Rialtas na hÉireann
Government of Ireland

Ireland's National Food Waste Prevention Roadmap

2023-2025

Prepared by the Department of the Environment, Climate and Communications
www.gov.ie

Contents

Foreword by Minister of State with responsibility for Public Procurement, eGovernment and Circular Economy		2
Foreword by Minister for Agriculture, Food and the Marine		3
1	Introduction and Key Roadmap Actions	5
2	UN Sustainable Development Goal 12 – Ireland's Commitment	11
3	EU Context, Target Setting, Baseline Data and Reporting	12
4	The Roadmap	13
5	Working Together with a Common Goal	17
6	Pledge, Measure and Reduce – How You Can Get Involved?	18
7	Where Are We Now?	19
8	Food Waste Measurement and Reporting	22
9	The Food Waste Charter	25
10	Food Donation – Redistribution	26
11	Food Waste Segregation	28
12	Communications, Education and Awareness	29
13	Research and Innovation	31
14	Green Public Procurement	33
15	Monitoring, Evaluation, Review and Knowledge Sharing	34
Appendix 1: Priority Actions for first Roadmap period		37
Appendix 2: Supporting Policy and Legislative Context		42
Appendix 3: Further Information – Key Sectors		46

Foreword by Minister of State with responsibility for Public Procurement, eGovernment and Circular Economy

Valuable resources are needed to produce food. Wasting food that we produce and buy is not only a waste of money but a mismanagement of valuable resources in a time when we all need to make a concerted effort to protect and use our resources wisely. Importantly, an estimated 8-10 per cent of global greenhouse gas emissions are associated with food that is not consumed.

The Government is already committed to making the circular economy a reality in Ireland which means moving to a more sustainable pattern of production and consumption. Tackling food waste is one of the key steps we can all take along that journey that can help us to achieve sustainability, help combat climate change, and to support our transition to a circular economy.

Ireland is committed to reducing food waste by 50% by 2030 – in line with the United Nations Sustainable Development Goals. This National Food Waste Prevention Roadmap is a key step in steering our efforts towards achieving this goal. It sets out the context of food waste in Ireland, informed by the latest available data, and sets out priority actions to bring the focus on food waste prevention, across key sectors in the food supply chain, together in a coherent manner.

This Roadmap addresses a number of key areas that we need to develop in order to put us on the right trajectory to reduce food waste in a meaningful and robust way. This includes, for example, establishing national baseline data on food waste from which we will achieve a 50% reduction by 2030. This will be informed by developments at EU level in setting food waste reduction targets.

We need to establish and enhance food waste measurement and reporting in key sectors so we can identify where problems occur, identify appropriate solutions and monitor progress towards meeting targets in reducing food waste. Other key components of this Roadmap include action that supports surplus food donation and redistribution, and promotes proper food waste segregation which will help identify and change behaviours that lead to food waste generation in the first instance.

Communications, education and awareness raising on food waste will continue to play a vital role, so that food waste prevention can be embedded in everyday behaviour across society and key sectors. Available research mechanisms will be utilised so we can explore potential innovative solutions to tackle food waste. The public sector will also play a leadership role through improved procurement practices that leads to reduced food waste generation.

I look forward to working with key stakeholders in a collaborative and collective manner in implementing the actions set out in this Roadmap and meeting the challenge of reducing our food loss and food waste. This will in turn help us make significant progress in meeting our climate and circular economy objectives.

Ossian Smyth, T.D.
Minister of State with responsibility for Public Procurement, eGovernment and Circular Economy

Foreword by Minister for Agriculture, Food and the Marine

As Minister for Agriculture, Food and the Marine, I welcome the publication of this Food Waste Prevention Roadmap. My Department has specific responsibility for the United Nations Sustainable Development Goal 12.3 which aims, by 2030, to halve per capita global food waste at the retail and consumer levels and to reduce food losses along production and supply chains, including post-harvest losses.

This publication fulfils a commitment, included in the ten year strategy for the agri-food sector, Food Vision 2030, to engage with stakeholders to produce the roadmap as part of our goal to embed the Agri-Food Sector in the Circular, Regenerative Bioeconomy under Mission 1: A Climate Smart, Environmentally Sustainable Agri-Food Sector.

The Roadmap is an important strategy to help all stakeholders in the agri-food sector, including retailers, food service, consumer representatives, and primary producers to participate in collective efforts to reduce food waste and food loss.

When food is wasted, it is not just the food itself that goes to waste: other losses include the time, energy and resources used to produce it as well the resources used to process, transport, store, sell and buy the food. Food waste also impacts on our carbon footprint: by reducing food waste we will reduce our greenhouse gas emissions.

As recognised in the Roadmap and in Food Vision 2030, education and awareness initiatives are needed to effect behavioural change and these will be needed all along the agri-food supply chain if we are to achieve our food waste reduction targets. The Roadmap also envisages collaborative actions to help ensure there is accuracy and consistency of measurement of food waste across the supply chain. The importance of donation of surplus food where appropriate is also recognised.

Food is a precious and valuable resource. When we reduce our food waste, as well as helping our primary producers and processors to be more viable and resilient, we show our respect for the hard work that has gone into producing that food.

My Department will continue to work collaboratively with the Department of the Environment, Climate and Communications on reducing food waste and food loss through implementation of this Roadmap, including engagement on the bioeconomy initiatives, with a view to achieving our food waste and food loss reduction target.

Charlie McConalogue, T.D.
Minister for Agriculture, Food and the Marine

Tackling food loss and food waste is one of the key steps we can take to achieve sustainability, help combat climate change and support Ireland's transition to a circular economy.

1 Introduction and Key Roadmap Actions

Food waste is a global problem that has environmental, social and economic consequences. Growing, processing, transporting and storage of food all use significant amounts of resources. An estimated 8-10 per cent of global greenhouse gas emissions are associated with food that is not consumed. Worldwide, more than one quarter of food that is produced is wasted.

Tackling food loss and food waste is one of the key steps we can take to achieve sustainability, help combat climate change and support Ireland's transition to a circular economy and bioeconomy. Reducing food waste brings savings for consumers and operators, and the recovery and redistribution of surplus food that would otherwise be wasted also has an important social dimension in terms of providing safe food for those in need. According to published data[1], 8.9% of the population in Ireland experienced food poverty in 2021. Redistribution of surplus food can help to address food poverty. Tackling food waste also ties in with policies on the recovery of nutrients and secondary raw materials, the production of feed, food safety, biodiversity, bioeconomy, waste management and renewable energy.

Food waste can occur at any point along the food supply chain, from primary production (e.g., damage to harvested crops), processing and manufacturing (e.g., waste arising from quality control processes), retail and distribution (e.g., unsold stock), restaurants and food services (e.g., food uneaten by customers) and households (e.g., purchased food not consumed on time)[2]. Food waste generation can arise due to a number of different reasons in each sector and different solutions may be needed depending on the sector.

According to the Environmental Protection Agency (EPA) Ireland generated approximately 770,316 tonnes of food waste in 2020. Approximately 31% of the total comes from households, 29% comes from the processing and manufacturing sector, with the remainder coming from restaurants and food service (23%), primary production (9%), and retail and other distribution of food (8%).

[1] https://www.gov.ie/en/press-release/919b8-minister-obrien-welcomes-publication-of-the-report-on-food-poverty-government-programmes-schemes-and-supports/

[2] Refer to Appendix 3 for further information on each of the key sectors.

Food Loss and Food Waste

The approach to what is considered to be food loss and food waste differs in the context of the United Nations Sustainable Development Goal 12.3 commitment and EU waste legislation.

Food Loss

According to the UN Food and Agriculture Organisation* food loss is the decrease in the quantity or quality of food resulting from decisions and actions by food suppliers in the chain, excluding retailers, food service providers and consumers.

EU Guidance** indicates that the concept of food loss as presented above is not used in the EU legislation in the same meaning. All food discarded as waste is covered in the EU simply as food waste, while concept of food loss is used rather to describe loss of food in primary production (e.g., pre harvest losses), which is excluded from the scope of the Waste Framework Directive.

Food Waste

According to the EU Waste Framework 'food waste' means all food as defined in Article 2 of Regulation (EC) No 178/2002 of the European Parliament and of the Council that has become waste.

Commission Delegated Decision (EU) 2019/1597 states that the definition of food encompasses food as a whole, along the entire food supply chain from production until consumption. Food also includes inedible parts, where those were not separated from the edible parts when the food was produced, such as bones attached to meat destined for human consumption. Hence, food waste can comprise items which include parts of food intended to be ingested and parts of food not intended to be ingested.

The Decision also states that food waste does not include losses at stages of the food supply chain where certain products have not yet become food as defined in Article 2 of Regulation (EC) No 178/2002, such as edible plants which have not been harvested. In addition, it does not include by-products from the production of food that fulfil the criteria set out in Article 5(1) of Directive 2008/98/EC, since such by-products are not waste.

EU Guidance on reporting of data on food waste and food waste prevention states that food waste is any food that has become waste under these conditions:
1. It has entered the food supply chain;
2. It then has been removed or discarded from the food supply chain or at the final consumption stage;
3. It is finally destined to be processed as waste.

* http://www.fao.org/platform-food-loss-waste/en/

** https://ec.europa.eu/eurostat/documents/342366/351811/Guidance+on+food+waste+reporting/5581b0a2-b09e-adc0-4e0a-b20062dfe564

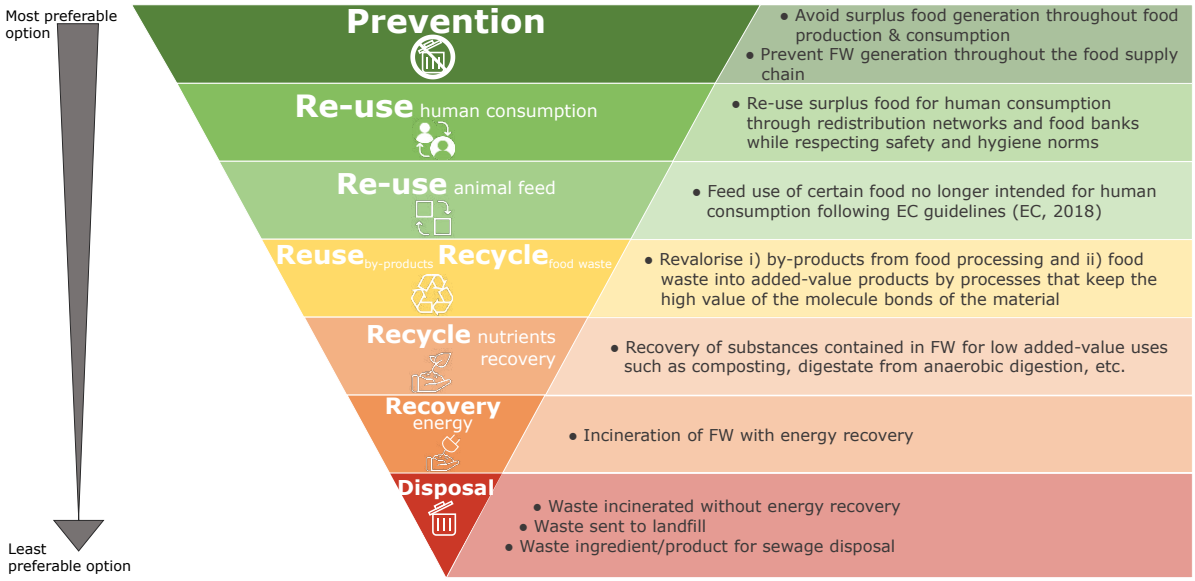


Figure 1: Food Waste Hierarchy[3]

The use of circular economy and bioeconomy approaches, and the waste hierarchy to address food waste, requires a strategic and collaborative approach to find solutions across the entire food system rather than continuing to operate within single, linear supply and consumption chains. In line with the food waste hierarchy (see Figure 1, for example), the top priority in terms of a National Food Waste Prevention Strategy for Ireland is to prevent food waste.

