FoodPath – Investigating Behavioural Interventions to Reduce Food Waste in Irish Households

Authors: Authors: Colum Gibson, Eileen Mitchell, Keelin Tobin, Alberto Longo, Sarah O'Connor and Elizabeth Gold

Lead organisations: The Clean Technology Centre, MTU Cork and Queen's University Belfast

Identifying pressures

Food waste is a global issue with significant economic, social and environmental impacts. An estimated one-third of food produced globally is lost or wasted, with an estimated contribution of 8–10% of global greenhouse gas emissions. United Nations Sustainable Development Goal (SDG) 12.3 has a specific target of a 50% reduction in food waste generated at the retail and consumer levels by 2030. As a signatory to the SDGs, Ireland is taking steps to reach this goal through the government's Climate Action Plan, the Waste Action Plan for a Circular Economy and, more recently, the establishment of the National Food Waste Prevention Roadmap. Recent EPA estimates suggest that Ireland generated approximately 750,000 tonnes of food waste in 2022, with 29% of this originating from households.

Informing policy

Household food waste generation is influenced by several socio-economic factors, behaviours and attitudes. Consequently, preventing food waste is multifaceted, nuanced and complex. Behaviour change interventions represent one way to address the issue; however, the findings from this research suggest a need to apply behavioural interventions designed to facilitate the implementation and development

of food waste reduction policy. The FoodPath research team built upon the extensive work carried out under the EPA's Stop Food

Waste programme over the past decade and identified and implemented food waste prevention interventions based on best practices

to encourage changes in consumer behaviour. The FoodPath interventions were analysed and evaluated to measure their impact on household food waste generation. The findings informed recommendations on facilitating behaviour change, providing pathways to achieve large-scale reductions in food waste volumes at the household level.

Developing solutions

This research investigated current state-of-the-art methodologies, at both national and international levels, to assess consumer behaviour change approaches and, more specifically, how these apply to food waste prevention. This review, coupled with

interviews conducted with national and international practitioners, informed the development of two intervention models.

Intervention A was designed to empower individuals to prevent and reduce food waste at the household level using tools, nudges and targeted messaging via their local waste collector. Intervention B took a broader approach and targeted the changing of social norms through community engagement via local stakeholders. The outcomes from intervention A suggest that it may be a viable and cost-efficient model for reducing household food waste. The quantitative results for intervention B show that it was not as successful. Nonetheless, the current extent of interest in community-led food waste initiatives suggests that this approach should be viewed as an important precursor, which, when coupled with other national awareness-raising campaigns, could amplify the impacts associated with the targeted approach developed in intervention A.