

Rediscovery Centre response to draft Food Waste Prevention Roadmap 2022

Overview

The Rediscovery Centre welcomes the opportunity to engage with the Department of Environment, Climate, and Communications in relation to the development of Ireland's National Food Waste Prevention Roadmap. This is an important area of policy action and the broad aims of this roadmap align strongly with the Rediscovery Centre's goal of supporting the development of the Circular Economy in Ireland.

Our submission to this consultation is informed firstly, by our in-house desk based review of existing policy and research literature including briefing papers published by the leadership group on food waste in the European Circular Economy Stakeholder Platform, where the Rediscovery Centre sits on the coordination group, as well as recent Waste and Resources Action Programme (WRAP) research.

Secondly, in collaboration with the EPA, the Rediscovery Centre ran an event entitled *Circular Economy Conversations: Fighting Food Waste* on the 15th of March 2022. This event was attended by more than 60 stakeholders from across Irish society with input from the EPA, Department of Environment, Climate and Communications, Green Earth Organics (a primary producer), FoodSpace chef Conor Spacey, and FoodCloud. As well as raising awareness about food waste prevention, this event allowed us to gather a range of concerns and potential solutions pertaining to food waste from across the food supply chain. These concerns are reflected in this submission and provided in full in the attached Miro board.

1. Do you think the approach as outlined in the draft roadmap will deliver the reductions necessary to reduce Ireland's food waste by 50% by 2030?

As the first roadmap to be drafted following publication of the Whole of Government Circular Economy Strategy, this draft consultation sets a very important precedent for future sectoral Circular Economy Roadmaps.

The draft roadmap aims to deliver on the important priority waste prevention target, reducing food waste by 50% by 2030. However, as with any policy initiative, the effectiveness of the roadmap depends on its implementation. In this case, the ability of the roadmap to deliver the necessary reductions to Ireland's food waste cannot be assessed given the lack of detail in a number of important areas, including:

- Overall and sectoral interim targets;
- Effort sharing between sectors;
- Definition and timeframe of required actions;
- Attribution of responsibility; and,
- Availability of funding and resources.

The remainder of our submission highlights areas that require further elaboration in a revised draft of the roadmap. We also wish to highlight the opportunity to use the proposed roadmap to advance

social equity through retraining and the distribution of costs and benefits between producers, retailers, processors, and consumers.

1.1 Objectives, responsibilities and requirements

RECOMMENDATION: The roadmap should provide a clear indication of objectives, responsibilities, and requirements in terms of food waste measurement and reporting.

As stated in the draft roadmap, in order to compile a more accurate picture of where food waste is occurring and the most effective remedial actions that should be taken, strong measurement and reporting requirements are needed. For instance, the draft states that “a national system for food waste data measurement, collection, and validation ... [will be developed] ... for the purpose of updating on progress made in reducing food waste and reporting on Ireland’s official statistics on food waste”. The draft also notes that there is no data available in relation to food waste in primary production, while data is unreliable in the area of manufacturing and processing.

The roadmap must identify clear actions through which to improve this situation. In the current draft, measurement and reporting are presented as an aspiration or voluntary action rather than a requirement across all sectors of the food supply chain. For instance, the draft states “every sector in the food supply chain *should* pursue food waste monitoring and reporting as part of their operations” (emphasis ours) and identifies requirements as part of quality assurance schemes in the horticulture sector and the Food Waste Charter.

RECOMMENDATION: The roadmap should clearly identify

- A timeline for making methodologies available to stakeholders;
- The stakeholders responsible for measuring and reporting food waste or a timeline for establishing such responsibility; and,
- The level of funding and support that will be made available for the purpose of rolling out a measuring and reporting methodology.

A sustainable textile roadmap developed by the UK charity WRAP provides an example of what such a timeline could look like¹. It also identifies stakeholder roles in this process. This model could be used to inform the Food Waste Prevention Roadmap.

1.2 Measuring and reporting

RECOMMENDATION: Urgent measures are needed in relation to establishing and improving measuring and reporting methods in the food production, manufacturing, and processing sectors.

