

North Lanarkshire Council Report

Environment and Transportation

approval noting

Ref AM/LON

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Smart Waste Monitoring Project

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Executive Summary

The report provides Committee with details on a proposal for a potential partnership with Zero Waste Scotland for a Smart Waste Monitoring Project.

Recommendations

It is recommended that Committee:

1. Approves the introduction of the Smart Waste Monitoring Project.

The Plan for North Lanarkshire

Priority Improve the health and wellbeing of our communities

Ambition statement (17) Ensure we keep our environment clean, safe, and attractive

1. Background

- 1.1 Household behaviour change is key to Scotland's waste targets. To push recycling rates to 60% or higher will require new approaches, and better insight into individual household performance is an essential component of how we achieve that.
- 1.2 Zero Waste Scotland (ZWS) proposes to work in partnership with North Lanarkshire Council to trial the use of "smart" technologies that measure how much waste individual households recycle and dispose of, providing data to test interventions that improve recycling rates.

2. Report

- 2.1 The proposed trial will monitor performance across approximately 5,000 households to measure individual household participation in recycling and test the success of different interventions with householders.
- 2.2 Radio-frequency identification (RFID) tags will be installed on wheeled bins of the 5,000 properties, providing information from individual bins. Vehicle weighing technology will be installed on 3 vehicles to monitor the weight on the residual, dual stream recycling and mixed food and garden waste wheeled bins.
- 2.3 Whilst the trial does not measure contamination, the data will provide levels of recycling participation against residual waste disposal which will be collected at household level. Key to the project will be to determine which campaigns and interventions work best to reduce the levels of residual waste and increase recycling.
- 2.4 It is anticipated that the project will take approximately 2 years from start to finish. The procurement and installation of weighing equipment and RFID chips, subsequent testing and controlled data collection, would take place in year one. Year two would focus on intervention testing and the difference that this makes on the base data collected during year one. Data will be studied looking at broad patterns across areas providing information on how much participation varies across areas and how much waste varies following specific intervention methods and targeted messaging. Unique references will be issued to each property, but no personal data will be gathered.
- 2.5 There will be a joint approach to communications, both internal and external, led and funded by ZWS. The communications strategy will be developed to inform key stakeholders, including elected members, householders and staff, before, during and after the trial. This will include frequently asked questions and engagement with householders allowing them to highlight any concerns and allow the service to provide advice and reassurance on how the data will be processed. Details of the exact areas which will be covered by the trial have still to be determined following discussions with ZWS. Once these have been established, those elected members whose wards are to be included will be notified and further information provided.
- 2.6 This is a collaborative project and there is no financial support required from the service. Waste Solutions will provide 'in-kind' support from appropriate staff within the service. There will be no disruption to routes, collection frequency and material type will not change.
- 2.7 In terms of its own commitment, ZWS will deliver funding of around £150K which will cover:

- Dedicated technical support, including development of a project plan, input to procurement of equipment and analysis of data.
- Grant funding to cover the purchase and installation of weighing technology including RFID chips - including installation in bins and additional replacement bins where bins are not compatible with RFID tags, vehicle weighing equipment, replacement vehicle hire and associated software.
- Funding of a dedicated project support role for 12 months.

2.8 Details of the progress of this initiative along with a copy of the final outcomes of the full trial will be provided to future Committees.

3. Equality and Diversity

3.1 Fairer Scotland Duty

3.1.1 There are no implications from this report.

3.2 Equality Impact Assessment

3.2.1 There are no implications from this report.

4. Implications

4.1 Financial Impact

4.1.1 There will be no financial impact on the Council as the costs of the project are being met by Zero Waste Scotland.

4.2 HR/Policy/Legislative Impact

4.2.1 No significant impacts.

4.3 Environmental Impact

4.3.1 The ZWS trial will provide better insight into individual household performance and evaluate the most effective measures to improve recycling.

4.4 Risk Impact

4.4.1 No significant risks have been identified.

5. Measures of success

5.1 Implementation of intervention strategies to divert recycle from residual waste bins.



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