Ireland is committed to reducing food waste by 50% by 2030 – in line with the United Nations Sustainable Development Goals. The development of this first National Food Waste Prevention Roadmap is a key step that will help steer our efforts towards this goal. It sets out a number of priority actions to bring the focus on food waste prevention, across key sectors in the food supply chain, together in a coherent manner. In terms of responsibilities for key sectors resulting from the National Food Waste Prevention Roadmap, this first Roadmap is focusing on a voluntary approach[4] particularly in terms of measuring and reporting of food waste. The effectiveness of this approach will be reviewed, and key developments in the short to medium term such as the progress on setting of EU targets to reduce food waste, the establishment of Ireland's baseline data, and developments in relation to food waste measurement and reporting, will inform further focused actions on food waste prevention into the future.

[3] https://food.ec.europa.eu/safety/food-waste/eu-actions-against-food-waste/food-waste-measurement_en

[4] Such as the effective approach established under the Food Waste Charter.

Key Priority Actions for the first Roadmap 2023-2025[5]

Regulatory

- Establish statutory basis for preparing, updating and review of National Food Waste Prevention Strategy (Roadmap) – Circular Economy and Miscellaneous Provisions Act 2022.
- Engage in process following Commission proposal on EU Food Waste Reduction Target.
- Engage in process regarding Commission proposal on revised rules on Date Marking under the Food Information for Consumers Regulation.

Food Waste Measurement and Reporting

- Fulfil annual reporting obligations on food waste data reporting to EU.
- Publish the national food waste statistics and reporting methodology for food waste data collection, validation and reporting for the purpose of reporting on Ireland's official statistics on food waste and progress made in reducing food waste.
- Recommend food waste baseline dataset that links to 2030 food waste reduction target.
- Promote the use and integration of the EPA's standard national food waste measurement protocol for use in key sectors via:
  - » Engagement with DAFM, relevant bodies and working groups (e.g., related to Food Vision 2030 implementation)
  - » Engagement with Origin Green Programme
  - » Engagement with Bioeconomy Policy Implementation Group
  - » Engagement with reactivated Retail Sector Action Group
  - » Engagement with Sectoral Representative Bodies

Food Waste Charter

- Launch revised Food Waste Charter.
- Extend the Food Waste Charter to food supply chain businesses to establish industry agreement on food waste prevention.
- Build knowledge and develop capacity for food waste measurement and prevention in food sector businesses.
- Establish Food Waste Charter Action Group with sub sectoral working groups to collectively address food waste measurement and reduction in the food supply chain.
- Review the effectiveness of the voluntary approach to food waste measurement and reporting to determine if there is a need to set mandatory requirements for measurement and reporting.
- Identify and conduct studies to build evidence base for food waste prevention actions in food sector businesses.

Food Donation – Redistribution

- Investigate the potential impact of a prohibition on the destruction of edible food in advance of its 'use by' date.
- Investigate the regulatory and legal barriers to 'Good Samaritan' acts of donation and whether mandatory donation of edible food from retail outlets would reduce food waste.
- Using the EPA's Food Waste Charter, support a voluntary target with retailers and the processing industry for a percentage of edible food to be donated.
- Examine options that supports a significant increase in the capacity and scale of the surplus food redistribution sector (e.g. in the charity sector).
- Support surplus food redistribution initiatives including redistribution of surplus food arising from sectors such as retail and primary production. Identify and support surplus food redistribution activities that can further combat food poverty.

[5] Refer to Appendix 1 for further details.

Key Priority Actions for the first Roadmap 2023-2025

- Support social enterprises and community-based initiatives that promotes surplus food redistribution.
- Raise awareness on food redistribution and donation including the use of consumer and local business facing technology platforms that facilitate food redistribution and donation. Presentation to the Retail Forum.
- Work with key sectors (e.g., primary production and retail sectors) to examine how food waste due to product specification related aspects (e.g., misshapen fruit and vegetables) can be avoided.

Food Waste Segregation

- Introduce incentivised pricing for Commercial waste to support an increase in the segregation of waste.
- Make the provision of an organic waste bin mandatory as part of a waste collection service for all households.
- Roll out the provision of kitchen food waste caddies (via MyWaste.ie campaigns) to householders that have an existing organic bin collection service.

Communications, Education and Awareness

- Prepare overarching communications and awareness plan on food waste prevention related to delivery of the Roadmap.
- Roll out Stop Food Waste Communications and Awareness activities including National Stop Food Waste Day on 1st March.
- Roll out Food Waste Recycling Awareness activities including an annual National Food Waste Recycling Week.
- Identify education and training supports for organisations (e.g., food processors, hospitality and food services) that can incorporate robust food waste measurement and prevention activities.

Research and Innovation

- Provide funding for research, piloting and demonstration on food waste topics (e.g., via EPA and DAFM Research Programmes, Green Enterprise funding, Circular Economy Innovation Grant Scheme, Rural Innovation and Development Fund).
- Prepare a compendium of existing and completed research, innovation, piloting and demonstration, on food waste prevention.
- Establish a Register of Priority Research and Innovation Topics on Food Loss and Food Waste.

Green Public Procurement

- Update Green Public Procurement Policy that includes examining how food waste prevention can be further strengthened in the government and public sector.

Monitoring, Evaluation, Review and Knowledge Sharing

- Establish Food Waste Prevention Task Force and sub-sectoral groups.
- Coordinate Forum on Food Waste.
- Participate in the work of the EU Platform on Food Losses and Food Waste and associated subgroups.
- Provide annual updates on food waste (via the EPA's national waste statistics reporting) to chart the progress of the impact of Ireland's National Food Waste Prevention Programme and progress towards meeting Ireland's food waste reduction targets.
- By end of the first Roadmap period set interim targets for food waste reduction for inclusion in the next Roadmap.
- Undertake annual review of Food Waste Prevention Roadmap.

Ireland is committed to reducing food waste by 50% by 2030 – in line with the United Nations Sustainable Development Goals.

2 UN Sustainable Development Goal 12 – Ireland's Commitment

The urgency and challenge of addressing food waste is highlighted at international level through the United Nations (UN) Sustainable Development Goals (SDGs). In 2015, UN Member Countries adopted 'Transforming Our World' the 2030 Agenda for Sustainable Development. Integral to the 2030 Agenda are the 17 SDGs. Each of the goals has a number of sub-targets for a total of 169 targets across the 17 goals which cover three dimensions of sustainable development; economic growth, social inclusion and the protection of the environment.

Goal 12 of the UN SDGs deals with responsible consumption and production and Goal 12.3 has set a target 'by 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.'

Updated information on the reporting on progress in meeting sustainable development goals is set out in Ireland's Second National Implementation Plan for the Sustainable Development Goals 2022-2024[6].

[6] https://www.gov.ie/en/policy-information/ff4201-17-sustainable-development-goals/?referrer=http://www.gov.ie/sdgs/

3 EU Context, Target Setting, Baseline Data and Reporting

The EU is committed to meeting the Sustainable Development Goal Target 12.3[7]. The process is underway at EU level on setting targets to reduce food waste across the EU and a Commission legislative proposal is foreseen for the 2nd Quarter of 2023. EU Member States are required to collect data on food waste generated in the year 2020 for reporting to the Commission by the end of June 2022 and annually thereafter. Data reported by Member States will be taken into account as part of the process for setting reduction targets. Ireland's annual EU food waste reporting obligations are being fulfilled by the EPA[8].

To help ensure Ireland is on the right trajectory to meet its 50% food waste reduction target by 2030, we will set interim targets. However, without an established baseline that links to the 2030 50% reduction target, it is difficult to set robust interim targets. An appropriate baseline data set and baseline year to work from will provide a clear evidence base to help identify targeted actions and measure progress towards delivery of the 2030 food waste reduction target. The setting of Ireland's baseline reference year will take into account Ireland's food waste dataset for 2020 that was reported by the EPA to the Commission in 2022, and developments at EU level in relation to reduction target setting.

The outcome of the EU process on reduction target setting, reporting of food waste data to meet EU requirements, and the establishment of the baseline will inform the setting of interim targets for inclusion in the next Roadmap.

[7] https://food.ec.europa.eu/safety/food-waste/eu-actions-against-food-waste_en

[8] Ireland's official waste statistics are available on the EPA's National Waste Statistics web resource www.epa.ie/nationalwastestatistics

4 The Roadmap

Ireland's *Waste Action Plan for a Circular Economy – Ireland's National Waste Policy 2020-2025*, published in September 2020[9], commits to developing a Food Waste Prevention Roadmap that lists a series of actions aimed at delivering the reductions necessary to halve our food waste by 2030, meet any other related targets, and promote our transition to a circular economy. This commitment is also included in Food Vision 2030[10] and the Government of Ireland's Climate Action Plan[11].

The Circular Economy, and Miscellaneous Provisions Act 2022 ('the Act') provides the statutory basis for the preparation of the national food waste prevention strategy (to be known as "the national food waste prevention roadmap"). The legislation requires the preparation of the national food waste prevention roadmap at least once every three years. In preparing the national food waste prevention strategy, the Minister shall take into account, inter alia, the Circular Economy Strategy which is to be prepared and made in accordance with section 7 of the Act. Following the publication of a Circular Economy Strategy in accordance with section 7 of the Act, section 15 of the Act will be commenced and the next National Food Waste Prevention Roadmap (which will be the first statutory national food waste prevention strategy) will be prepared and published on a statutory basis.

This first non-statutory National Food Waste Prevention Roadmap sets out the context on food waste, Ireland's overall commitment to reduce food waste, and provides the pathway to help achieve Ireland's goal of reducing food waste by 50% by 2030. While this is a non-statutory Roadmap, its preparation has been informed by a detailed consideration of key aspects concerning food waste, and consultation with a range of stakeholders including a public consultation on a draft National Food Waste Prevention Roadmap in early 2022. Future iterations of the Roadmap will be informed by key developments in the short to medium term such as the progress on setting of EU targets to reduce food waste, establishment of Ireland's baseline data, and developments in relation to food waste measurement and reporting.

This Roadmap includes:

- Context on food waste and what components of the food supply chain are included in the Roadmap;
- How Ireland will establish its national baseline data on food waste from which we will achieve a 50% reduction by 2030;
- The approach to interim milestones and targets on the way to that 2030 target;
- How we will ensure a robust national system for food waste measurement and reporting is established in order to meet Ireland's reporting obligations and to monitor Ireland's progress in meeting its UN and EU commitments over the next decade;
- A commitment to work together, enhance food waste measurement, and identify and implement key priority actions along the food supply chain to help deliver on Ireland's commitments on food loss and food waste prevention;
- The approach to food waste segregation, food donation and redistribution, the role of research and innovation, and green public procurement in relation to food waste prevention;
- A commitment to deliver sustained communications and awareness on food waste prevention and segregation;
- How we will establish a monitoring and evaluation framework to check progress of key activities and update the Roadmap accordingly.