Where data exists in these sectors, there is considerable uncertainty. For instance, the EPA estimates that food waste occurring in this area of the economy ranges from between 400,000 and 700,000 tonnes. No data is currently available for food waste at a primary production stage. We welcome the EPA’s intention to release such data during 2022, as well as the EPA’s commitment to developing a methodology to increase the accuracy of food waste measurement and reporting². Nonetheless, the roadmap should highlight that these sectors will be attended to as a matter of urgency. This may involve developing adapted measuring and reporting methods for sub-sectors (e.g. particular farm

¹ See <https://wrap.org.uk/sites/default/files/2021-04/Textiles%202030%20Circularity%20Roadmap.pdf>

² <https://www.epa.ie/publications/circular-economy/resources/NWPP-Food-Waste-Report.pdf>

types or processing facilities). The roadmap should also identify the resources, training, and infrastructure needed to roll out such measuring and reporting systems.

1.3 Detail on timeframes and implementation

RECOMMENDATION: The roadmap should clearly indicate how all interim targets and actions will be structured in terms of timing, scale of implementation, and distribution of effort between sectors.

The draft roadmap includes the goal of reducing food waste by 50% by 2030 and states “we will set interim targets following the establishment of the baseline, and these will take account of developments at EU level”.

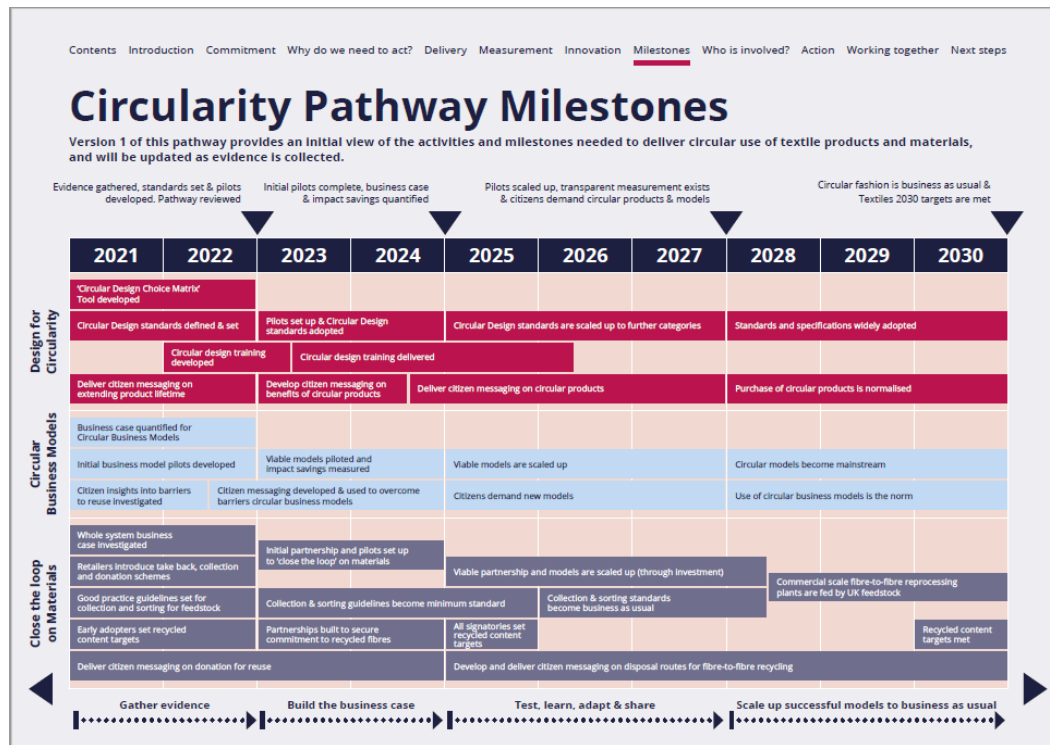
RECOMMENDATION: The roadmap should include significantly more detail on how interim targets and measures will be structured in terms of,

- What those targets will be, and/or how the baseline will be used to inform targets;
- When targets will be achieved (e.g. 25% by 2025);
- How the cost will be distributed throughout the food supply chain. For example, will actions be evenly distributed across sectors in accordance with relative contributions to national food waste? Or will efforts focus on certain areas where food waste prevention may be more readily achieved?
- How will all other measures within the roadmap be rolled out and aligned to support realisation of these targets?

