of future pilot projects involving practical trials of this nature, the challenges experienced here and on previous projects delivered by the peer review team perhaps justifies more time being spent upfront considering how the relative reliability of the output data will be measured and reported. This could enable greater confidence to be assigned to conclusions where it has been possible to undertake quantitative analysis on the more reliable data.

2 Zero Waste Scotland comment on subsequent updates to reports

This peer review was concluded in May 2014. At this stage in the project the vast majority of trial data collection and analysis was complete, and near final drafts of the report and case studies were available for review.

Since completion of the peer review, minor amendments on points of detail have been added to some case study reports, and there have also been minor updates for clarity. These have not been resubmitted for peer review, as they have no bearing on the overarching conclusions and commentary above.



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