The Department of the Environment, Climate and Communications (DECC) is the lead Government Department in developing Ireland's National

[9] https://www.gov.ie/en/publication/4221c-waste-action-plan-for-a-circular-economy/
[10] https://www.gov.ie/en/publication/c73a3-food-vision-2030-a-world-leader-in-sustainable-food-systems/
[11] https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/

Food Waste Prevention Roadmap, and in the coordination and review of its implementation. The Department of Agriculture, Food and the Marine (DAFM) is the lead Government Department for UN SDG12.3. Both Departments are committed to working closely together to pursue ambitious food loss and food waste reductions that contribute effectively to the implementation of the Roadmap. The EPA will play a key operational role in driving implementation of key actions in the Roadmap, particularly in the context of their continued responsibility in delivering Ireland's National Food Waste Prevention Programme and annual reporting on Ireland's national food waste statistics.

All stages[12] along the supply chain are included in Ireland's National Food Waste Prevention Roadmap, as follows:

- Primary Production;
- Processing and Manufacturing;
- Retail and other distribution of food;
- Restaurants and Food Services;
- Households.

In terms of the 50% target reduction referred to in the UN SDG Goal 12.3, the target aims to 'halve per capita global food waste at the retail and consumer levels'. As mentioned previously the European Commission is currently assessing policy options in relation to EU 2030 food waste reduction targets which includes the scope and form of the target. The outcome of this process will inform future updates of the Roadmap[13].

Food waste prevention measures that are already committed to in the *Waste Action Plan for a Circular Economy* include:

- Continuing to commit resources nationally to the prevention of food waste and to the regulation of optimal food waste collection and treatment practices;
- Through our agencies and public sector partners, supporting innovative pilot projects to trial solutions to some of the challenges of preventing food waste;
- Working with the public sector and public procurement specialists to ensure public bodies are supported in their efforts to prevent food waste and manage unavoidable waste through green public procurement;
- Working closely with the DAFM to pursue ambitious food waste reductions and other measures that contribute towards a sustainable food chain in the Agri-Food Sector;
- Working with DAFM to pursue the relevant objectives of the EU's 'Farm to Fork Strategy' and in our national Strategy for the Development of the Organic Food Sector 2019-2025;
- Working with key business sectors to ensure they play their part in not only reducing the waste that arises at the point of sale, but also collateral waste that occurs lower down and higher up the food chain on farms, in food production and in our homes;
- Working with the Retail Sector Action Group on preventing food waste in the supply chain;
- Supporting the design and roll out of packaging developed by retailers and the packaging industry that meets the needs of food preservation without encouraging the generation of packaging waste, especially plastic packaging[14];
- Working with retailers to end the sale of multi-buy packs to prevent over-buying by consumers.

As outlined in Ireland's *Waste Action Plan for a Circular Economy* we will continue to commit resources nationally to the prevention of food waste. In terms of funding sources to support food waste prevention initiatives as part of the

[12] In terms of responsibilities for the sectors resulting from the National Food Waste Prevention Roadmap, this first Roadmap is focusing on a voluntary approach particularly in terms of measuring and reporting of food waste. The effectiveness of this approach will be reviewed before the end of the Roadmap period to determine if there is a need to set mandatory requirements for measurement and reporting.

[13] See: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13223-Food-waste-reduction-targets_en

[14] In relation to plastic and packaging waste measures, the WAPCE also commits to raising consumer awareness on the benefits of use of reusable containers and work with retailers to encourage the provision of refill options.

Roadmap implementation, the Circular Economy Fund that will be established under the Circular Economy and Miscellaneous Provisions Act 2022 will be considered for such purposes. Other funding streams will also be available for certain activities including, for example, research and innovation (see Section 13).

This Roadmap will strengthen the National Food Waste Prevention Programme led by the EPA (as part of the National Circular Economy Programme) in terms of scaling up its reach, measuring the impact and effectiveness of the programme and ensuring it continues to play a central role in meeting food waste prevention targets.

Appendix 1 of this Roadmap sets out the priority actions to be undertaken during the first Roadmap period, key organisations involved in their delivery and the timeline for implementation. Appendix 2 sets out supporting policy and legislative context and Appendix 3 provides further information on key sectors along the food supply chain.

Every organisation, every business, every household and every individual has a role to play

5 Working Together with a Common Goal

Every organisation, every business, every household and every individual has a role to play. A concerted approach across all stakeholders – Government Departments, organisations across the public sector, businesses, industry and representative bodies, academia and the research community, community organisations, social enterprises, food rescue organisations, households and individuals – will be crucial to help drive the delivery of Ireland's National Food Waste Prevention Roadmap. Working together within and across sectors to focus on common issues, to introduce new ways of thinking, and to educate on issues in different parts of the supply chain will also be important.

We need to continue to build on the food waste prevention work and innovation that is already happening in Ireland. We need to contribute to and adopt an integrated approach where we:

- *collaborate* to achieve common goals
- *innovate* to find new solutions and change the way we do things
- *share* knowledge and data so we are better informed to make decisions

All sectors need to measure their food waste to identify what food is being wasted and where, and they need to implement solutions, through waste prevention and food redistribution. Targets will be considered to drive improvement. Collaboration will also be important to help ensure there is accuracy and consistency of measurement across the supply chain and therefore sectors will need to work together where appropriate.

Following the establishment of a baseline dataset, the EPA supported by DECC and DAFM will work with key stakeholders to identify more targeted actions for measuring and reducing food waste in each stage of the food supply chain and that will contribute to the 2030 goal of a 50% reduction.

Part of the focus of the Roadmap implementation will be to drive a sectoral approach, and to identify training and support requirements and to showcase solutions, inspiring others to take action. Action will also focus on the interaction and interconnection between the different stages of the supply chain so as to try to prevent upstream and downstream food waste at the earliest opportunity. This will help encourage a systems approach across the supply chain and ensure a sense of common purpose.

The role of community and community-based initiatives and networks that support food waste prevention and the development of resource efficiency, circular economy and bioeconomy initiatives at both local and national levels will also play a key role in the delivery of the Roadmap. Initiatives such as the Community Climate Action Programme[15] includes €60 million from the Climate Action Fund invested in community climate action projects and initiatives, as well as capacity building. The Community Climate Action Programme (Strand 2) – Climate Education, Capacity Building and Learning by Doing included Food and Waste as one of its themes[16]. Through such schemes, and the Circular Economy Innovation Grant Scheme, led by DECC, we will continue to provide support to circular economy initiatives, particularly those which are community and/or voluntary led.

Organisations such as Community Resources Network Ireland (CRNI) have a valuable role in the development of resource efficiency and circular economy initiatives at both local and national levels and supporting communities to live more sustainably. Such organisations will continue to be important leaders in the transition to a circular economy and contributing to the implementation of the National Food Waste Prevention Roadmap.

[15] https://www.gov.ie/en/publication/de5d3-climate-action-fund/

[16] https://www.pobal.ie/programmes/community-climate-action-programme-climate-education-capacity-building-and-learning-by-doing-strand-2/

6 Pledge, Measure and Reduce – How You Can Get Involved?

To help prevent food loss and food waste, and to meet our 50% reduction target by 2030:

- All sectors must play their part in committing to reduce food loss (where applicable) and food waste in line with Ireland's commitment;
- As a priority we need to measure our food loss and food waste in order to identify targeted actions to reduce food loss and food waste;
- We must implement actions to reduce our food loss and food waste, where possible.

It is important that all sectors involved in the production and supply of food and drink ensure that food loss and food waste is reduced all along the food supply chain.

Business Sectors

If you are a business within the manufacturing and processing, retail and distribution or restaurants and food services sectors, support the Roadmap goals by measuring[17] and reducing your food waste using the EPA standard methodology, and by signing up to the Food Waste Charter, https://foodwastecharter.ie/. Commit to raising awareness around food waste and share your knowledge and experience.

Primary Producers

If you are a primary producer, start by measuring[18] your food loss and food waste and engage with efficient practices to reduce food loss and food waste. Commit to raising awareness around food loss and food waste, and share your knowledge and experience.

Householders

As a householder you can support the food waste reduction goals by following guidance and tips on household food waste prevention that are available through the national campaign StopFoodWaste.ie (https://stopfoodwaste.ie/). Commit to raising awareness around food waste and share your knowledge and experience.

[17] See Section 8 on Food Waste Measurement and Reporting.
[18] Ibid

7 Where Are We Now?

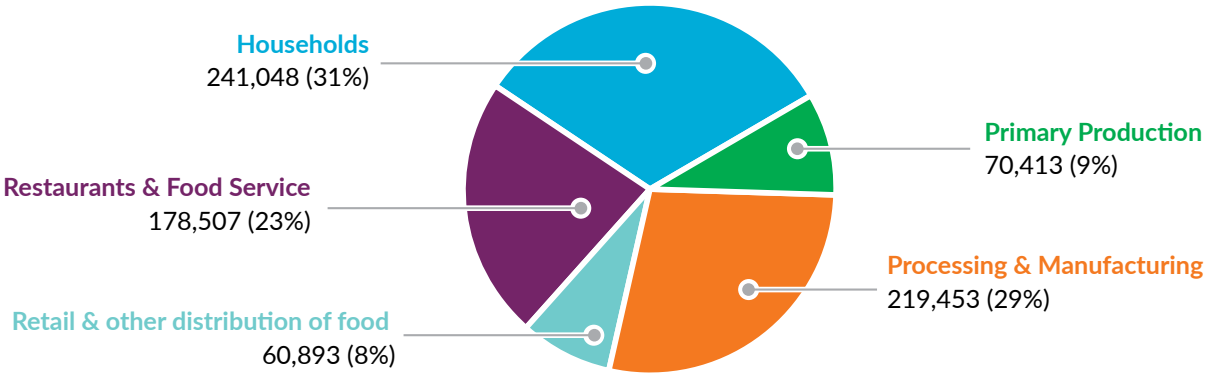
Ireland is already taking action on food waste and has many experiences and examples of good practice to showcase. Through the EPA led National Waste Prevention Programme (NWPP) Ireland has been working on waste prevention initiatives since 2004, and in that time the EPA has worked in partnership with many stakeholders across the food chain.

The EPA launched a new Circular Economy Programme in 2021 which incorporates the NWPP and is the driving force for Ireland's move to a circular economy by businesses, householders and the public sector[19].

The Waste Management Act requires the EPA to adopt a specific food waste prevention programme within their waste prevention programmes.

To date the EPA's food waste prevention programme has had a strong focus on households, particularly through the Stop Food Waste campaign, and retailers through the close links it has built up via the Retail Sector Action Group and the establishment of a Food Waste Charter (see Section 9). Work in other sectors such as Restaurants and Food Service and the Processing and Manufacturing sectors is at an earlier stage. The programme has had limited focus to date on the Primary Production sector.

The most recent EPA published estimates indicate that Ireland generated approximately 770,316 tonnes of food waste in 2020[20]. As shown in Figure 2, 31% of the total comes from households (241,048 tonnes), 29% comes from the processing and manufacturing sector (219,453 tonnes), with the remainder coming from restaurants and food service (178,507 tonnes), primary production (70,413), and retail and distribution (60,893 tonnes).



