

Towards a Resource Efficient Ireland

Ireland's National Waste Prevention Programme
Annual Report for 2017



ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

The work of the EPA can be divided into three main areas:

Regulation: *We implement effective regulation and environmental compliance systems to deliver good environmental outcomes and target those who don't comply.*

Knowledge: *We provide high quality, targeted and timely environmental data, information and assessment to inform decision making at all levels.*

Advocacy: *We work with others to advocate for a clean, productive and well protected environment and for sustainable environmental behaviour.*

Our Responsibilities

Licensing

We regulate the following activities so that they do not endanger human health or harm the environment:

- waste facilities (e.g. landfills, incinerators, waste transfer stations);
- large scale industrial activities (e.g. pharmaceutical, cement manufacturing, power plants);
- intensive agriculture (e.g. pigs, poultry);
- the contained use and controlled release of Genetically Modified Organisms (GMOs);
- sources of ionising radiation (e.g. x-ray and radiotherapy equipment, industrial sources);
- large petrol storage facilities;
- waste water discharges;
- dumping at sea activities.

National Environmental Enforcement

- Conducting an annual programme of audits and inspections of EPA licensed facilities.
- Overseeing local authorities' environmental protection responsibilities.
- Supervising the supply of drinking water by public water suppliers.
- Working with local authorities and other agencies to tackle environmental crime by co-ordinating a national enforcement network, targeting offenders and overseeing remediation.
- Enforcing Regulations such as Waste Electrical and Electronic Equipment (WEEE), Restriction of Hazardous Substances (RoHS) and substances that deplete the ozone layer.
- Prosecuting those who flout environmental law and damage the environment.

Water Management

- Monitoring and reporting on the quality of rivers, lakes, transitional and coastal waters of Ireland and groundwaters; measuring water levels and river flows.
- National coordination and oversight of the Water Framework Directive.
- Monitoring and reporting on Bathing Water Quality.

Monitoring, Analysing and Reporting on the Environment

- Monitoring air quality and implementing the EU Clean Air for Europe (CAFÉ) Directive.
- Independent reporting to inform decision making by national and local government (e.g. *periodic reporting on the State of Ireland's Environment and Indicator Reports*).

Regulating Ireland's Greenhouse Gas Emissions

- Preparing Ireland's greenhouse gas inventories and projections.
- Implementing the Emissions Trading Directive, for over 100 of the largest producers of carbon dioxide in Ireland.

Environmental Research and Development

- Funding environmental research to identify pressures, inform policy and provide solutions in the areas of climate, water and sustainability.

Strategic Environmental Assessment

- Assessing the impact of proposed plans and programmes on the Irish environment (e.g. *major development plans*).

Radiological Protection

- Monitoring radiation levels, assessing exposure of people in Ireland to ionising radiation.
- Assisting in developing national plans for emergencies arising from nuclear accidents.
- Monitoring developments abroad relating to nuclear installations and radiological safety.
- Providing, or overseeing the provision of, specialist radiation protection services.

Guidance, Accessible Information and Education

- Providing advice and guidance to industry and the public on environmental and radiological protection topics.
- Providing timely and easily accessible environmental information to encourage public participation in environmental decision-making (e.g. *My Local Environment, Radon Maps*).
- Advising Government on matters relating to radiological safety and emergency response.
- Developing a National Hazardous Waste Management Plan to prevent and manage hazardous waste.

Awareness Raising and Behavioural Change

- Generating greater environmental awareness and influencing positive behavioural change by supporting businesses, communities and householders to become more resource efficient.
- Promoting radon testing in homes and workplaces and encouraging remediation where necessary.

Management and structure of the EPA

The EPA is managed by a full time Board, consisting of a Director General and five Directors. The work is carried out across five Offices:

- Office of Environmental Sustainability
- Office of Environmental Enforcement
- Office of Evidence and Assessment
- Office of Radiation Protection and Environmental Monitoring
- Office of Communications and Corporate Services

The EPA is assisted by an Advisory Committee of twelve members who meet regularly to discuss issues of concern and provide advice to the Board.



Rialtas na hÉireann
Government of Ireland



Towards a Resource Efficient Ireland

Ireland's National Waste Prevention Programme

Annual Report for 2017

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- The many local authority staff who have contributed significantly to the development of the programme;
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Foreword

Moving Ireland to a circular economy, where materials are conserved and kept in use as long as possible, will require changes in how we make products and how we deliver services. By being clever about what we make, and being careful about how we use the goods and services in our lives, we can save raw materials and reduce waste while maintaining a good lifestyle. As the Circular Economy gathers momentum at a European level, it is critical to translate this policy concept into changes in our consumption and production practices.

The work of the National Waste Prevention Programme (NWPP) plays a key role in building Ireland's response in this area by providing leadership on innovative ways to keep the added value in products for as long as possible and eliminating wastage. In this context it is timely to consider the thrust and scope of the programme with regard to supporting Ireland's ambitions in this area. The NWPP has been operating since 2004 and during 2018 a strategic review will be undertaken to inform a reframing of the NWPP to ensure that it continues to deliver on emerging policy priorities within a changing economy.

Looking ahead, the NWPP will continue to play a strong role supporting Ireland's sustainable development ambitions – including transition to a low-carbon circular economy; and in providing leadership on national priorities such as food waste prevention. As the NWPP looks forward to a new phase, we will look to refresh our strategic partnerships and to develop our advocacy role to maximise the impact of the work underway in the programme.

This annual report is intended to provide an engaging overview of the activities of the NWPP, and I trust that you find it an interesting read. Within the NWPP, we look forward to an exciting and productive year ahead.



Dr Tom Ryan

Chair, National Waste Prevention Committee

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€1.3 million in savings identified through Greenbusiness.ie



260 businesses used the online Tool for REsource Efficiency



3000 tonnes of materials reused through SMILE Resource Exchange



Ireland's Food Waste Charter signed & launched



300 Households completed Stop Food Waste Challenges



Over 10,000 items exchanged on FreeTrade Ireland

NATIONAL WASTE PREVENTION PROGRAMME HIGHLIGHTS 2017



38 Smart Farmers saved costs, reduced GHGs & shared their experiences



21 Local Authorities funded to run 34 community waste prevention initiatives



180 of Ireland's largest water users collaborated on water saving



Piloted quality standard ReMark to strengthen consumer confidence in reused goods



www.repairmystuff.ie developed to promote local repair services



Case Studies & Best Practice Guidance for hospital water use published



2,400 farmers safely disposed of 177 tonnes of hazardous wastes & oils

1. Introduction

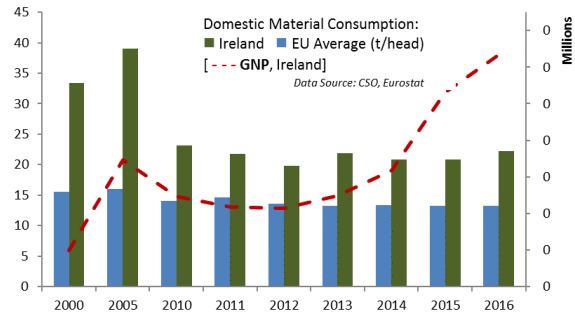
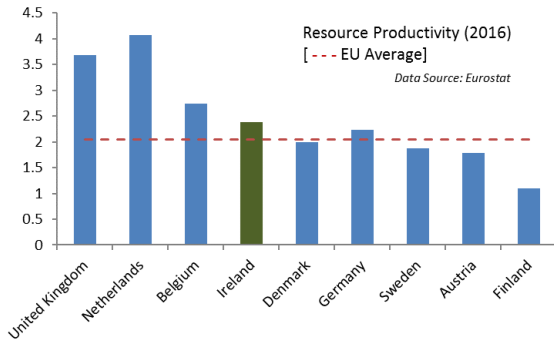
Over the course of 2017, the National Waste Prevention Programme (NWPP) continued to deliver a suite of initiatives and supports to promote resource efficiency and the sustainable use of resources in Ireland. The programme elements continued to evolve to reflect the changing economic and policy context around waste prevention and the circular economy.