A sustainable textile roadmap developed by WRAP provides an example of what such an indicative plan should look like. The image below shows how all targets and actions will be implemented in a time-bound manner³. The linked document details dates, numerical targets, and responsibilities for reducing the greenhouse gas and water footprints of textile production by 2030⁴.

³ Source *ibid.*

⁴ See *ibid.*



1.4 Education, (re)training, and job creation

Almost every job will be impacted by circular economy strategies, principles and practices in the coming decade, which will require reskilling as well as formal and informal education at all levels and in all industries. Circular economy skills will be required across all sectors and types of businesses.

RECOMMENDATION: A plan for supporting education on food waste prevention at all levels, in addition to awareness raising, should be included as part of the roadmap.

The study carried out by Oxfam Ireland and Trócaire on developing a more sustainable food system includes a host of recommendations that are relevant in this regard⁵.

Awareness of food waste prevention issues is growing thanks to programmes like Stop Food Waste and other work, though in many cases specific skills (like chef training, or household cooking and preserving skills) are required to bring awareness into action. There is an urgent need for education around food waste and food supply chains in society as a whole. As highlighted by CRNI, community based organisations are well placed to deliver education in this area due to their role in engaging with the public on a regular basis and deep understanding of their current level of knowledge.

1.5 A circular and holistic approach

It is clear that food waste is intrinsically linked to our food system and to be effective in addressing this, a systemic approach is needed. This is described by the leadership group on food waste in the European Circular Economy Stakeholder Platform (ECESP) in a recent briefing paper⁶, which aligns the three principles of the circular economy (eliminate, circulate, regenerate) with the food system to

⁵ <https://www.trocaire.org/documents/sustainable-food-systems/>

⁶See

https://circulareconomy.europa.eu/platform/sites/default/files/leadership_group_on_food_waste_food_systems_and_the_bioeconomy_2021_reflection_paper.pdf

show how food waste prevention measures can build biodiversity, help with emissions reduction, provide economic opportunities and enhance resilience for people and the planet. This includes:

- Eliminating waste in the food industry (which would reduce annual emissions by 1.4 billion tonnes by 2050)
- Circulating food byproducts and upcycling them into new high-value ingredients to open up new opportunities while decreasing pressure on natural systems
- Regenerating nature by producing soil-based foods and selecting integrated crops and livestock can reduce GHG emissions and sequester CO₂ in soils and plant matter: switching to regenerative food production globally would reduce emissions by 3.9 billion tonnes of CO₂ equivalent per year by 2050

RECOMMENDATION: In line with recommendations from the ECESP leadership group, the roadmap should adopt a more circular and holistic approach, acknowledging and aligning with policies on sustainable agriculture and the bioeconomy.

A number of case studies illustrating the role of the bioeconomy in maximising the value of residues and byproducts at different stages of the supply chain is provided in the ECESP leadership group briefing paper.

2. What additional actions do you think would be effective in helping Ireland reduce its food waste faster?

2.1 Collaboration between different stakeholders

We believe that there is significant potential to develop effective solutions to current food waste challenges by bringing different stakeholders together in a collaborative capacity. The value of collaboration was a recurring theme during the stakeholder event *Circular Economy Conversations: Fighting Food Waste* as was the role of every stakeholder in tackling food waste. This is also a key theme of the draft roadmap.

RECOMMENDATION: The roadmap needs to outline the measures that will foster and strengthen collaboration from a practical perspective.

The ECESP leadership group on food waste briefing paper 2021⁷ provides a number of excellent examples of collaboration tackling food waste that could be drawn upon in developing the roadmap. The City of Milan's food policy has involved collaboration between stakeholders including public authorities, municipal agencies, private companies, cities and third-sector organisations. In its first year (2019) the initiative saved 660 tonnes of food (equivalent to €4,100,000) and has since won the first ever Earthshot award.

RECOMMENDATION: The roadmap should include support for circular cities initiatives that can influence the way in which food is grown, consumed and disposed of.

⁷ Ibid

More locally, in the Irish agricultural sector EIP-AGRI⁸ has been a very positive initiative in terms of fostering engagement and collaboration between different stakeholders, as well as developing and implementing pilot projects for the purpose of trialling potential solutions to agricultural sustainability. Moreover, and similar to the example from Milan, EIP-AGRI has demonstrated the value of developing context specific solutions. This could serve as a valuable model for developing greater collaboration in the area of food waste prevention. Such an approach could help challenges in specific localities, specific parts of the food supply chain, or indeed across different parts of the supply chain.