Source: EPA

Figure 2: Estimated tonnage of food waste produced in Ireland in 2020

[19] https://www.gov.ie/en/press-release/16a69-government-launches-irelands-first-whole-of-government-circular-economy-strategy/

[20] https://www.epa.ie/publications/monitoring--assessment/waste/national-waste-statistics/EPA_Nat_Waste_Stats_Report_2019_web.pdf

Current household food waste amounts to approximately a quarter of a million tonnes per annum (including home composting). The average Irish household throws out 130 kg of food waste each year, at a cost of approximately €700[21]. There is still considerable uncertainty over food waste amounts in the processing and manufacturing sector, and the EPA will undertake further analysis of sectors, where relevant.

A recently published EPA research project[22] provides data and information on estimated quantities of food loss and food waste arising from primary production. This study was the first of its kind in Ireland, looking to create a starting point from which food loss and waste from primary production can begin to be understood and mitigated. The results are informing reporting of food waste statistics to the European Commission.

While there is some uncertainty about the food waste generated by certain sectors (e.g., processing and manufacturing) the actions resulting from the Roadmap (e.g., food waste measurement and reporting) will increase knowledge and understanding of these sectors' contributions and their capacity to deliver towards reducing food loss and food waste, where applicable.

[21] https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/food/
[22] https://www.epa.ie/publications/research/waste/Research_Report_410.pdf

To reduce food waste effectively, we need to improve monitoring, measurement and reporting of food waste across all sectors.

8 Food Waste Measurement and Reporting

To reduce food waste effectively, we need to improve monitoring, measurement and reporting of food waste across all sectors.

To understand how we are progressing towards our 50% reduction of food waste by 2030 target, a national food waste baseline that links to this reduction target will need to be established. An appropriate baseline data set and baseline year to work from will provide a clear evidence base to measure progress towards delivery of the national target for a 50% reduction in food waste by 2030. It will also provide evidence on which to build actions and strategies and will inform more targeted actions needed to be taken by key stakeholders in order to achieve the 2030 target.

The setting of Ireland's baseline reference year will take into account Ireland's food waste dataset for 2020, reported by the EPA in 2022, and developments at EU level in relation to reduction target setting. Subject to EU developments, it is currently expected that Ireland's baseline reference year will be 2020.

EU Reporting

The European Union (Waste Directive) Regulations 2020[23] require the EPA to monitor and assess the implementation of national food waste prevention measures by measuring the levels of food waste generated by different sectors, according to the methodology established by the EU delegated act[24].

Member States are required to collect data on food waste generated in 2020 to be reported to the Commission by the end of June 2022 and annually thereafter. Data is to be accompanied by a quality check report, in order to help verify the quality of the data and improve data collection in the future. Work has been undertaken by the EPA to establish reporting methodologies for each sector and develop the 2020 reference year data in accordance with protocols established by the legislation.

The EU Platform on Food Losses and Food Waste[25], dedicated to food waste prevention, was established in 2016 to bring together EU institutions, experts from the EU countries, international organisations, and relevant stakeholders, to support achievement of the SDG 12.3 target on food waste. The Platform aims to support all actors in: defining measures needed to prevent food waste; sharing best practice; and evaluating progress made over time. The first mandate of the Platform ended in December 2021, and it has been re-established for a second five-year mandate (2022-2026). Ireland participates in the work of the platform.

A subgroup of the EU Platform on Food Losses and Food Waste, dedicated to the issue of food loss and waste measurement, supports the Commission's work in this area more generally and facilitates sharing of experience and best practice amongst Platform members. There are also subgroups dedicated to action and implementation, date marking, food donation and consumer food waste prevention.

Sector Reporting

Every sector in the food supply chain should pursue food waste measurement and reporting as part of their operations. Businesses should measure their food waste to identify what food is being wasted and they should implement solutions, through waste prevention and the redistribution of surplus food.

Measurement protocols are already in place or under development by the EPA for sectors such as Manufacturing and Processing, Retail and Distribution, and Hospitality and Food Services. A standardised measurement methodology, with templates has been developed by the EPA and

[23] European Union (Waste Directive) Regulations 2020 (Statutory Instrument No. 323 of 2020)

[24] On the basis of the methodology established by the delegated act referred to in Article 9(8) of the Waste Directive as from the first full calendar year after the adoption of that delegated act.

[25] https://ec.europa.eu/food/safety/food-waste/eu-actions-against-food-waste/eu-platform-food-losses-and-food-waste_en

tested within the relevant sectors. In addition to the methodology, building capacity for food waste measurement and reduction will require a reporting framework to support development of sectoral indicators and benchmarks that are also consistent with EU reporting requirements. Improved food waste measurement at a business level will help improve national food waste data for legislative reporting requirements, support the development of sectoral benchmarks and track progress towards reduction targets.

There is a strong business case for these actions, particularly in demonstrating a commitment to sustainability and the environment. This Roadmap will drive the sectoral approach in terms of identifying training and support needs. The EPA's national measurement protocol will be promoted as a tool to assist businesses in fulfilling requirements on food waste measurement and reduction for existing certification and accreditation schemes (e.g. ISO 14001).

Measurement protocols for other sectors, such as primary production, will be considered as part of the Roadmap implementation. For example, the horticulture sector has in place requirements to consider crop losses and food waste as part of a sustainable horticulture assurance scheme[26].

The Food Waste Charter[27], led by the EPA, is a voluntary agreement introduced in 2017 to support engagement on food waste, primarily with the retail grocery sector, including reporting and measurement. The EPA, supported by the DECC, will extend the Food Waste Charter to include other key sectors of the supply chain. The Charter will be revised to include specific measurement and reporting obligations for members of the Charter with target-based reduction commitments. Further information is outlined in Section 9.

As part of Ireland's approach on food waste measurement and reporting Ireland will, via the EPA food waste prevention programme and waste statistics reporting:

- Publish the national food waste statistics and reporting methodology for food waste data collection, validation and reporting for the purpose of reporting on Ireland's official statistics on food waste and progress made in reducing food waste.
- Subject to EU developments, propose the national food waste baseline dataset (expected to be for the reference year 2020) within 12 months following publication of the first Roadmap, along with an approach to monitor and evaluate our progress to achieving the 2030 reduction target;
- Through a sectoral approach (e.g., via voluntary agreement (Food Waste Charter) and the National Food Waste Prevention Programme) identify training supports for organisations to undertake robust food waste measurement and reporting activities;
- Work with key sectoral organisations and programmes to help ensure food waste measurements are integrated into such programmes, where relevant;
- Promote the EPA's national measurement protocol as a tool to assist businesses in fulfilling requirements on food waste measurement and reduction for existing certification and accreditation schemes;
- With regard to the primary production sector, engage with key Government Departments (e.g. DAFM), organisations and representative bodies with the aim of integrating the EPA's national measurement protocol into existing sectoral and industry schemes and programmes, where appropriate;
- Provide annual updates on food waste (via the EPA's national waste statistics reporting) to chart the progress of the impact of Ireland's National Food Waste Prevention Programme and progress towards meeting Ireland's food waste reduction targets.

[26] https://www.bordbia.ie/globalassets/bordbia.ie/farmers--growers/farmers/qas/document-libraries/shas-pdfs/sustainable-horticulture-assurance-scheme---producer-standard.pdf

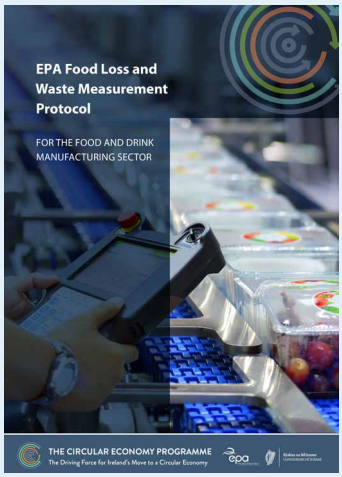
[27] https://foodwastecharter.ie/

Building knowledge to waste less

Robust and meaningful data on food waste is central to building a compelling narrative on the benefits of preventing food waste and to help comply with reporting requirements. Food waste prevention actions must be linked to consistent measurement in order to track improvements and provide data and evidence to support action. In order to improve data quality, the EPA has been developing a standard measurement protocol for food sector businesses, designed to bring consistency by following a step-based approach.

Driving food waste reduction across the food value chain, will require food sector businesses to commit to measurement and reporting of food waste in a clear and consistent manner. Based on internationally recognised measurement standards, the *Food Waste Measurement Protocol* for the Food and Drink Manufacturing sector aims to support businesses to use their existing available data to identify and quantify their main food waste streams. This will then lay the foundations for mapping out actions to reduce food waste in line with realistic, measurable targets.

The Pathway to Less Food Waste for the Food Services sector is a simplified version of the measurement methodology, designed specifically for the hospitality sector to use information already available to estimate food waste in a consistent manner. Before deciding on any course of action, businesses need to know what food waste is coming from the business, where it is coming from and what causes it to happen. It will also allow these businesses to track performance over time. More businesses measuring food waste consistently will in turn help improve the estimates of national food waste data used for EU legislative reporting requirements. This will also allow for the development of sectoral benchmarks and indicators, as well as provide data for monitoring and reporting on progress towards reduction targets.



The measurement protocols and associated workbooks can be found on http://foodwastecharter.ie

9 The Food Waste Charter

Establishing industry commitment to improve data reporting and targeted food waste reduction across the supply chain will play a key role in the Roadmap implementation to encourage a sense of common purpose and share best practice across the food supply chain. Improved monitoring of food waste levels will highlight the costs of mismanagement of food, and in turn, prompt action by business operators to reduce this.

The EPA food waste prevention programme is implementing activities to drive change across the retail, distribution, processing and manufacturing sub-sector, and to reduce food waste in the hospitality and food service sectors, aiming to help deliver the national target. As mentioned in Section 8 above, specific areas of focus in the short term include guidance and methodologies on food waste measurement and reporting. The EPA will continue to support capacity building in food sector businesses to improve data quality for national reporting and develop benchmarks against which businesses can assess performance.

A priority action for the programme is to support the establishment of a robust data set for food waste quantities across the food supply chain, such as retail, distribution, processing and manufacturing, and developing tools and resources for upskilling on food waste prevention. This will provide a solid baseline from which awareness and interventions can be designed and measured, including identifying sectoral targets for 2030 food waste reduction.

The Food Waste Charter, led by the EPA, is a voluntary agreement introduced in 2017 to support engagement on food waste with the grocery retail sector, using a set of general binding principles. The Charter sets out general binding principles around improved measurement and reducing food waste. Since its introduction retailers have worked with the EPA to develop and agree a reporting methodology, develop in-house systems to improve data availability, and have been demonstrating an increased focus on food waste prevention measures.

The EPA, supported by the DECC, will extend the Food Waste Charter to include other key sectors of the supply chain. In order to drive change across the wider supply chain sector, the Charter will be revised to include specific measurement and reporting obligations for members of the Charter with target-based reduction commitments. The revised agreement will set out the vision, targets, outcomes, baseline and annual reporting commitments.

To encourage a systems approach across the supply chain and ensure a sense of common purpose, a high-level Food Waste Charter Action Group, with sub-sectoral or topic working groups will be formed. The EPA will work in partnership with DECC to support the formation of these groups, taking into consideration the plan for establishing a national Food Waste Prevention Task Force and sub-sectoral groups (see also Section 15).