The overarching strategy that encompasses the NWPP is Towards a Resource Efficient Ireland which has as its key objective to implement EU and national policy on resource efficiency to break the link between economic growth and environmental impact. The NWPP does not exist in a vacuum, and seeks to build synergies between state agencies and national bodies working in relevant areas, for example Bord Bia and its “Origin Green” programme.



In terms of national performance in this area, Eurostat data provides an opportunity to consider Ireland’s position in relation to comparable countries and Ireland’s position over time. The graphs below present two views of Ireland’s consumption and efficiency performance, and offer a mixed picture. From a resource productivity point of view, Ireland looks to be in a strong position though this reflects the high proportion of the economy working in the services sector, rather than material-intensive industries of manufacturing and construction. A recent OECD quarterly employment survey reported that the services sector now accounts for 75% of employment in the economy¹. On the consumption side, Ireland continues to be above the EU average, with Eurostat noting high levels of biomass consumption (particularly fodder crops & grazed biomass) in national activity data. There is also a trend which points to the early stages of resumption of unsustainable material usage in Ireland, in line with economic recovery. This emphasises the need for urgent and effective action on resource use to be taken across the economy.

¹ <http://stats.oecd.org/Index.aspx?DataSetCode=STLABOUR>



The European Commission made progress on implementation of the Circular Economy Package during 2017. Some of the key areas under the Action Plan and legislative ambitions are:

- Clearer definitions of key waste concepts.
- New binding targets at EU level for waste reduction to be met by 2025, 2030 and 2035. These targets cover municipal waste recycling and packaging waste recycling (with specific recycling targets for various packaging materials) and landfilling of municipal waste. Specific elements include:
 - *By 2030, the preparing for reuse and the recycling of municipal waste shall be increased to a minimum of 60% by weight;*
 - *By 2030, a minimum of 70% by weight of all packaging waste will be recycled;*
 - *By 2035, the amount of municipal waste landfilled is reduced to 10% or less of the total amount of municipal waste generated (by weight).*
- Stricter methods and rules to calculate the progress made towards targets.
- Stricter requirements for the separate collection of waste, reinforced implementation of the waste hierarchy through economic instruments and additional measures for member states to prevent waste generation.
- Minimum requirements for extended producer responsibility schemes. Producers under these schemes are responsible for the collection of used goods, sorting and treatment for their recycling. Producers will be required to pay an increased financial contribution for that purpose calculated based on treatment costs.
- The legislative ambitions of the Circular Economy are complemented by a wider Action Plan which consists of five stands of production, consumption, waste management, secondary raw materials and innovation and investment. Implementation is ongoing and developments in 2018 included the publication of a Plastics Strategy and a proposal on Single Use Items.

Moving Towards a Circular Economy in Ireland

In October, the National Economic and Social Council (NESC) launched a research report on the circular economy in Ireland², completed as part of its sustainability remit and with support from Department of Communications, Climate Action and Environment (DCCAE). The research was conducted by Dr Simon O’Rafferty, and its purpose was to identify and document case studies of circular economy practices in Ireland and also to examine some of the key enablers and barriers to their further development.



The report shows there are pockets of innovation and some very well-established businesses at the frontier of the circular economy. The research report documents the opportunities and challenges for these companies and organisations as they strive to bring more circular practices to their business and enterprise models. Circular economy practices were also identified in civil society, community-led initiatives through the work of Non-Governmental Organisations (NGOs), social enterprises and co-operatives. This ‘bottom-up’ approach to examining the circular economy provides a key contribution to the emerging debate in Ireland.

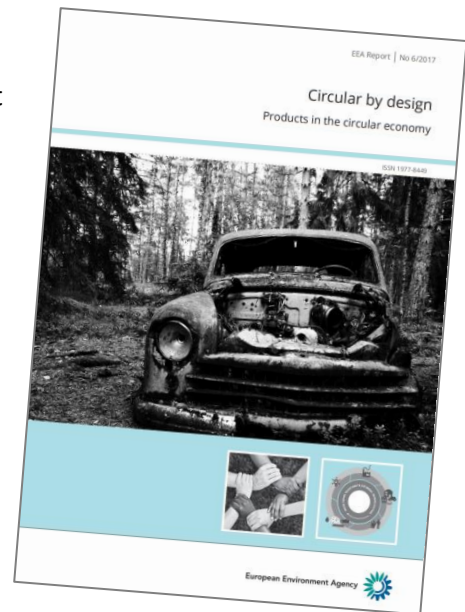
The report also carefully maps out many of the complex challenges that these, and other organisations, have faced to date. It reflects on some of the key enablers and barriers to the development and discussion of circular economy practices more widely in Ireland.

The research report concludes with recommendations on the transition pathways, enabling conditions, metrics and innovation system needed to progress the circular economy. In its consideration of the research work, the Council developed four broad reflections which are presented within the report:

- There is momentum in circular economy practices in Ireland but action is needed to build on the early advantage.
- The full potential of the circular economy for Ireland has yet to be identified.
- The meaning and nature of the circular economy needs to be understood more widely.
- The development of the circular activity requires a holistic and strategic policy approach so as to maximise opportunities.

² http://files.nesc.ie/nesc_reports/en/144_Moving_Towards_the_Circular_Economy.pdf

During 2017, the European Environment Agency published a report ‘Circular by Design’ which looked at how product design and usage can contribute to circularity of materials³. The report notes that transition towards a circular economy requires fundamental changes to production and consumption systems, going well beyond resource efficiency and recycling waste. The authors noted that the circular economy concept has developed from a need to tackle waste issues and so has placed a strong emphasis on materials rather than products. The report calls for increased focus on designing products to increase their useful lives; and to facilitate reuse, repair and remanufacturing. In addition, the report considers the linkages between circularity and the low-carbon economy. It is noted that 55-65% of total greenhouse gas emissions relate to material handling (production, transport & disposal) and so efficiencies in material flows offer strong potential for emissions reductions.



The UN Sustainable Development Goals provide a further context for the NWPP and in particular, the targets shown below have strong linkages to the programme activities.