2.2 Production measures

According to a recent article in the Irish Times⁹ quoting the Irish Farmers Association (IFA), the number of field growers of vegetables has fallen from 400 to 100 in the last 20 years, due to the ever lower prices offered by retailers. This and other factors in the current system lead to unnecessarily long supply chains with associated food loss and waste, as well as overproduction and cosmetic out-grading of perfectly edible food due to shape, size or colour variances. While some of this can be overcome through awareness raising (see below), the rest relates to systemic issues that require policy measures or regulation. Many of these issues also contribute to food security issues which have come under the spotlight recently as the war in Europe impacts on food supply chains.

Specific recommendations for tackling issues in relation to production losses and waste were made during the stakeholder event *Circular Economy Conversations: Fighting Food Waste* and we propose these should be included in the roadmap.

RECOMMENDATION: The roadmap should include measures that provide greater support for domestic horticulture providing local and seasonal produce and address below-cost retail prices

A large scale study undertaken by researchers at University College Cork (UCC) found that consumers who shop based on impulse and special offers tend to generate more food waste at a household level¹⁰. For these reasons, the roadmap should aim to disincentivise below cost selling and restrict the markup of smaller or loose portions.

The Sustainable Food Systems study prepared by Oxfam Ireland and Trócaire that enhancing horticultural production in Ireland is key to reducing reliance on imports for certain products as well as shortening supply chains¹¹. These measures provide double benefits of helping to reduce food waste throughout the supply chain, as well aligning with the EU-level Farm to Fork strategy. Another briefing paper¹² from 2020 by the leadership group on food waste in the ECESP, provided similar recommendations at production level. For example, to support domestic horticulture it recommends facilitating more direct sales and improving farmer access to information so that they may more readily respond to market demands.

This point also relates to a broader point regarding the lack of flow of information and data along the supply chain. This is elaborated upon further in section 2.3. The overarching point is that there is a

⁸ See <https://www.nationalruralnetwork.ie/eip-agri/>

⁹ Hegarty, R., *Can Ireland Feed Itself?* Irish Times Weekend Review 12 Mar 2022

¹⁰

<https://www.independent.ie/business/personal-finance/food-study-finds-pay-more-waste-less-approach-could-add-up-to-smarter-shopping-habits-41067308.html>

¹¹ <https://www.trocaire.org/documents/sustainable-food-systems/>

¹² See <https://circulareconomy.europa.eu/platform/sites/default/files/leadership-group-food-waste.pdf>

need to better align production with consumer demand so that overproduction does not occur. Additional research may be needed on potential transfer of forecasting data between retailers and producers, and/or establishing collaboration along the supply chain to tackle this issue.

2.3 Retail and distribution measures

Key recommendations raised during the stakeholder event *Circular Economy Conversations: Fighting Food Waste* in relation to retail and distribution are set out below and we propose these should be included in the roadmap.

RECOMMENDATION: Measures should be introduced to disincentivise the over purchasing of products.

Research by O’Neill et al.¹³ found that consumers engaged in shorter supply chain, for instance via Community Supported Agriculture, tended to generate less food waste. Targeted supports for short food supply chain activities should therefore be considered.

WRAP’s *Reducing household food waste and plastic packaging* report contains ground-breaking research into the relationship between plastic packaging and frequently wasted fresh produce. This shows that enhanced selling key produce loose (apples, bananas, potatoes) could reduce household food waste by 60,000 tonnes per year in the UK. While acknowledging that retailers already sell some of these items loose currently, significantly greater effort is recommended and “*solutions ... need to be found to reconfigure supply chains and store operations, and to make it easy and convenient for people to buy loose produce*”.

RECOMMENDATION: Measures should be introduced to support a relaxation of retailer specifications which can otherwise lead to cosmetic out-grading of fresh produce

RECOMMENDATION: Measures are needed to address perverse incentives in licensing agreements between producers and retailers that can drive overproduction

RECOMMENDATION: The roadmap should support data sharing between actors along the food supply chain to enable actors to better evaluate the demand for food products.