The Food Waste Charter Action Group will have clear outcome-based and timebound Terms of Reference that specify the role of the group including:

- Providing input to the revised Charter;
- Promoting the Charter and supporting the objectives of the Government's National Food Waste Prevention Roadmap and the EPA's National Food Waste Prevention Programme;
- Supporting roll out of the EPA's national measurement protocol;
- Integrating the measurement protocol into existing initiatives;
- Committing to providing food waste data in a common format, using the EPA national standard methodology, in order to collectively track progress of the Charter and support Ireland's EU reporting requirements;
- Promoting target-bound food waste prevention in business;
- Providing a channel of communications to business stakeholders, e.g. speaking opportunities at conferences, newsletter articles, and social media.

The effectiveness of this voluntary approach to food waste measurement and reporting, and the revised Food Waste Charter, in terms of measurement and reporting of food waste by key sectors, will be monitored as part of the Roadmap review. This will determine if there is a need to set mandatory requirements in relation to food waste measurement and reporting.

10 Food Donation – Redistribution

Conditions may arise along different stages of the food production and distribution chain where food donation is an appropriate option. These are primarily associated with, for example:

- Difficulties with managing supply and demand where food businesses may have a 'surplus' of supply to meet orders;
- Errors in the labelling or packaging could mean that the perfectly safe food will not be entered into the marketplace and so is available for donation.

It is acceptable for this 'surplus' food to be redistributed or donated by food businesses to various charities, once the food is still in an acceptable condition and it is handled and distributed safely.

All food businesses whether donating or receiving and handling donated food must make themselves aware of their legal responsibilities under food legislation. The Food Safety Authority of Ireland provides general food safety guidance to both food businesses that donate food and also charities who receive the donated food. The guidance[28] includes questions and answers to help clarify the legal provisions in EU food legislation thus allowing the safe donation and receipt of food. The European Commission has also adopted EU food donation guidelines and has provided further information on food donation[29].

In terms of food donation and the charity sector, FoodCloud[30] has been actively developing a solution in the form of support infrastructure to facilitate the rescue of surplus food suitable for human consumption from the supply chain and distribute to charities. Surplus food in the retail sector can be matched and donated to local charities through the FoodCloud app. Larger volumes of surplus food from the production sector can be distributed through FoodCloud Hubs which has created necessary infrastructure around Ireland to facilitate this. There is a need for greater participation by businesses, especially in the food production sector.

There are challenges in terms of redistribution of certain food products, due to short shelf life for example. This requires working with key stakeholders such as the retail sector to explore ways that facilitate redistribution of such products while ensuring food safety requirements are adhered to.

To improve conditions for food donation and distribution Ireland's *Waste Action Plan for a Circular Economy* commits to the following measures:

- Support food donation and investigate ways to simplify food donation for business;
- Investigate the potential impact of a prohibition on the destruction of edible food in advance of its 'use-by' date[31];
- Investigate the regulatory and legal barriers to 'Good Samaritan' acts of donation and whether mandatory donation of edible food from retail outlets would reduce food waste;
- Using the EPA's Food Waste Charter, support a voluntary target with retailers and the processing industry for a percentage of edible food to be donated.

As well as implementing the above measures we will:

- Examine options that support a significant increase in the capacity and scale of the surplus food redistribution sector (e.g.in the charity sector);
- Support surplus food redistribution initiatives including redistribution of surplus food arising from sectors such as retail and primary production. This includes identifying and supporting surplus food redistribution activities that can further combat food poverty;
- Support social enterprises and community-based initiatives that promotes surplus food redistribution;
- Raise awareness on food redistribution and donation including the use of consumer and local business facing technology platforms that facilitates food redistribution and donation;
- Work with key sectors (e.g., primary production and retail sectors) to examine how food waste due to product specification related aspects (e.g. misshapen fruit and vegetables) can be avoided.

[28] https://www.fsai.ie/food_businesses/donations/donations.html
[29] https://ec.europa.eu/food/food/food-waste/eu-actions-against-food-waste/food-donation_en
[30] https://food.cloud/
[31] This measure will principally focus on businesses such as retailers.

Food waste prevention needs to be embedded in everyday behaviour across society and sectors.

11 Food Waste Segregation

In line with the food waste hierarchy food waste prevention is the first priority. Prevention efforts also need to be combined with efforts to better manage the food waste that does arise, some of which is unavoidable. Better awareness of behaviours that lead to food waste generation will help identify efforts to avoid food waste generation in the first instance. For people to engage in positive behavioural change in terms of food waste prevention, there needs to be improved awareness and active engagement in proper food waste segregation and ensuring that the food waste that is generated is directed to the right bin (i.e., organic waste bin).

The European Union (Household Food Waste and Bio-waste) Regulations 2015[32] sets out the requirements in relation to segregation of household food waste and separate collection of household food waste for households in population agglomerations greater than 500 persons. The Waste Management (Food Waste) Regulations 2009[33] require the source segregation of food waste from specified commercial sources.

In line with a commitment in the *Waste Action Plan for a Circular Economy*, legislation will be introduced to mandate that all households on a kerbside collection service be provided with an organic waste bin.

In terms of measures to improve commercial food waste segregation, the Circular Economy and Miscellaneous Provisions Act 2022 provides for the application of incentivised pricing for commercial waste collection on a similar basis as the existing provisions support incentivised pricing and the segregation of household waste into separate streams. This will help increase food waste segregation which will in turn enhance food waste awareness and help identify measures to prevent food waste in the commercial sector.

The *Waste Action Plan for a Circular Economy* also commits to supporting food waste segregation and management with measures such as:

- Using National Waste Collection Permit Office and other 'brown bin' data to develop strategies and investigate how new technology can support greater usage;
- Through changes to waste collection permits, and working with the Local Authority sector, ensuring that every householder has access to a reliable, clean and sustainable way of managing food waste;
- Working with the Department of Housing, Local Government and Heritage to make regulatory changes in planning and tenancy laws required to ensure apartment dwellers are provided with infrastructure to support food waste segregation;
- Incorporating municipal waste recycling targets as conditions of waste collection permits.

In 2020 a food waste recycling pilot project report was published[34] which includes the results of pilot activities focusing on improved food waste recycling.

Following this pilot project, a group of stakeholders, involving DECC, the waste industry including the Irish Waste Management Association, Cré (Composting and Anaerobic Digestion Association of Ireland), the Regional Waste Management Planning Offices and the EPA, are carrying out a number of collaborative activities to improve food waste segregation. This includes a focus on the roll out of food waste kitchen caddy packs to a number of householders, and education and awareness on how to segregate food waste with a focus on reducing contamination. Approximately €1 million funding is being allocated to support food waste recycling awareness initiatives being led by the Regional Waste Management Planning Offices in 2022 and 2023.

For example, a National Food Waste Recycling Week, led by the Regional Waste Management Planning Offices, took place from 30th May until 6th June 2022 which focused on encouraging people to recycle their food waste and providing food waste kitchen caddy packs[35].

[32] Statutory Instrument 430 of 2015

[33] Statutory Instrument 508 of 2009

[34] https://www.mywaste.ie/report-on-the-food-waste-recycling-pilot-project

[35] https://www.mywaste.ie/news/national-food-waste-recycling-week-launched-30th-may-6th-june-2022/

12 Communications, Education and Awareness

Food waste prevention needs to be embedded in everyday behaviour across society and sectors. Communications and awareness activities to highlight positive behaviours that lead to reduced food waste and encourage behavioural change will assist this. This Roadmap commits to delivering an overarching communications and awareness plan on food waste prevention related to the implementation of the Roadmap and which covers all stages of the food supply chain.

The Stop Food Waste programme, managed by the EPA, is the national public facing programme for household food waste prevention and has extensive experience working with consumers, through campaigns, interventions and living labs. This Roadmap commits to delivering a sustained communications and awareness programme, principally through Ireland's Stop Food Waste Programme, led by the EPA. Future national household food waste prevention communication activities will be coordinated by the EPA's Stop Food Waste Programme and will continue to be linked to the targeted priority food waste types and populations. These will be implemented through an annual communications plan, prepared by the EPA, which will include a mix of Stop Food Waste activities, social media, PR and other mass communication methods to regularly reach large audiences, and that reflects different preferences for communication channels. Behavioural change science will continue to be integrated into activities that seek to influence food waste prevention behaviour.

Education and awareness on food waste prevention in cooking and food management skills will be advocated for inclusion in school curricula and other education channels, such as through increased uptake of home economics or through inclusion in other subjects such as Civic, Social and Political Education.

Other initiatives being undertaken in the education space that includes a focus on food waste will also be supported such as initiatives like the Campus Living Labs Sustainability Project[36].

Date marking will be a particular area of focus in order to help consumers better differentiate between 'use-by' and 'best before' dates. A previous EPA commissioned survey has found that passing the 'use-by' (68%) and 'best before' (55%) food dates are the main reasons why people throw out food in their household[37].

Date marking on food products is controlled under Regulation (EU) No. 1169 of 2011[38] on the provision of food information to consumers (the FIC Regulation). Under the Farm to Fork Strategy (the agri-food component of the European Green Deal) and Europe's Beating Cancer Plan, the European Commission is proposing to revise the FIC Regulation, focusing on five elements of the FIC Regulation[39] including in relation to date marking on food products.

The Irish Government is developing a policy position on the European Commission's food labelling package. This is being developed by a cross Government group headed by the Department of Health (DoH) working closely with the DAFM, DECC and the Department of Enterprise, Trade and Employment (DETE), as well as relevant agencies under the remit of all four Departments[40].

Education and awareness activities on date marking will focus on adopting good food management behaviours and promoting the correct behaviours around dates. Activities will also focus on promoting guidance for industry including on the correct application of date marking labels.

[36] https://www.iua.ie/ourwork/sustainability/campus-living-labs-sustainability/

[37] https://www.epa.ie/media/epa-2020/monitoring-amp-assessment/circular-economy/National_Food_Waste_Attitudes_Survey.pdf

[38] REGULATION (EU) No 1169/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004.

[39] https://ec.europa.eu/food/safety/labelling-and-nutrition/food-information-consumers-legislation/proposal-revision-regulation-fic_en

[40] https://www.gov.ie/en/publication/6b865-the-food-information-to-consumers-fic-regulation/

Education and awareness activities will also include:

- Supporting awareness and training for workers in the food supply chain, with a focus on better segregation and practices that lead to prevention of food waste and other benefits including cost savings;
- Promoting lifelong learning opportunities on how to prevent food waste both through school and relevant professional curricula (e.g. hospitality sector studies) as well as on-the-job training;
- Engaging with training bodies (e.g. industry training bodies) with the aim of integrating good practice food waste quantification and prevention in relevant training programmes for key sectors (e.g. hospitality sector), where possible;
- Encouraging food businesses to make food waste prevention a business priority, with clear KPIs and training programmes for staff;
- Supporting public authorities on how to integrate objectives and messages of campaigns and other interventions across sectors;
- Placing an emphasis on food waste prevention as an action to combat climate change;
- Engaging with Local Authorities, Regional Waste Management Planning Offices, Climate Action Regional Offices, businesses, social media influencers, and other organisations to amplify the reach of Stop Food Waste Programme and other food waste awareness related activities;
- Supporting the Stop Food Waste programme by exploring ways how food can be packaged, labelled, priced, and promoted with an aim of reducing household food waste. This includes engaging with retailers and food manufacturers on these aspects and the use of well-run public facing campaigns to influence good food management behaviours;
- Supporting direct communications on food waste prevention to consumers (e.g. on product or online);
- Supporting community focused organisations to continue to develop community-based education and awareness initiatives that are focused on food waste prevention;
- Disseminating key outputs and tools developed through research and innovation projects related to food waste prevention;
- Launching a national food waste prevention awareness day, led by StopFoodWaste.ie on the 1st March every year. All sectors, businesses and householders will be encouraged to actively engage on food waste prevention activities on this date to collectively demonstrate support for Ireland's commitment to reduce food waste.