8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation...
9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes...
11b	By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters...
12.1	Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
12.2	By 2030, achieve the sustainable management and efficient use of natural resources
12.3	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
12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

³ <https://www.eea.europa.eu/publications/circular-by-design>

2. Communicating & Networking

Communicating the Outputs

The NWPP tailors key messages on waste prevention for specific audiences including community groups, homeowners, businesses, public sectors and agriculture. Each programme engages these audiences using a broad range of communication channels such as targeted online platforms, social media, campaigns, videos, published reports, case studies and guides, workshops & training days, events and traditional media (radio and television).

Programmes are also focused on working closely with key audiences through peer-to-peer learnings, providing personal assistance and expertise to support those on a journey to preventing waste. All programmes do this through raising awareness on the issues of waste and the positive impacts of implementing actions to prevent waste. Our programme elements provide the tools and expert support necessary to create awareness, identify the opportunities and enable action on waste prevention.

Along with using targeted channels and peer-to-peer learnings, the NWPP has a dedicated twitter channel (@EPAWasteRes) to promote programme activities and key waste statistics. The EPA Waste & Resources YouTube provides programme-wide video communications, an increasingly useful tool for raising awareness⁴.

Throughout the year the NWPP has been promoted through national and local media such as newspapers, radio interviews, online articles and videos. Below are some examples for 2017.



⁴ <https://www.youtube.com/channel/UCROj8BE7o4X-hBnGMB0GBx5A>

The individual programmes of the NWPP aim to disseminate and share the programme outputs to as wide an audience as possible. The table below shows the communications channels employed for each element in 2017.

Communication Channels	NWPP Elements									
	Stop Food Waste	Greenbusiness.ie	Green Healthcare	Smart Farming	Farm Hazardous Waste	Green Enterprise	Local Authority Prevention Network	FreeTrade Ireland	SMILE Resource Exchange	Community Reuse Network Ireland
Website	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Twitter	✓	✓					✓	✓	✓	✓
Facebook	✓	✓					✓	✓	✓	✓
YouTube	✓	✓		✓	✓	✓	✓	✓	✓	
LinkedIn		✓							✓	✓
Newsletter	✓						✓		✓	✓
Published Reports		✓	✓	✓		✓	✓			✓
Published Guides	✓	✓	✓	✓			✓			
Published Case Studies		✓	✓	✓		✓	✓		✓	✓
Online tools	✓	✓	✓				✓		✓	✓
Networking tools	✓		✓				✓			✓
Workshops	✓	✓	✓				✓			
Events	✓	✓	✓		✓		✓	✓	✓	✓
Seminars	✓	✓	✓	✓						
Training Days	✓		✓	✓			✓			
Awareness Days	✓		✓				✓			
Radio	✓						✓			
Television	✓						✓			

Working with Others

Along with targeting key waste prevention messages, the NWPP supports policy implementation in areas such as the EU Circular Economy Package and the UN Sustainable Development Goals.

The NWPP forms strong partnerships to develop and implement the programme. The National Waste Prevention Committee (NWPC) consists of members from government, business networks, industry, agriculture, waste management, social enterprises, public sectors and NGOs. The NWPC informs the direction and delivery of the NWPP, provides expert guidance and generates awareness of the programme within their networks.

The EPA delivers the programme through partnerships with Local Authorities, Regional Waste Offices, Government Agencies and Public Bodies as well as sectoral groups and bodies. Each element of the programme enables waste prevention actions by business, public sector and communities. Below is a diagram of the supporting structures, delivery channels and partnerships of the NWPP.



Sponsorships 2017

The NWPP also recognises those leading the way towards waste prevention through sponsorship and support funding to key events and awards. During 2017, these included the following;

- Mayo Business Awards, February, Castlebar
 - Winner Green Business Award: Homecare Medical Supplies (see image)
- Rochestown College Cookbook Sponsorship
- The Green Awards 2017, Dublin, February
 - Winner Green Small Organisation of the Year: Alice Ryan, Irish Green Building Council
- Chambers Ireland Award, Dublin, September.
 - Excellence in Environment Large Indigenous Company: Dublin Airport Central for the Sustainable Buildings Project. Excellence in Environment Multi National Company: Lidl Ireland for Origin Green Project
- Tidy Towns National Award, Dublin, September
 - Winner Raheny Tidy Village Group. Highly commended Ballyleague Village Renewal & Tidy Towns Committee, Co. Roscommon. Coiste Forbartha Charraig Airt, Co. Donegal. Most Innovative Project: Carlingford, Co Louth
- Charity Shops Association of Ireland: Reuse event and training on effectively promoting reuse items.
- Pakman Awards, October, Dublin



- *Waste Prevention Business Award Winner: SMILE Resource Exchange*
- Sustainable Nation Ireland Gathering event, Dublin, November.
- Role of Social Enterprise in a Circular Economy, RReuse Conference, Belgium, November.
- Upcycle Challenge, Athlone, November.
 - *Allihies Men's Shed, Co. Cork: 6 Seater Garden Table*
 - *Eastern-Midlands Waste Region Award: Hana Tesarova, Bag from bicycle tubes*
 - *Connacht-Ulster Waste Region Award: Martin McLoughlin, Sewing Machine Table*
 - *Southern Waste Region Award: IRD Duhallow Furniture Revamp, Tyre Foot Stool*

3. Home & Community

3.1 Stop Food Waste

Though food waste may not seem to be an issue that has a direct impact on our daily lives, when the impacts associated with global food waste are considered, it is one of the most significant issues of our time. It is estimated that, annually,

1.3 billion tonnes of food is wasted globally. This equates to roughly one third of all the food that is produced

worldwide. In fact, if food waste were a country it would be the third largest contributor to greenhouse gas emissions after China and the US⁵. But that doesn't tell the full story: 200 times the landmass of Ireland and the equivalent of 100 times the water that flows through the Shannon are used each year to produce food that is not consumed. In Ireland it is estimated that over 1 million tonnes of food waste is produced annually.



There are also moral and social implications of wasted food. Although enough food is currently produced to feed everyone, approximately 9% of the global population of 7 billion are undernourished. And as our global population increases, so too will the pressures on the food system that feeds us. Therefore, it is imperative that the efficiency by which we produce, distribute and consume food is improved.

Food Waste and Consumers:

Of the 1 million tonnes of food waste produced annually in Ireland, ~300,000 tonnes is produced by households. Of course, not all this food waste can be prevented but the Stop Food Waste programme, established in 2009, was developed to provide information and support to Irish households so that they can make the most of the food that they have and reduce the volumes of food waste produced.

The Stop Food Waste team work directly with households, communities and national organisations (e.g. local authorities, local development companies) to continually develop the tools and supports needed to address this challenging behavioural based issue. In addition, the national brand is supported through strong on-line messaging and collaborative promotion through local and national networks. The following provides a summary of some of the key actions undertaken as part of the Stop Food Waste programme in 2017.

⁵ The UN Food & Agriculture Organization estimates the total carbon footprint of food wastage at 4.4 GtCO_{2eq} per year, based on assessment of food wastage volumes and application of emissions factors taken from life cycle assessment studies (<http://www.fao.org/docrep/018/i3347e/i3347e.pdf>).

Website – [stopfoodwaste.ie](http://www.stopfoodwaste.ie)

The Stop Food Waste website (www.stopfoodwaste.ie) was updated in 2017. The website has two main functions – it is used to promote specific messages and campaigns and it acts as a repository for the information and tools developed. As the programme has grown, so too has the volume of information contained within the website. To ensure that all information is easily accessed, and to provide a more dynamic and interactive interface, the website was restructured and re-developed. The new website now provides a more fluid user experience and allows for new information, under any topic, to be added without compromising the ease of navigation.