While retailers obviously gauge demand through sales, such information is not always available to all actors along the food supply chain. In addition, there is a time lag between production decisions, e.g. planting, and consumption. As such, research and methods for developing closer links between farmers and retailers for the specific purpose of sharing data, information, and forecasting should be supported. This point further underscores the potential value of shorter supply chains to play an important role in reducing food waste as information may disseminate more readily between different actors.

This could complement a review of labelling in relation to best before dates, described further below.

RECOMMENDATION: The roadmap should require the removal of date labels, especially best before labels from fresh produce

¹³ <https://www.sciencedirect.com/science/article/pii/S2352550921001822?via%3Dihub>

WRAP's *Reducing household food waste and plastic packaging* report found that best before labelling on fresh produce is relied upon by about one tenth of consumers, which can lead to perfectly edible food being thrown away. WRAP estimates removing labels from five products (apples, potatoes, bananas, cucumbers and broccoli) could save 50,000 tonnes of food wasted in the home every year in the UK. To tackle this, the ECESP leadership group on food waste recommends a legislative approach to date-marking.

2.4 Restaurants and Food Service Measures

Key recommendations raised during the stakeholder event in relation to restaurants and food services are set out below and we propose these should be included in the roadmap.

RECOMMENDATION: Measures should be introduced to support training and accreditation of food services professionals in food waste prevention

Current procurement practices in restaurants and food services are often driven by lowest price to accommodate the very low margins in the business. However, ingredients (especially fresh produce) are often wasted as trimmings or due to a focus on using only the best part e.g. the florets in a cauliflower due to the way a chef is trained.

FoodSpace chef Conor Spacey, who spoke at the *Fighting Food Waste* stakeholder event, found that identifying ways to use trimmings and unwanted parts of ingredients (e.g. through creative recipes or preserves) can reduce waste by up to 10%, releasing procurement budget that can be better spent on quality produce, working within seasons and supporting local farmers. This underlines the importance of education (see above) in the form of training and support to chefs and kitchen staff in using foods more efficiently. The new GIY project [WASTED](#) funded through the Circular Economy Innovation Grant Scheme is an excellent pilot tackling this issue and should be supported to replicate beyond the scope of the grant timeframe. Accreditation for restaurants who have good food waste practices was also recommended during the *Fighting Food Waste* event.

RECOMMENDATION: Measures should be introduced to tackle cultural behaviours and procurement practices both by restaurant staff and guests

Some key cultural behaviours include reluctance to request doggy bags for leftover food and the association between larger portion sizes and value. Changing cultural norms would require sustained interventions, further underpinning the importance of education and awareness as part of the food waste prevention roadmap.

2.5 Household Measures

Key recommendations raised during the stakeholder event in relation to household measures include:

RECOMMENDATION: Measures should be introduced to support better design for apartment dwellers to prevent food waste.

Some issues facing apartment dwellers include lack of space for growing and a lack of storage space for food. Better design and urban planning would help overcome some of these barriers to food waste prevention. Some valuable examples of this are shown in the Food Sharing Futures¹⁴ scenario created through the ShareCity project, and in practice can be found via the ShareCity 100 database¹⁵.

RECOMMENDATION: Education must be provided at all levels - in schools and in the home - on food waste prevention.

As highlighted above, awareness must be complemented by education (providing tailored and practical skills) to support more sustained and effective action.

Stakeholders at the *Fighting Food Waste* event recommended education at all levels including schools and in the home, on a range of themes already raised above tackling cultural and producer / retail barriers. This includes showing children that "ugly" food has the same nutritional value/benefit as other produce (see also Section 2.2); educating on the difference between best before and use by labelling (see also Section 2.3) and on buying loose and only what you need (see also Section 2.3).

RECOMMENDATION: Measures should be introduced to enhance accessibility to local markets, gardens and food delivery services.

In addition to enhanced awareness and education, enhanced accessibility is required to support more circular activities or initiatives. This includes the ability to purchase loose produce and "wonky veg" (see also 2.2 Production Measures and 2.3 on Retail), access local markets and community growing spaces to shorten the supply chain and transport losses and supporting food delivery services to enable people to order only what they need. Expanding the mapping of food sharing initiatives, as developed for Dublin via the ShareCity database, would support awareness of existing sharing opportunities.

3. What are the most effective awareness raising measures that would be taken to reduce food waste?

The EPA's Food Waste Prevention programme, supported through research (e.g. behavioural insights) and Stop Food Waste resources, provides informed and targeted awareness raising measures and should continue to be fully supported.