13 Research and Innovation

Tackling food waste means working together with all stakeholders in order to better identify, measure, understand and find solutions to deal with food waste. There is not one single cause with one solution because the food chain is a complex and dynamic system. All actors in the food chain should work together to find solutions, from farmers, fishers, processors, manufacturers, retailers, hospitality, through to consumers themselves. Other food sector experts, research scientists, food banks and NGOs also play an important role.

As highlighted previously Ireland participates in the work of the EU Platform on Food Losses and Food Waste and will continue to take part in activities that include the sharing of knowledge and best practice in relation to food waste prevention.

Ireland will continue to utilise all relevant EU and national research and innovation mechanisms to support food waste prevention activities and inform related policy, including, through programmes led at EU level such as Horizon Europe and at national level led by Science Foundation Ireland[41]. The Life Programme[42], for example, provides funding for the support of Environment, Nature Conservation and Climate Action projects throughout the European Union. Previous projects have included food waste reduction initiatives.

EPA Research 2030[43], is a ten-year high-level framework for the EPA's research programming for the period 2021 to 2030. Its thematic structure comprises four interconnected hubs that includes, for example, addressing climate change evidence needs and facilitating a green and circular economy. The EPA Research Programme also has a Fast-Track to Policy funding mechanism which aims to provide evidence synthesis, review of policies and best practices to answer urgent emerging policy questions and addressing short-term policy needs.

The EPA's Green Enterprise: Innovation for a Circular Economy is an annual funding call to support innovators in Ireland to develop, demonstrate and implement circular economy approaches in their business models. It is managed through the EPA's National Circular Economy Programme and is co-funded by EPA Research. Target areas for innovation projects include Food, Nutrients and Water.

The Circular Economy Innovation Grant Scheme (CEIGS)[44] is a Government of Ireland initiative led by DECC. The purpose of this grant scheme is to provide support to projects which work in the Circular Economy space, with the aim of advancing the Circular Economy in Ireland and raising awareness of the need to transition to a Circular Economy. The scheme was launched in 2021 and the thematic areas included food waste prevention.

Other research avenues include the DAFM's Rural Innovation and Development Fund (RIDF)[45] which has previously provided funding for initiatives aimed at reducing food waste generated by food businesses, retailer/wholesalers, or suppliers in rural areas.

Food Vision 2030[46] includes an action to research the extent of food loss at the production (primary) stage in an Irish context, and develop innovative ways of reducing it.

Bord Bia has conducted research to better understand global sustainability demands around food and drink[47] and has produced insights that are designed to help understand customer and consumer behaviours and demand

41 https://www.sfi.ie/
42 https://www.gov.ie/en/publication/7e5e8-life-programme/
43 https://www.epa.ie/our-services/research/epa-research-2030/
44 https://www.gov.ie/en/service/b3faa-apply-for-the-circular-economy-innovation-grants-scheme-ceigs/
45 https://www.gov.ie/en/press-release/ba6b7-minister-mcconalogue-announces-funding-for-food-waste-reduction-projects-and-promotes-national-food-waste-recycling-week/
46 https://www.gov.ie/en/publication/c73a3-food-vision-2030-a-world-leader-in-sustainable-food-systems/
47 https://www.bordbia.ie/global-sustainability-insights/

around sustainability. The research has, for example, identified food waste as an important topic for consumers.

Ireland's National Bioeconomy Policy Statement[48] sets out a framework to further develop and strengthen the bioeconomy in Ireland with a focus on sustainability, circularity and innovation (See Appendix 2 for further information). A Bioeconomy Action Plan is currently being developed which will seek to map out key actions which will deliver on Ireland's ambition to be a global leader for the Bioeconomy.

DAFM's Competitive Research Funding Programme is the primary national funding mechanism for food research in higher education institutions and other public research institutes (e.g. Teagasc). It has been re-configured to help implement the research and innovation commitments contained in the Food Vision 2030 Strategy and the related Mission 4 which is to have 'An innovative, competitive and resilient agri-food sector driven by technology and talent'.

BiOrbic[49], Bioeconomy SFI Research Centre is Ireland's national bioeconomy research centre, established to promote and develop Ireland's bioeconomy through excellent research and innovation.

As part of the Roadmap's focus on research and innovation a Food Waste Prevention Task Force (see also Section 15) will identify and maintain a register of priority research topics on food loss and food waste which will inform the different research funding calls that include the topic of food waste and losses. This will ensure a coherent and strategic overview of food waste and losses research priorities, and help identify key organisations that could play an important role in associated research activities. Outputs of key research and innovation projects on food waste prevention will be communicated and disseminated in order to facilitate the sharing of knowledge, methods and tools to help support food waste prevention activities, and to facilitate active engagement for behaviour change. A compendium of existing research (completed and currently active) on food waste will be prepared to support this work.

It is also important to support innovation and advances in technology, and to identify opportunities to deploy new technologies such as artificial intelligence solutions to support the measurement and prevention of food waste.

Future areas of research that will be considered include, for example:

- **Date Marking**
  Misunderstanding and misuse of date marking ('use-by' and 'best before' dates) lead to food waste.
- **Greenhouse Gases Associated with Food Waste**
  Research will be considered in relation to the quantification of greenhouse gas emissions (direct and indirect) associated with food waste generation and the emissions savings resulting from the implementation of food waste reduction measures in Ireland. This can inform the development of climate relevant metrics for food waste prevention in Ireland.
- **Packaging**
  Sustainable packaging and plastics has been identified as a key issue. Advances in the bioeconomy offer potentially important solutions. Greater collaboration and research between food companies and others in the supply chain, such as packaging companies, is important and will be a key focus.
- **Primary Production Food Loss and Food Waste**
  Building on recent research, further research on food loss and food waste at the primary production stage in an Irish context and development of innovative ways of reducing food loss and food waste.

[48] https://assets.gov.ie/2244/241018115730-41d795e366bf4000a6bc0b69a136bda4.pdf
[49] https://biorbic.com/about/

14 Green Public Procurement

The *Waste Action Plan for a Circular Economy* commits to working with the public sector and public procurement specialists to ensure public bodies are supported in their efforts to prevent food waste and manage unavoidable waste through green public procurement. In 2021 the EPA published updated Green Public Procurement: Guidance for the Public Sector[50] which includes, for example, a focus on food waste prevention as part of public procurement of food and catering services.

Green Tenders – An Action Plan on Green Public Procurement[51], published in 2012, is the first action plan on Green Public Procurement in Ireland. The Programme for Government commits to progressing Green Public Procurement objectives such as mandating the inclusion of green criteria in all procurements using public funds, to be completed within three years. DECC has commenced the process of reviewing and updating *Green Tenders – An Action Plan on Public Procurement*. A public consultation will be carried out on a draft Green Public Procurement Strategy and Action Plan.

This work will include examining how food waste prevention can be further strengthened as part of Green Public Procurement so as to ensure that government and public sector organisations play a leadership role in championing efforts to prevent food waste.

[50] https://www.epa.ie/publications/circular-economy/resources/GPP-Guidance-for-the-Irish-Public-Sector.pdf

[51] https://www.gov.ie/en/publication/74075-green-tenders-an-action-plan-on-green-public-procurement/

15 Monitoring, Evaluation, Review and Knowledge Sharing

Food Waste Prevention Task Force and Roadmap Monitoring

The National Food Waste Prevention Roadmap, coordinated and led by DECC, will be monitored and reviewed annually to assess the impact of national food waste prevention measures. The Minister will report annually on the implementation of the National Food Waste Prevention Roadmap.

We will establish a Food Waste Prevention Task Force, comprised of representatives from key sectors and organisations, which will monitor the implementation and progress of the Roadmap delivery. The establishment of sub sectoral groups that engage with each of the stages of the food supply chain will be considered with a key focus on measurement, and the identification and implementation of food loss and food waste reduction measures, where applicable. The setting up of the Food Waste Prevention Task Force and identification of key stakeholders to participate in its work and sub sectoral groups will be completed following publication of the first Roadmap. Figure 3 illustrates key components that will contribute to the monitoring and review of progress of the Roadmap implementation.

The EPA, via the National Food Waste Prevention Programme and national waste statistics reporting, will monitor and evaluate the impact of food waste reduction measures and report on Ireland's progress in meeting its food waste reduction targets.

Regular updates on Ireland's progress in implementing food waste prevention measures and meeting food waste reduction targets will be made available by DECC and via the EPA website.

We will review the findings of the Food Waste Prevention Task Force and we will update the Roadmap accordingly to ensure actions remain

Figure 3 : Key components contributing to the National Food Waste Prevention Roadmap monitoring and review

relevant and appropriate so that Ireland is on the right path to deliver on its food waste reduction obligations. The update of the Roadmap will occur at least once every three years. The review of the Roadmap implementation will also inform the reporting on progress on meeting our Sustainable Development Goals commitments.

Forum on Food Waste

Ireland's Forum on Food Waste[52], first established in 2014, will continue to be held periodically and will bring policy leaders, businesses and experts together from across the food supply chain and will continue to provide a valuable network for information exchange on food waste prevention and reduction activities.

The Forum will actively promote and facilitate analysis of food waste prevention and reduction actions and their impacts, sharing information and identifying activities for collaboration and development (e.g. guidance and training supports).

This includes a focus on the interaction between different stages of the food supply chain to identify actions to prevent food waste upstream and downstream at the earliest opportunities (e.g., establishment of feedback loops). This will help encourage a systems approach across the supply chain and ensure a sense of common purpose.

The Forum will also inform stakeholders on the progress of the implementation of the Roadmap.

[52] https://foodwastecharter.ie/forum/

The National Food Waste Prevention Roadmap will be monitored and reviewed annually to assess the impact of national food waste prevention measures.