As part of the re-development a new community section was added. As many of the groups that Stop Food Waste work with are community based, the programme wanted to ensure that the needs of these groups are catered for.

The website currently has between 150 – 200 active users each day with 89% of all these being new to the site. This activity equated to over 34,000 new users in 2017 who had 85,000 page views.

Social Media

To promote local initiatives, as well as campaigns and seasonal messages, a significant investment in social media promotion was made during 2017. Through this the number of Facebook followers has increased from 5,200 to over 7,000 and Twitter followers has increased from 4,300 to over 5,000. This ongoing growth in social media exposure can be attributed to the dedicated social media plan that is continually updated. This provides a structured outline for topics to be covered during the year while also allowing for flexibility in addressing active topics and responding to other national initiatives. Campaigns promoted this year included:

- Pancake Tuesday
- Eat local, eat seasonal
- Compost Awareness Competition
- National Leftovers day
- World food day
- Food for one, waste for none

Additionally, a Stop Food Waste Community has been established on Facebook. This aims to provide support to those interested in the topic of food waste and allow for communities throughout the country to share ideas.

Stop Food Waste Challenge

As every household produces different types of food waste, for different reasons, there is no one solution that can work for all. The Stop Food Waste Challenge was developed to allow participating households firstly understand their own food waste and then to provide the tools to allow them develop solutions that work as part of their daily lives. The programme, which involves four 1-hour meetings held over 4-6 weeks, employs a range of activities, tools and media to train and support participants.

In 2017 the Stop Food Waste team, in co-operation with many local authorities, ran over 23 Stop Food Waste Challenges with over 300 households participating. This was a 35% increase on 2016 activity and, more importantly, a number of alternative groups were targeted. In addition, a ‘train the trainer’ programme was developed in conjunction with South Dublin County Council. Fourteen trainers were trained through this pilot and it is expected that each of these trainers will conduct at least one Challenge during 2018.

The materials used for the Challenge were updated during the year and an additional element, the Stop Food Waste survey, was developed. The survey provides a method by which information on people’s opinions and behaviours can be gathered. While the survey is also used as a stand-alone engagement tool, when used during the Challenge it provides an informal method by which changes in attitudes and behaviours can be assessed over time.

Master Composter Programme

Composting continues to be of great interest to individuals and community groups. This is reflected by the fact that during 2017 five master composter programmes were established in Cavan, Waterford, Wexford, Kildare and Dublin. With over 110 volunteers trained, and multiple outreach projects developed, the master composter training continues to be a hugely important aspect of our community engagement model. In addition to full master composter training, numerous smaller bespoke composting training events were held. These were provided for a wide range of different audiences including schools, local authority parks staff, tidy towns groups and community gardens.

In support of the composting aspect of the programme, a 3rd edition of our Household Composting Guide was published this year⁶. Some new posters were produced based on the updated content developed for this new edition. These are now used extensively in promotion and training activities.



⁶ <http://stopfoodwaste.ie/downloads/composting-household-guide/>

Support to local authorities

Local authorities continue to act as one of the main channels by which the programme connects directly with local communities. In addition to this, through numerous collaborative projects, Stop Food Waste continues to evolve its materials and support tools.

The following outlines some of the collaborative projects and initiatives that took place in 2017.

- i. **Stop Food Waste Challenge Train the Trainers** – carried out in South Dublin County Council this pilot programme provides an alternative model by which the Challenge can become embedded in local communities.
- ii. **Bin it Better** – this educational game was sent out to over 20 local authorities and community groups during the year in support of local activities.
- iii. **Stop Food Waste Lingo** – a food waste game, based on bingo, was developed by Wicklow County Council, with assistance from the Stop Food Waste Team. The game will be trialled during 2018 with a view to providing it to teachers as a teaching aid for 2018/9 academic year.
- iv. **Events, lectures and talks** – through a national presence the Stop Food Waste team has supported numerous local events hosted and organised by local authorities and other local organisations.
- v. **Support materials** – over 8,000 fridge magnets were distributed to local authorities during 2017. The programme provided support in developing other materials such as shopping bags, posters, cinema adverts, etc.



Food Waste and Business

Food waste is generated all along the food chain, from farm to fork. Of the 1 million tonnes of food waste generated per year around 40% of this comes from food production and another 34% from the commercial sector. No one sector in the food chain can reduce Ireland's food waste alone, it is only through collaboration and a shared vision to reduce Ireland's food waste that this can be achieved.



UN Sustainable Goal 12.3

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

In 2017, the EPA continued to provide leadership on food waste reduction in business and supported actions contributing towards Ireland's commitment to the UN Sustainable Development Goal (SDG) 12.3, including:

- Hosting the Forum on Food Waste

- Assisting the development of Ireland’s Food Waste Charter
- Providing support to Ireland’s Action Group on Wasted Food in the Retail Sector
- Participating at international and EU fora, in particular, the EU platform on Food Losses and Food Waste

Forum on Food Waste

In March 2017, the EPA hosted the second Forum on Food Waste – the national platform for organisations to work together to measure, improve and communicate the issues relating to food waste. This event brought together food businesses, national organisations, international experts, and interested individuals to discuss the issues associated with, and solutions to, food waste in Ireland. With over 100 attendees it provided a forum for open and frank discussions on food waste and also showcased much of the work that is already happening in this country to reduce food waste. During the Forum, two major developments were announced; the launch of the Food Waste Charter and the establishment of an Action Group on Wasted Food in the Retail Sector.

Ireland’s Food Waste Charter

Ireland’s Food Waste Charter was launched in March 2017 by the Minister for Communications, Climate Action & Environment, Denis Naughten and the Director General of the Environmental Protection Agency, Laura Burke. The Charter is a collective industry commitment to reduce food waste along the entire supply chain. It is a call for all actors to align with the global commitment to the UN Sustainable Development Goal to achieve a significant reduction in food waste by 2030.



During 2017 the main focus was to develop a website to act as a central point for businesses to sign up to the Charter and as a repository for information and materials for all food related businesses. A starter pack for signatories was also developed and members of the Forum were invited to sign the Charter to commit to implementing at least one food waste prevention action within the first year, and putting measures in place to carry out future actions by 2020.

While over 60 signatories made a commitment to reduce their food waste by signing the Charter, it became apparent that a more strategic approach would be needed to address sector specific issues and to lead a fundamental shift in how businesses think, manage, commit and report on food waste in Ireland. To this end, an innovative ‘design approach’ commenced in November 2017 to explore ways to roll out the Charter in an effective way and to maximise the number of signatories. Using

this targeted approach, the EPA will continue to work with businesses and call on all actors in the supply chain to sign up to the Charter.

Data gathering

A key first-step will be building an accurate picture of food waste in Ireland – in order to effectively target areas where improvements can be made, and identify where support is needed.