In addition to the points made above in relation to production, retail, and household food waste, the following awareness raising actions are recommended.

RECOMMENDATION: Stakeholder involvement in the development of the roadmap should be continued and expanded.

Research has shown that when people are involved in developing policy, they take more ownership. Indeed, the EIP-AGRI¹⁶ initiative run by the DAFM has shown an exceedingly high level of engagement with this model. Research published by Oxfam and Trocaire in 2021 on the potential to

¹⁴ See <https://sharecity.ie/research/food-sharing-futures/>

¹⁵ See <https://sharecity.ie/research/sharecity100-database/>

¹⁶ See *ibid.*

enhance the sustainability of Ireland's food systems also supports this approach¹⁷. This report specifically recommends establishing "a national sustainable food systems body that provides space for the voices of all stakeholders - including the most marginalised in Irish society - to be heard and integrated into decision making". As well as fostering a sense of ownership, this kind of approach could be used to refine the roadmap and implementation of objectives on an ongoing basis.

RECOMMENDATION: A nationally coordinated awareness programme should be developed providing clear, coherent and simple messaging. This should aim to bring together and facilitate collaboration between stakeholders active in this space. The Circular Economy Advisory Group¹⁸ provides an ideal vehicle for developing this kind of coordination.

Areas identified during the stakeholder event *Circular Economy Conversations: Fighting Food Waste* as requiring further awareness work include:

- Education in schools including through home economics curricula to raise awareness among young people about food supply chains, the food waste pyramid, food storage to minimize food waste, and recipes that use the entirety of food products.
- A public campaign to raise householder awareness of labelling (especially on "use by" vs "best before" dates), portion control, and seasonal food. The current "Know Your Use Bys" EPA Stop Food Waste campaign is important in supporting understanding and awareness of labelling and should receive continued support.
- Additional investment into the development of Ireland's food identity, local food cultures, and regionally specific cuisine.

Each of these points are also supported by a study carried out by Oxfam Ireland and Trócaire in 2021 on supporting sustainable food systems in Ireland¹⁹.

As highlighted above, key cultural behaviours should also be normalised in order to reduce food waste that occurs in restaurants. This would require sustained interventions, which should form part of the plan for awareness and education.

4. Which sectors or stakeholders do you think should play a key role in the implementation of the roadmap?

Stakeholders across the supply chain must play a role in the implementation of a successful and sustainable food waste prevention roadmap. Again, this assertion is supported by research carried out by Oxfam Ireland and Trócaire²⁰. However, this should be achieved through fostering engagement and collaboration between different stakeholders. Moreover, major economic and policy changes inevitably favour certain interests over others. It is important that policy makers seek to distribute the costs and benefits evenly between different stakeholders.

We echo the CRNI recommendation to recognise and value the impact of social enterprises supporting food waste prevention, redistribution, and segregation, including CRNI members. The

¹⁷ See *ibid.*

¹⁸ Formerly Waste Advisory Group

¹⁹ <https://www.trocaire.org/documents/sustainable-food-systems/>

²⁰ See *ibid.*

further potential to grow this social impact through additional job creation and reskilling to meet the demands of the roadmap and its targets should be highlighted.

5. Are you satisfied with the proposed roadmap and evaluation arrangements?

As explained throughout the draft in more detail, we believe a clear timeframe for implementation of measures is needed.

We would also like to see the oversight measures strengthened through increasing the proposed frequency of the revision of the plan (currently at least every three years) to align with the Whole of Government Circular Economy Strategy (1.5 to 2 years maximum). This should be complemented by regular (6 monthly to annually) progress reports and a commitment to publishing strong and corrective measures that will be taken where progress is not being made. Progress reporting helps to ensure policy ambition is strengthened and underpinned by clear repercussions for failure to meet targets.

Ireland's Rural Development Policy 2021-2025 sets a strong precedent on progress reporting and oversight with biannual progress updates provided for on the implementation of the policy. This excellent policy also clearly links individual measures with sustainable development goals and provides a unique example of cross sectoral and cross departmental cooperation.

6. Any other comments or feedback?

See also the attachment to this submission containing feedback from stakeholders via Miro during the *Fighting Food Waste* event.