Appendix 1: Priority Actions for first Roadmap period

No.	Action	Lead Delivery Body	Other Stakeholders	Timeline
	Regulatory			
1	Establish statutory basis for preparing, updating and review of National Food Waste Prevention Strategy (Roadmap) – Circular Economy and Miscellaneous Provisions Act 2022.	DECC	Various other stakeholders	2024 (Following publication of a Circular Economy Strategy in accordance with the Circular Economy and Miscellaneous Provisions Act 2022)
2	Engage in process following Commission proposal on EU Food Waste Reduction Target.	DECC	DAFM, EPA	Commission proposal due Q2 2023
3	Engage in process regarding Commission proposal on revised rules on Date Marking under the Food Information for Consumers Regulation.	DOH	DAFM, DETE, DECC, various other stakeholders	Commission proposal due before end of 2022
	Food Waste Measurement and Reporting			
4	Fulfil annual reporting obligations on Food Waste Data Reporting to EU.	EPA	Various other stakeholders	June 2022 and annually thereafter
5	Publish the national food waste statistics, and reporting methodology for food waste data collection, validation and reporting for the purpose of reporting on Ireland's official statistics on food waste and progress made in reducing food waste.	EPA	Various other stakeholders	Annually
6	Recommend Food Waste Baseline Dataset that links to 2030 food waste reduction target.	EPA	DECC, DAFM	Q2 2023 and subject to EU developments on setting of EU Food Waste Reduction Targets
7	Promote the use and integration of the EPA's standard national food waste measurement protocol for use in key sectors via: • Engagement with DAFM, and relevant bodies and working groups (e.g., related to Food Vision 2030 implementation) • Engagement with Origin Green Programme • Engagement with Bioeconomy Policy Implementation Group • Engagement with reactivated Retail Sector Action Group • Engagement with Sectoral Representative Bodies	EPA	DAFM, DECC, Bord Bia, sectoral representative bodies, various other stakeholders	Ongoing

No.	Action	Lead Delivery Body	Other Stakeholders	Timeline
Food Waste Charter				
8	Launch revised Food Waste Charter.	EPA	DECC, DAFM, various other stakeholders	Q2 2023
9	Extend the Food Waste Charter to food supply chain businesses to establish industry agreement on food waste prevention.	EPA	Various other stakeholders	Ongoing
10	Build knowledge and develop capacity for food waste measurement and prevention in food sector businesses.	EPA	Various other stakeholders	Ongoing
11	Establish Food Waste Charter Action Group with sub sectoral working groups to collectively address food waste measurement and reduction in the food supply chain.	EPA	DECC, DAFM, various other stakeholders	Q1 2023
12	Review the effectiveness of the voluntary approach to food waste measurement and reporting to determine if there is a need to set mandatory requirements for measurement and reporting.	DECC	EPA, DAFM, sectoral representative bodies	Q4 2024
13	Identify and conduct studies to build evidence base for food waste prevention actions in food sector businesses.	EPA	Various other stakeholders	Ongoing
Food Donation – Redistribution				
14	Investigate the potential impact of a prohibition on the destruction of edible food in advance of its 'use-by' date.	DECC	Various other stakeholders	2024
15	Investigate the regulatory and legal barriers to 'Good Samaritan' acts of donation and whether mandatory donation of edible food from retail outlets would reduce food waste.	DECC	Retail Sector Action Group, various other stakeholders	2024
16	Using the EPA's Food Waste Charter, support a voluntary target with retailers and the processing industry for a percentage of edible food to be donated.	DECC	EPA, Retail Sector Action Group, various other stakeholders	2023
17	Examine options that supports a significant increase in the capacity and scale of the surplus food redistribution sector (e.g. in the charity sector).	DECC	Various other stakeholders	Ongoing

No.	Action	Lead Delivery Body	Other Stakeholders	Timeline
18	Support surplus food redistribution initiatives including redistribution of surplus food arising from sectors such as retail and primary production. Identify and support surplus food redistribution activities that can further combat food poverty.	DECC, DAFM	Working Group on Food Poverty[53], various other stakeholders	Ongoing
19	Support social enterprises and community-based initiatives that promotes surplus food redistribution.	DRCD[54], DECC, DAFM	Various other stakeholders	Ongoing
20	Raise awareness on food redistribution and donation including the use of consumer and local business facing technology platforms that facilitate food redistribution and donation. Presentation to the Retail Forum	DECC	Retail Forum	Ongoing
21	Work with key sectors (e.g., primary production and retail sectors) to examine how food waste due to product specification related aspects (e.g., misshapen fruit and vegetables) can be avoided.	DECC	DAFM, Retail Sector Action Group, various other stakeholders	Ongoing
Food Waste Segregation				
22	Introduce incentivised pricing for Commercial waste to support an increase in the segregation of waste.	DECC	Waste industry, various other stakeholders	2023
23	Make the provision of an organic waste bin mandatory as part of a waste collection service for all households.	DECC	Waste industry, various other stakeholders	2023
24	Roll out the provision of kitchen food waste caddies (via MyWaste.ie campaigns) to householders that have an existing organic bin collection service.	RWMPOs[55]	DECC, waste industry, various other stakeholders	2022 & 2023
Communications, Education and Awareness				
25	Prepare overarching communications and awareness plan on food waste prevention related to delivery of the Roadmap.	DECC, DAFM, EPA	Various other stakeholders	Q1 2023
26	Roll out Stop Food Waste Communications and Awareness activities including National Stop Food Waste Day on 1st March.	EPA	DECC, various other stakeholders	Ongoing

[53] https://www.gov.ie/en/press-release/4f450-minister-obrien-announces-new-working-group-on-food-poverty/

[54] Department of Rural and Community Development

[55] Regional Waste Management Planning Offices

No.	Action	Lead Delivery Body	Other Stakeholders	Timeline
27	Roll out Food Waste Recycling Awareness activities including an annual National Food Waste Recycling Week.	RWMPOs	DECC, waste industry, various other stakeholders	Ongoing
28	Identify education and training supports for organisations (e.g., food processors, hospitality and food services) that can incorporate robust food waste measurement and prevention activities.	DECC, DAFM, EPA	Various other stakeholders	Ongoing
Research and Innovation				
29	Provide funding for research, piloting and demonstration on food waste topics (e.g., via EPA and DAFM Research Programmes, Green Enterprise funding, Circular Economy Innovation Grant Scheme, Rural Innovation and Development Fund).	DECC, DAFM, EPA	Various other stakeholders	Ongoing
30	Prepare a compendium of existing and completed research, innovation, piloting and demonstration, on food waste prevention.	DECC	EPA, DAFM, various other stakeholders	Q1 2023
31	Establish a Register of Priority Research and Innovation Topics on Food Loss and Food Waste.	DECC	DAFM, EPA, Food Waste Prevention Task Force	Q2 2023
Green Public Procurement				
32	Update Green Public Procurement Policy that includes examining how food waste prevention can be further strengthened in the government and public sector.	DECC	OGP[56], EPA, various other stakeholders	Q2, 2023
Monitoring, Evaluation, Review and Knowledge Sharing				
33	Establish Food Waste Prevention Task Force and sub-sectoral groups.	DECC	DAFM, EPA, key sector representatives	Q1 2023 (linked to establishment of Food Waste Charter Action Group)
34	Coordinate Forum on Food Waste.	EPA	DECC and various other stakeholders	Q4 2023
35	Participate in the work of the EU Platform on Food Losses and Food Waste and associated subgroups.	EPA	DECC, DAFM and various other stakeholders	Ongoing

[56] Office of Government Procurement

No.	Action	Lead Delivery Body	Other Stakeholders	Timeline
36	Provide annual updates on food waste (via the EPA's national waste statistics reporting) to chart the progress of the impact of Ireland's National Food Waste Prevention Programme and progress towards meeting Ireland's food waste reduction targets.	EPA	DECC	Annual
37	By end of the first Roadmap period set interim targets for food waste reduction for inclusion in the next Roadmap.	DECC	DAFM, EPA, various other stakeholders	2024
38	Undertake annual review of National Food Waste Prevention Roadmap.	DECC	DAFM, EPA, Food Waste Prevention Task Force	Annual

Appendix 2: Supporting Policy and Legislative Context

International

2030 Agenda for Sustainable Development

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries – developed and developing– in a global partnership. Goal 12.3 of the Sustainable Development Goals includes the target that by 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.

European

A new Circular Economy Action Plan for a cleaner and more competitive Europe and the EU Farm to Fork Strategy

The European Commission adopted a new Circular Economy Action Plan which is one of the main blocks of the European Green Deal, Europe's new agenda for sustainable growth. The Commission will be proposing a target on food waste reduction, which will address comprehensively the food value chain. The EU's Farm to Fork Strategy is at the heart of the European Green Deal which aims to make food systems fair, healthy and environmentally-friendly. This includes reducing food loss and waste. The Commission is committed to halving per capita food waste at retail and consumer levels by 2030. Using the new methodology for measuring food waste and the data expected from Member States in 2022, it will propose legally binding targets to reduce food waste across the EU by end of 2023 defined against a baseline for EU food waste levels. The Commission will integrate food loss and waste prevention in other EU policies.

Misunderstanding and misuse of date marking ('use-by' and 'best before' dates) leads to food waste. The Commission will revise EU rules to take account of consumer research. In addition to quantifying food waste levels, the Commission will investigate food losses at the production stage, and explore ways of preventing them. Coordinating action at EU level will reinforce action at national level, and the recommendations of the EU Platform on Food Losses and Food Waste will help show the way forward for all actors.

Also as part of the EU's Farm to Fork Strategy objective for a Fair, healthy and environmentally-friendly EU food system, the Commission will also be preparing a proposal for a legislative framework for sustainable food systems by the end of 2023[57].

Waste Framework Directive

The revised Waste Framework Directive (2018/851/EC) requires that "Member States shall adopt specific food waste prevention programmes within their waste prevention programmes". The Directive calls on the EU countries to reduce food waste at each stage of the food supply chain, monitor food waste levels and report back regarding progress made. Moreover it requires the EU countries to:

- prepare food waste prevention programmes (as a part of general waste prevention programmes);
- encourage food donation and other redistribution for human consumption, prioritising human use over animal feed and the reprocessing into non-food products as part of measures taken to prevent waste generation;
- provide incentives for the application of the waste hierarchy, such as facilitation of food donation.

[57] https://ec.europa.eu/food/horizontal-topics/farm-fork-strategy/legislative-framework_en

The legislation also:

- introduces a 'food waste' definition based on the definition of food from the General Food Law;
- requests the Commission to adopt legislation on food waste measurement by end-March 2019;
- requests the Commission to prepare a report accompanied, if appropriate, by a proposal by end-2023 to set up an EU-wide food waste reduction target (to be met in 2030);
- states that consumer understanding of 'use-by' and 'best before' dates should be improved in order to reduce food waste.

The Commission was delegated to establish a common methodology to measure food waste levels in the EU, as well as a reporting format for the EU countries to inform on progress made over time. The Delegated Decision[58] establishing a common EU methodology to measure food waste requires Member States to collect data on food waste[59] as of 2020 and report on national food waste levels by mid-2022. The EU reporting framework will help standardise reporting of food waste levels by business and contribute to global monitoring of the Sustainable Development Goal Target 12.3.

National

Programme for Government – Our Shared Future

The Programme for Government: Our Share Future[60], June 2020, sets out commitments to help Ireland's transition to a circular economy and commits to continuing to work to minimise food waste across the economy.

Whole of Government Circular Economy Strategy

Ireland's first Whole of Government Circular Economy Strategy[61] sets out a vision for Ireland's transition to circularity; explaining the concept of the circular economy, describing what initiatives are already happening, what opportunities are available and how Government will drive the changes required.

Circular Economy and Miscellaneous Provisions Act 2022

The Circular Economy and Miscellaneous Provisions Act 2022[62] places the National Food Waste Prevention Strategy (Roadmap) on a statutory footing, making the ongoing development of policy in relation to food waste prevention a legal requirement for Government. Following the publication of a Circular Economy Strategy in accordance with section 7 of the Circular Economy and Miscellaneous Provisions Act 2022, the next National Food Waste Prevention Roadmap (which will be the first statutory national food waste prevention strategy) will be prepared and published on a statutory basis.

Waste Action Plan for a Circular Economy

The development and implementation of measures to prevent and manage food waste is a key focus of the *Waste Action Plan for a Circular Economy* that was published in September 2020. A central action in the plan in terms of food waste is to develop a Food Waste Prevention Roadmap that sets out a series of actions to deliver the reductions necessary to halve our food waste by 2030, meet any other related targets, and promote our transition to a circular economy.