One of the most important steps involved in reducing food waste is to know how much waste there is, where it is coming from within a business and what it consists of. Thus, measuring and understanding waste data is an essential first step to set a baseline which will assist in identifying areas for improvements as well as monitoring and tracking progress towards food waste reduction goals. To address some of the data gaps, the EPA Research Programme is currently funding a research project looking at commercial food waste⁷.

In addition, numerous support activities will continue and resources will be developed including:

- Promoting collaboration and change by facilitating forums, workshops and meetings to encourage the adoption of best practice across the sectors.
- Identifying data gaps and collation of data from stakeholders
- The Food Waste Charter website⁸ and social platforms will facilitate businesses with measurement tools and resources, research and best practice guidelines by industry category.

Support to the Retail Action Group

In March 2017, the Minister for Communications, Climate Action and Environment announced the establishment of an Action Group on Wasted Food in the Retail Sector⁹. Chaired by retail expert Eamonn Quinn, the action group consists of leading retailers who have been invited to come together to take action against food waste.



Retailers play an influential role in the supply chain. Providing a link between producers and consumers, retailers are uniquely placed to share insights into the dynamic of the market for food in Ireland and why food may be wasted. The EPA has provided expert input and support to the group, who have been tasked with agreeing and implementing a transparent system of measuring and

⁷ <http://stopfoodwaste.ie/resources/business/research-project-on-food-waste-in-business/>

⁸ <http://foodwastecharter.ie>

⁹ <https://www.dccae.gov.ie/en-ie/environment/topics/sustainable-development/waste-prevention-programme/Pages/The-Retail-Action-Group0616-6288.aspx>

reporting on wasted food. In addition, the retailers are working to make a commitment to implement specific food waste prevention measures by signing the Food Waste Charter.

EU platform on Food Losses and Food Waste

The EU Platform on Food Losses and Food Waste¹⁰ is an initiative of the European Commission dedicated to the prevention of food losses and waste. The Platform has been established as part of the EC's Circular Economy Action Plan to support the achievement of the SDG 12.3 target. Ireland participates in the sub-groups on specific issues such as measurement, donation and implementation and reporting on prevention actions. The Platform has published EU guidance on former food to feed, is conducting ongoing work on date marking and has assisted with the development of a common methodology on food waste measurement which will become a legislative obligation next year.

3.2 Community Reuse Network Ireland

The Community Reuse Network Ireland (CRNI) work plan is formulated in conjunction with the CRNI Board and is based on a five-year strategy (2014-2018 inclusive) which envisages CRNI as a significant and influential stakeholder in resource efficiency, waste management, social enterprise and job creation discussions in Ireland.

Promoting Reuse & Communications

Building awareness of member activities and opportunities for reuse was identified as a key priority for CRNI members in 2017. To facilitate this, CRNI engaged an events and communications officer. This enabled greater participation in Reuse Month 2017 from the network and its members, including tours of member facilities and hosting a seminar in Cork, with support from the Southern Waste Region to explore opportunities to develop community reuse and recycling enterprise. These events saw CRNI featured in two Irish Times articles and being flagged as a key contact point for Reuse Month.



32,600 t reused
67,800 t recycled



Supporting 968 jobs
500 training opportunities
7,620 volunteer positions



Over €100 million turnover
Est. €50.7 million
employment value

To promote reuse more widely, the network participated in the RREUSE network's European Week of Waste Reduction campaign and ran a pre-Christmas awareness campaign online and through over 440 retail stores, entitled "Reimagine Christmas".

¹⁰ https://ec.europa.eu/food/safety/food_waste/eu_actions/eu-platform_en

The network also presented at key national and international conferences including Environment Ireland, the Irish Waste Management Conference and the RREUSE network's international conference, in addition to regular communication with stakeholders via newsletters, the website and social media.

Supporting Members, Membership Drive

To support members, CRNI hosted regular network meetings and facilitated training and sharing of best practices. The preparation of metrics to explain members' activities continues to be improved upon with a new template and scope of data collected in 2017.

To continue to expand the network, CRNI membership policy was agreed and published on their website (www.crni.ie). This enabled CRNI to welcome 5 new members including The Upcycling Project, FoodCloud Hubs, WeShare, The BabyMarket and Usel.

Policy

CRNI worked with members and key stakeholders including the DCCAE; Department of Social Protection; Department of Business, Enterprise and Innovation and Department of Rural and Community Development to identify key priorities for the reuse sector which were disseminated through conferences and other events.

The network contributed toward the National Social Enterprise Strategy and the EU Waste Framework Directive text through RREUSE network meetings and working groups. CRNI also took an active participatory role as a member of the National Waste Prevention Committee, National Industrial Symbiosis Working Group and National Mattress Recycling Working Group.

Research



The major research project embarked on in 2017 was the EPA funded Quality Standard ("Re.Mark") project, which aims to establish the value of a reuse quality mark for Ireland / Northern Ireland in strengthening consumer confidence in reused goods. This saw 10 members engage in a pilot certification process intended to improve processes and systems, shop design, customer experience and eventually become accredited. In parallel, customer surveys and broader consumer research are being

conducted to understand consumer engagement with reuse. The project will be widely promoted to raise the profile of pilot participants.

CRNI also commenced work on an ERASMUS+ funded project in partnership with the Rediscovery Centre and ReCreate with the goal of engaging youth in an international creative reuse design competition and development of a web documentary.

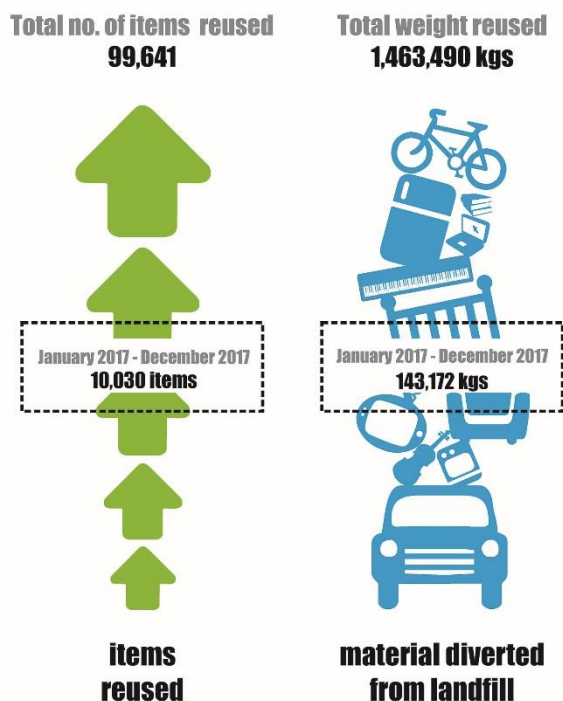
Networking

2017 saw the network develop a closer relationship with Zero Waste Scotland, who have generously given time to the Quality Mark project. WRAP NI is also involved on the steering group of this project. CRNI also reached out to local community based stakeholders including Public Participation Networks, Local Community Development Companies and Local Development Companies.

Finally, in 2017 CRNI appointed three new Directors to the Board, developed a code of conduct for board members and published a new employee handbook.

3.3 FreeTrade Ireland

As Europe continues to push the transition to a Circular Economy, an increased emphasis is being placed on resource efficiency and maximising the value of products and consequently eliminating



wastage. With so many products we consume being produced from finite resources, extending the lifespan of products through reuse reduces the pressure on our planet's resources.

FreeTrade Ireland is a great example of how accessible technology can be used to help maximise the value of products and resources whilst providing a truly valuable service to its users and the environment. The service is a key tool in helping to deliver our national waste prevention objectives and targets.

As reuse grows in importance we need to embrace systems that enable us to manage our materials better so that more sustainable options can be developed. Ireland needs to move away from its overuse of raw materials for new goods. This is even more important as the economy grows and Ireland is challenged with decoupling the link between economic growth

and waste generation. The service offers its users a convenient outlet for the reuse of materials and enables its users to adopt and implement greener lifestyle choices.

In 2017, FreeTrade Ireland facilitated the reuse of 10,030 items, extending the lifespan of the items and diverting more than 143 tonnes of high quality materials away from landfill to users of the service. The use of the service resulted in CO₂ savings of approximately 1,287 tonnes and significant financial savings for users of the service.

FreeTrade Ireland carried out a small-scale study on the valuation of reuse services to determine an accurate approach for calculating savings from the reuse of items through the website. The savings cover the avoided disposal costs and the cost of purchasing an equivalent new item. The team reviewed market data on the cost of items for each of the 277 sub-categories available on FreeTrade Ireland. A range of monetary values was produced and analysed for each category with a final value assigned. These values were agreed with the agency and a report documenting the work (Quantifying the Monetary Value of Reuse) was published in August 2017¹¹.



Applying the revised values, the direct savings from the reuse of items through the website was over €589,000 in 2017. A further €81,000 worth of items posted on the website in 2017 were reused through these alternative outlets (as recorded by users on the website). Overall the service facilitated the reuse of items to the value of €670,230 in 2017.

In excess of 122,500 items have been reused since the delivery of the FreeTrade concept, resulting in carbon savings in excess of 13,200 tonnes.

The service continues to prove an excellent value-for-money waste prevention initiative. The membership base continued to grow in 2017 with 2,434 new members signing up to use the service. The overall number of members now using the service stands at over 60,000. There continues to be high levels of interaction with the website, with over 397,000 visits to the website in 2017.

During 2017, the FreeTrade Ireland website (www.freetradeireland.ie) was redesigned and upgraded to make it even more accessible to users. The website was updated and features responsive design, adapts to different screen sizes such as desktop, tablet and different phone sizes. The update also focused on the user experience and accessibility in mind and these were enhanced while the innovative features and key functionality of the website have remained.

FreeTrade Ireland launched the Upcycle Challenge in 2016 (#upcyclechallenge16) in conjunction with the three Regional Waste Offices as part of the EPA Green Enterprise programme. In 2017, the competition took place for a second time, running from August to October. The Upcycle Challenge

¹¹ http://crni.ie/wp-content/uploads/2017/09/MDR0611_Quantifying-the-monetary-value-of-reuse-_F02.pdf

2017 (#upcyclechallenge17) had four categories; one for each region and a separate Men's Shed category.

The aim of the competition is to raise awareness of reuse and to highlight what can be done with items typically discarded. The competition encouraged people to take part in reuse activities countrywide. This year so many inspiring entries were received and the standard was extremely high. Over 150 upcycled projects were submitted highlighting the growing reuse and upcycling community in Ireland.

In 2018, promotion of the service will remain a key activity. FreeTrade Ireland aims to extend its promotion and develop the FreeTrade Ireland brand as a key waste prevention tool for the nation. Enhancing our social media activity will include social media content development and more regular item posts, posts on related news or stories about reuse, prevention and other connected issues utilising the advertising and boost post functions available (mainly through Facebook). Posts will be created to increase user interactions to the website and will include links back to the site, increasing visitor numbers and engagement with the service.

4. Business

4.1 Green Business

Green Business is managed by the Clean Technology Centre, and since 2011 the programme has visited 270 companies and identified over €10 million potential cost savings for businesses.

Green Business increased its activity in the SME sector and reached out to small companies through (a) establishing seven Green Business networks in several regions; and (b) by rolling out the Green Business Tool for Resource Efficiency (TREE)¹², which provided over 260 SMEs with resource efficiency action plans. The TREE which was launched in October 2016 has received a lot of interest











from government departments working with business including Bord Bia, who now require companies applying for Origin Green to complete the TREE as a part of the application process. Green Business has also engaged with SMEs through Green Business seminars organised in conjunction with local authorities, local enterprise offices, chambers of commerce and other business networks; presenting directly to over 800 delegates. In 2017 Green Business redeveloped its website (www.greenbusiness.ie) to engage more effectively with business and the community on resource efficiency issues.

¹² <http://greenbusiness.ie/sme-efficiency-and-cost-reduction-questionnaire/>

REA Site Visits

In 2017, Green Business carried out thirty Resource Efficiency Assessments (REAs) and identified €1.3 million cost savings opportunities, €44,500 per company visited.

Summary of potential cost savings identified per sector 2017

	SECTOR	SITE VISITS	POTENTIAL SAVINGS	SAVINGS/COMPANY
	Hospitality	9	€206,100	€22,900
	Manufacturing	4	€750,620	€187,655
	Food processor	3	€166,175	€55,392
	Government	2	€42,650	€21,325
	Finance	1	€8,960	€8,960
	Retail	5	€40,346	€8,069
	Service	4	€105,000	€26,250
	Agriculture	2	€17,000	€8,500
	TOTAL	30	€1,336,851	€44,562

Green Business serves a wide range of sectors and has a policy of allowing businesses to choose our service rather than Green Business targeting specific sectors. This allows Green Business to welcome businesses from all sectors ranging from; government services to manufacturing to agriculture. Large manufacturing and food processing facilities accounted for 68% of the potential cost savings identified by Green Business in 2017.

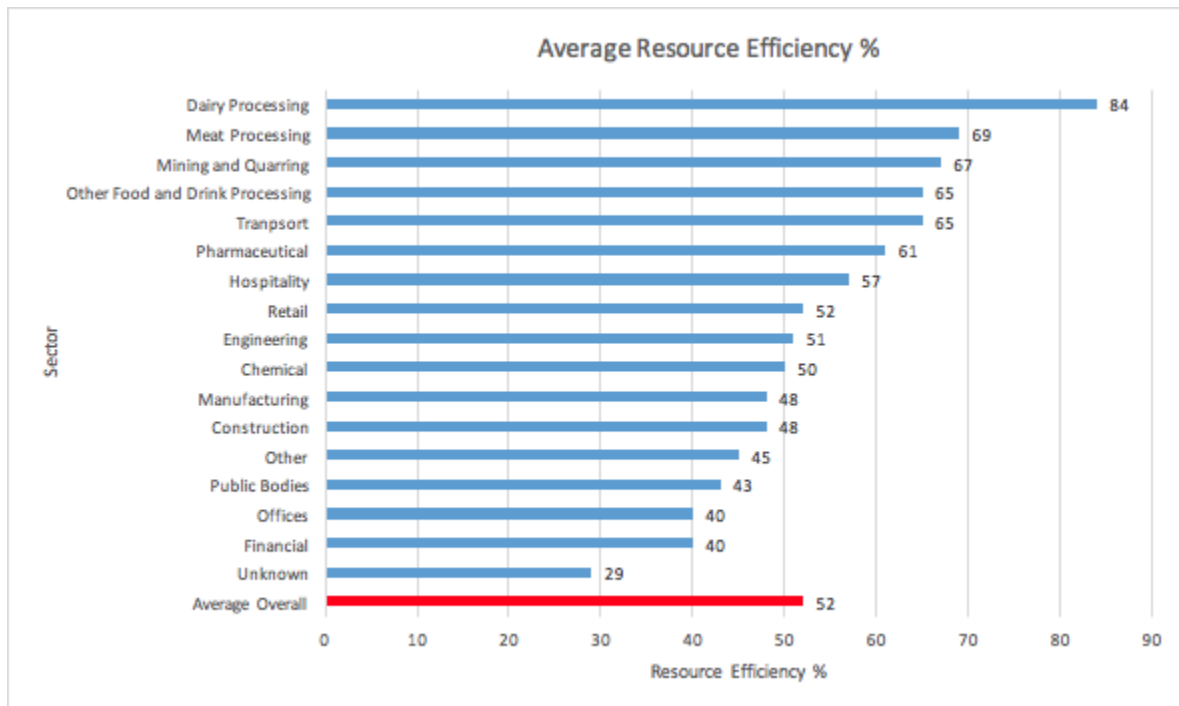
Tool for Resource Efficiency (TREE)