---

58 Commission Delegated Decision (EU) 2019/1597 of 3 May 2019 supplementing Directive 2008/98/EC of the European Parliament and of the Council as regards a common methodology and minimum quality requirements for the uniform measurement of levels of food waste

59 In accordance with Commission Delegated Decision (EU) 2019/1597 concerning a common methodology and minimum quality requirements for the uniform measurement of levels of food waste, food waste does not include losses at stages of the food supply chain where certain products have not yet become food as defined in Article 2 of Regulation (EC) No 178/2002, such as edible plants which have not been harvested. In addition, it does not include by-products from the production of food that fulfil the criteria set out in Article 5(1) of Directive 2008/98/EC, since such by-products are not waste.

60 https://www.gov.ie/en/publication/7e05d-programme-for-government-our-shared-future/

61 https://www.gov.ie/en/press-release/16a69-government-launches-irelands-first-whole-of-government-circular-economy-strategy/

62 https://www.irishstatutebook.ie/eli/2022/act/26

Climate Action and Low Carbon Development (Amendment) Act 2021

In July 2021, the Climate Action and Low Carbon Development (Amendment) Act 2021 was signed into law. Ireland is now on a legally binding path to net-Zero emissions no later than 2050, and to a 51% reduction in emissions by the end of this decade. The Act provides the framework for Ireland to meet its international and EU climate commitments and to become a leader in addressing climate change.

Ireland's Climate Action Plan

Ireland's Climate Action Plan sets out a roadmap to deliver on our climate ambition. The 2021 Climate Action Plan[63] includes a commitment to develop a Food Waste Prevention Roadmap to deliver our commitment to reduce food waste by 50% by 2030. Food waste prevention measures will be incorporated into future Climate Action Plans to ensure that food waste remains a key climate action priority for Ireland.

Food Vision 2030 Strategy

Ireland's Agri-Food Strategy, Food Vision 2030[64] outlines how an essential part of circular bio-based production is putting an end to avoidable waste that occurs in various parts of the food chain, from primary production to the waste-bins in kitchens, with the re-use of valuable materials that are unavoidable waste. The Strategy refers to the National Food Waste Prevention Roadmap and outlines that all relevant stakeholders in the agri-food sector, as well as retailer, food service and consumer representatives should participate in this, building on the work of the existing National Waste Prevention Programme (now the Circular Economy Programme) and related initiatives. The strategy also highlights activities that the Roadmap should include, such as behavioural change and educational initiatives for trade customers, consumers and businesses, technical support interventions, data gathering research, monitoring and evaluation.

Ag Climatise – A Roadmap towards Climate Neutrality

The Ag Climatise Roadmap[65] published by DAFM on 9th December 2020 recognises the need for action in terms of developing a circular bioeconomy, and reducing food waste and loss. The roadmap includes supporting actions in this regard such as promoting the development of a sustainable circular bioeconomy within the agri-food sector and further enhancing carbon credentials of the horticulture sector.

National Policy Statement on the Bioeconomy

The Government's vision for the bioeconomy[66] is to grow Ireland's ambition to be a global leader for the bioeconomy through a co-ordinated approach that harnesses Ireland's natural resources and competitive advantage and that fully exploits the opportunities available while monitoring and avoiding unintended consequences. An important objective of the bioeconomy is to move Ireland beyond simply a target compliance and carbon mitigation focus to integrating sustainable economic development into our economic model as we transition to a low carbon and circular economy. There is increasing recognition at a European level of the potential benefits for economies and societies of adopting a circular economy that maintains the utility and value of products, components and materials in the economy for as long as possible. The bioeconomy has a close relationship with the circular economy and represents an area where Ireland has some crucial advantages. The bioeconomy should promote circularity through solutions and innovations that reuse and recycle materials, maximising resource efficiency through the use of unavoidable wastes and environmental sustainability.

[63] https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/
[64] https://www.gov.ie/en/publication/c73a3-food-vision-2030-a-world-leader-in-sustainable-food-systems/
[65] https://www.gov.ie/en/publication/07fbe-ag-climatise-a-roadmap-towards-climate-neutrality/
[66] https://assets.gov.ie/2244/241018115730-41d795e366bf4000a6bc0b69a136bda4.pdf

Roadmap for Social Inclusion 2020-2025

The Roadmap for Social Inclusion 2020-2025[67] which sets out the Government's ambition for Ireland to become one of the most socially inclusive States in the EU, defines a number of specific targets to be achieved and details a number of key commitments to deliver on this ambition and these targets. As outlined in the roadmap, 7% of people in Ireland are in food poverty.[68] While this has decreased from a high of 13.2% in 2013, this rate is still of a concern and the Government has committed to develop a comprehensive programme of work to further explore the drivers of food poverty and to identify mitigating actions.

National Disability Inclusion Strategy 2017-2021

People with disabilities are more likely to live alone and 42% live in a jobless household, putting them at high risk of poverty. Overall, people with disabilities experience high levels of consistent poverty. The National Disability Inclusion Strategy 2017-2021[69] is the key framework for policy and action to address the needs of people with disabilities. Its overarching objective is to improve the lives of people with disabilities both in a practical sense, and also in creating the best possible opportunities for people with disabilities to fulfil their potential.

National Biodiversity Action Plan 2017-2021

This National Biodiversity Action Plan[70], the third such plan for Ireland, captures the objectives, targets and actions for biodiversity that will be undertaken by a wide range of government, civil society and private sectors to achieve Ireland's Vision for Biodiversity.

[67] https://www.gov.ie/en/press-release/0b2e3d-minister-doherty-publishes-roadmap-for-social-inclusion-2020-2025/

[68] According to more recently published data (see footnote no 1), 8.9% of the population in Ireland experienced food poverty in 2021.

[69] https://www.gov.ie/en/publication/8072c0-national-disability-inclusion-strategy-2017-2021/

[70] https://www.npws.ie/sites/default/files/publications/pdf/National%20Biodiversity%20Action%20Plan%20English.pdf

Appendix 3: Further Information – Key Sectors

Households

Householders can throw away food because they buy too much or don't use it on time, and may not be aware of the amount of the food waste they produce and may not see that there is a problem that needs to be dealt with.

The EPA's food waste prevention programme targets household food waste through the application of behavioural insights and awareness raising activities through the national public-facing campaign Stop Food Waste to achieve a measured increase in the number of people engaging on the topic and widespread public awareness of the issue of food waste and solutions to help reduce it.

For a successful food waste prevention programme, there is an important role for awareness raising and communication activities that have a large population reach and that maintain an ongoing presence in the public consciousness. An important finding from an EPA behavioural insights study in 2020[71] showed that some of the positive food organisation behaviours, such as checking the fridge before shopping and making a list, are followed by those who are more conscious of food waste on a day-to-day basis, highlighting the need to make people aware of how much food waste they are producing, and how they can take actions in their day-to-day life to reduce the food they waste.

Implemented through an evidence-led communications plan, Stop Food Waste public engagement activities use a multi-channel approach that reflects different preferences for communication channels, including a mix of stopfoodwaste.ie website, social media, PR and other mass communication methods to regularly reach large audiences. Engagement with collaborative partners and working with others is ongoing to amplify the message and reach.

The activities and delivery model of the food waste programme have been revised to ensure they are optimised for impact and appropriately focused to play a key role in the achievement of Ireland's 50% reduction in food waste target by 2030 and reduced associated GHG emissions. Activities and interventions are linked to targeted priority food waste types and audiences, informed by the results of attitudes surveys and behavioural insights. These surveys will be repeated to monitor the changes in engagement, inform the identification of target audiences, key messages and evaluating the effectiveness of the programme activities. Reduction in reported food waste will be measured through regular waste characterisation studies to track changes in household food waste.

A methodology to measure the composition of household food waste has been developed and studies are planned to provide granular data and insights on food waste from Irish homes and support food waste prevention measurement and reporting activities. Initial sampling is due to take place in Autumn 2022 (to coincide with national waste characterisation sampling where possible).

Processing and Manufacturing

The food manufacturing and processing sectors generate a significant amount of Ireland's food waste. Much of this waste is inedible (for example skins, seeds, bones) and redirected for animal feed or energy production. As a result, it is often overlooked when considering food waste prevention.

In order to reduce wastes in the manufacturing and processing sectors, the specific reasons contributing to the generation of food waste must be identified. These reasons will vary but the following are some that are commonly encountered:

- Trimming during processing;
- Product specifications (e.g. size, cosmetic/ aesthetic standards);
- Quality control;
- Rejected or damaged ingredients or products;
- End of line/batch residues;
- Product lost through cleaning;

[71] https://www.epa.ie/media/epa-2020/monitoring-amp-assessment/circular-economy/National_Food_Waste_Attitudes_Survey.pdf

- Improper packaging;
- Contamination on the processing line;
- Errors in processing resulting in defects;
- Poor operational practices;
- Poor instrumentation and controls.

Improving food waste segregation should be included in the remit of any future commercial food waste prevention and measurement initiatives. Such initiatives will not be fully effective without improvements to the current standards of food waste segregation in Irish businesses.

Restaurants and Food Services

The number of meals typically consumed by Irish people outside of the home is increasing. As a result, food service (including hotels, workplace canteens, bars, restaurants, etc.) is becoming an ever more important sector in relation to food waste prevention in Ireland.

The main sources and primary issues associated with food waste in this sector are typically related to:

- Unused, outdated and damaged stock;
- Food uneaten by customers;
- Prepared but unserved food;
- Preparation waste;
- Food cooked/prepared improperly.
- Large portions;
- Over-ordering by customers;
- Issues with stock control leading to spoilage;
- Over-ordering by kitchen staff (e.g. just in case ordering);
- Poor menu planning;
- Improper storage;
- Lack of communication internally and with customers;
- Poor preparation practices;
- Some food waste amounts going to the residual bin instead of the organic waste recycling bin.

Primary Production

Primary food production, including farming and fishing, is a major part of Ireland's economy. Similar to many other countries internationally, there is very little quantified data on the levels of waste generated in these sectors. While primary food production is a very diverse sector, some of the common drivers of food waste include:

- Product specifications (e.g. size, cosmetic standards);
- Lack of access to market or processing facilities;
- Price volatility resulting in commodity price too low to cover harvest cost;
- Premature or delayed harvesting;
- Adverse weather conditions;
- Damaged or low grade product;
- Food affected by pests, animals or disease;
- Lack of storage facilities, including lack of cold storage;
- Spoilage due to inappropriate storage, treatment and handling;
- Harvesting technique.

Retail and other distribution of food

Distribution and retail are the sectors within the food system that connect food production and processing with final use. Due to this position, distribution and retail are influenced by and can influence the entire system, both up and downstream.

Some of the main types of food waste at the distribution and retail stage are:

- Recalled product;
- Damaged food;
- Spoilage;
- Unsold stock e.g. promotional/seasonal stock;
- Short-dated product.

In order to reduce wastes in the distribution and retail sectors, the specific reasons contributing to the generation of waste must be identified. These reasons will vary but the following are some that are commonly encountered:

- Delivery issues (e.g. delays and oversized deliveries);
- Regular replenishment of stocks, leading consumers to select most recent products;
- Poor demand forecasting;
- Lack of a system for food donation.

www.gov.ie