In 2017 Green Business continued to promote the online Tool for Resource Efficiency (TREE) aimed at providing a wider pool of SMEs with resource efficiency advice.

This online tool allows businesses of all sizes to obtain a Resource Efficiency (RE) Score and receive an RE Action Plan tailored for their business. In 2017, 260 companies have completed the on-line survey and achieved



an average Resource Efficiency score of 52%. The chart below shows the average Resource Efficiency Scores obtained by various business sectors using TREE. The scores suggest that there is room for improvement in all business sectors. There has been growing interest in the TREE tool among various business sectors and government organisations. Bord Bia are requiring the usage of TREE for new Origin Green members to drive initial actions towards sustainable production.



Green Business Community Networks

In recent years, there has been a growing demand from community and local business groups for assistance from the Green Business Programme. There has been a growing number of requests for assistance with resource efficiency from Environmental Awareness Officers, other staff from local authorities, leaders of Tidy Towns committees, business groups and chambers of commerce. In 2017 Green Business has commenced the process of establishing Green Business networks in the following business communities:

1. **Kenmare**, with Tidy Towns
2. **Swords**, with Tidy Towns
3. **Carlow**, with Carlow County Council and Carlow / Kilkenny Energy Agency
4. **Cashel**, with Zero Waste Cashel
5. **Tipperary County** with Tipperary Green Business Network and Tipperary County Council
6. **Ennis**, with Clare County Council, Limerick/ Clare Energy Agency and the Fleadh Cheoil
7. **Salthill Village**, in conjunction with Galway City Council



Green Business Community Network Model

Green Business Outreach

Green Business continues to organise its own Green Business seminars in conjunction with local stakeholders. In 2017 Green Business hosted six regional seminars. Green Business also hosted a National Sustainability Conference in conjunction with Tipperary Green Business Network and a number of regional authorities.

Green Business is regularly invited to sustainability events to promote the message of Green Business and Resource Efficiency. During 2017 Green Business presented at 24 events which were attended by more than 800 delegates.

In June 2017, Green Business presented at the launch of the National Corporate Social Responsibility Strategy at the Department of Foreign Affairs and Trade in Dublin.

Guidance Documents

Green Business has developed resource efficiency tips for business which are disseminated through their website, presentations and exhibitions to target as many SMEs as possible. These include “50 Tips for Greening Your Office Space” and “9 Top Tips to Green your Business”¹³. Green Business also recently developed stickers to raise awareness in the workplace.

¹³ <http://greenbusiness.ie/resources/?subject=resource-efficiency>



4.2 Ibec Green Business Executive

The role of the Green Business executive in Ibec is to promote resource efficiency to the member companies of both Ibec and the Small Firms Association. The primary objective of the role is to promote the use of the EPA's Green Business programme and other BeGreen programme services with a particular focus on small and medium sized enterprises.

Resource Efficiency Assessments

In 2017, Ibec continued to promote the Green Business offering of a free resource efficiency assessment to Irish industry (see Section 4.1).

Online tool for SMEs

In 2017, Ibec was directly involved in the marketing of the TREE tool (see section 4.2) through presentations to Ibec members, articles in trade magazines and social media. Ibec also ensured that the tool was highlighted as a practical tool to aid SMEs at the National Corporate Social Responsibility Stakeholder forum. This has resulted in the tool now being a central part of the suite of assistance available to SMEs when taking the first steps into corporate social responsibility.



Circular Economy

During 2017, Ibec also began to brief members of Ibec trade associations on the European Commission circular economy package. Briefings were undertaken for Retail Ireland, Food Drink

Ireland, Building Materials Federation, Plastics Ireland, White Goods Association, Small Firms Association, Meat Industry Ireland and Prepared Consumer Foods. Ibec also took part in the Irish Beverage Council's circular economy study day, aimed at senior members of the industry. In October 2017, Ibec participated in the panel discussion at the launch of the NESC research report on the Circular Economy.

4.3 SMILE Resource Exchange

SMILE Resource Exchange is Ireland's national industrial symbiosis programme providing a platform for organisations to connect and identify synergies where an unwanted resource (waste) in one organisation can be utilised as a resource in another. SMILE began with a pilot event in Cork in 2010 and today it facilitates a network of over 1,500 organisations registered on its website, www.smileexchange.ie, in connecting and identifying potential synergies. Today SMILE is managed by Macroom E, an initiative of Cork County Council and is funded by the EPA, Local Enterprise Office South Cork and the Waste Management Regions.



Industrial symbiosis is identified in the revised European Commission Circular Economy Package as an opportunity to support a transition to the circular economy. SMILE is a well-established and internationally recognised industrial symbiosis intervention that supports Ireland's ambitions to move towards a circular and more resource efficient economy.

2017 Synergy Results

- SMILE recorded 80 successful synergies in 2017, representing cost savings of €541,667 and 2,943 tonnes of material actually diverted to reuse/recycling.

- 303 new potential synergies were identified and progressed throughout 2017; and to date, SMILE have directly supported 1,862 synergies (958 through the SMILE website; 904 identified by the SMILE team and the Technical Support Consultants).
- Many of the successful synergies are ongoing synergies and year on year this equates to an overall diversion of 35,253 tonnes of materials from landfill and an associated economic benefit of €6.4m from the period 2010 to 2017.

SMILE Support Activities

Three consultancies (ECOS Environmental Ltd, Flannery Nagel Environmental Ltd and SPeco Services Ltd) were contracted to service the three Waste Management Planning regions. During 2017, the consultants identified and supported 105 potential synergies and of these 44 were successfully completed. Challenges in completing synergies include logistical and liability issues. Following a review of the technical support offering in 2017, a restructuring of this approach will be implemented for 2018.

2017 saw a significant increase in the number of inbound calls and enquiries to the SMILE team. This in turn led to an increase in the number of referrals of businesses to the SMILE Technical Support Consultants. Having this “hotline” facility is appreciated by businesses as they often wish to speak to an expert if they have any questions or concerns about their resource.

There was also an increase in activity on the SMILE website (www.smileexchange.ie) which attracted 32,316 views consisting of 5,908 unique users and generated an increase in resource posts and enquiries for resources. In 2017 the membership on the website increased by 163 to over 1,500 members.

National and International Recognition

In 2017 SMILE featured as a case study in a report on industrial symbiosis commissioned by DG GROW, “*A Study on Cooperation fostering Industrial Symbiosis: market potential, good practices and policy actions*”. SMILE was identified by the research team as an example of a successful facilitated industrial symbiosis network and was invited to participate in a focus group in London which provided an opportunity to connect and share experiences with similar projects across Europe. The report was launched in November 2017¹⁴.



SMILE Resource Exchange is one of the ten case studies profiled as one of the leaders in the Irish circular economy, in a national report published by NESCF, “*Moving Towards the Circular Economy in Ireland*”, launched in October 2017. The Ellen MacArthur Foundation invited SMILE to share the experience of delivering a resource exchange project in Ireland, which will inform a research project being conducted by the foundation exploring reuse and recycling opportunities in Ireland.

¹⁴ <http://trinomics.eu/project/industrial-symbiosis/>

Communications Activity

In 2017 SMILE placed a significant emphasis on promoting SMILE through a range of communication platforms:

- SMILE was announced winner of the *Waste Prevention Business Award* at the REPAK Pakman Awards.
- New videos produced depicting successful synergies¹⁵. The videos are highly effective in grabbing attention in social media, and achieved 26,844 views in a five-week campaign.



SMILE continues to develop its online social media presence through Facebook, Twitter and YouTube. In 2017, the SMILE Facebook page increased to 655 likes and the Twitter page increased its followers to 1,247. The SMILE YouTube channel has 12 videos with over 4,402 views.

Project Development

Through collaboration with a variety of stakeholders, SMILE has supported the development of a number of initiatives that aim to find solutions to problematic waste streams. Projects that have developed as a direct result of SMILE interactions include Boomerang Enterprises, SourceIT, Circular Ocean and NetMap.

- **Boomerang:** In 2017, Boomerang deconstructed 8,049 mattresses contributing to their total number of 24,090 mattresses diverted from landfill since the inception of the project.
- **SourceIT:** The SourceIT software is now being used by Boomerang Enterprises to map the availability of mattresses and support in planning of logistics for collection, record collections, create reports and store details of clients etc.
- **Circular Ocean:** Following conversations between SMILE and harbourmasters in Cork on the challenges of fishing net waste on local piers, the Circular Ocean project was developed in pursuit of innovative and sustainable solutions for marine plastic waste and in particular waste fishing nets in the Northern Periphery & Arctic Region. Activities in 2017 included a **#Net_Hack_Challenge** in Iceland developing product concepts utilising waste nets; a Beach Clean in Kerry in collaboration with Clean Coasts where the largest waste stream collected was waste nets; the launch of an SME support service for start-ups including 1:1 support and webinars focusing on eco innovation.

¹⁵ <http://www.smileexchange.ie/success-stories>

- **NetMap:** Building on the success of the Circular Ocean project, the NetMap project was developed to explore more in more depth the nature and extent of the challenge of waste nets particular to Irish ports and to identify potential solutions e.g. the role of social enterprise. Potential applications for waste net materials are also being explored to see they can benefit coastal communities in which they emerge e.g. the use of net fibres in concrete production and new product development. This work could be useful in the context of the recent Commission proposal to develop an extended producer scheme for fishing gear.

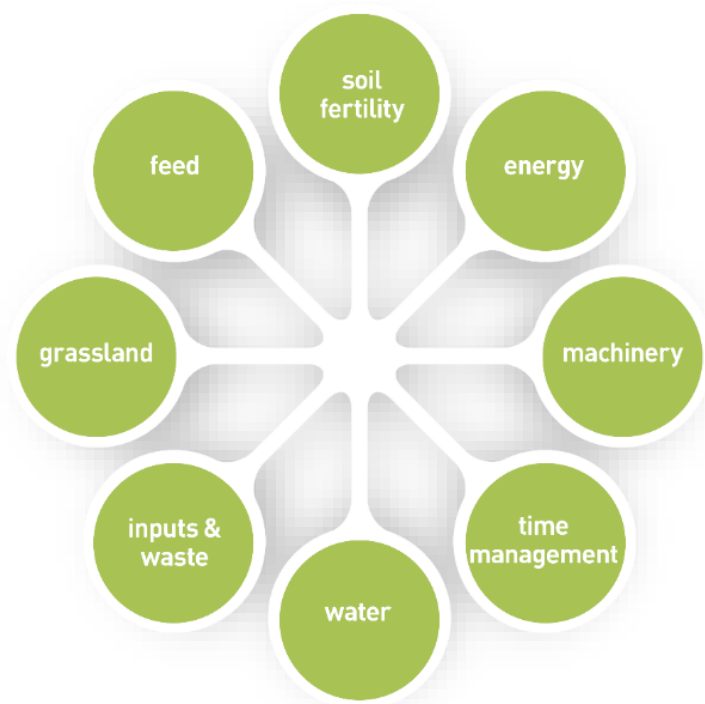
4.4 Smart Farming

Smart Farming continues to focus on delivering the double dividend of improving farm returns and enhancing the rural environment. This voluntary on-farm resource efficiency programme led by the Irish Farmers' Association, in conjunction with the EPA, continued its development during 2017. The programme collates the existing knowledge and expertise of Ireland's leading academic, advisory and technical institutions and communicates this knowledge in a targeted way, to deliver on the *double dividend* of improving farm returns and enhancing the rural environment through better resource management.

Smart Farming – Improving Farm Returns

Each farmer who participates in the Smart Farming programme receives a resource efficiency assessment (REA) of their farm, which is also called a cost saving study. These REAs are completed by a qualified agronomist who has a minimum level 8 (degree) qualification and is an agricultural science graduate.

The REA's are focused on identifying average cost savings on each participating farm of €5,000. This is delivered by examining the eight themes of soil fertility, inputs and waste, grassland, feed, energy, machinery, time management and water - as identified in the figure below.

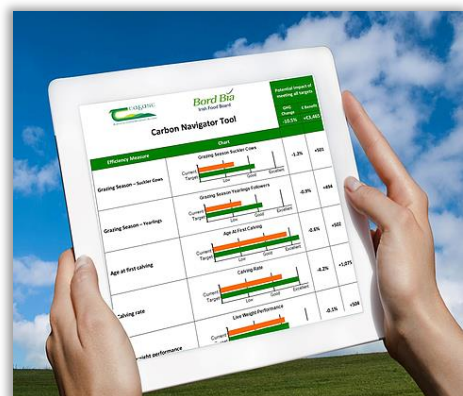


Smart Farming – Enhancing the Environment

As part of the REAs, participating farmers receive a suite of environmental metrics for their farms. A carbon reduction strategy for each farm is developed, using the Carbon Navigator decision support tool developed by Teagasc and Bord Bia. The Carbon Navigator provides an estimate of greenhouse gas emission reductions that can be delivered on each participating farm, by achieving the targets which are set.

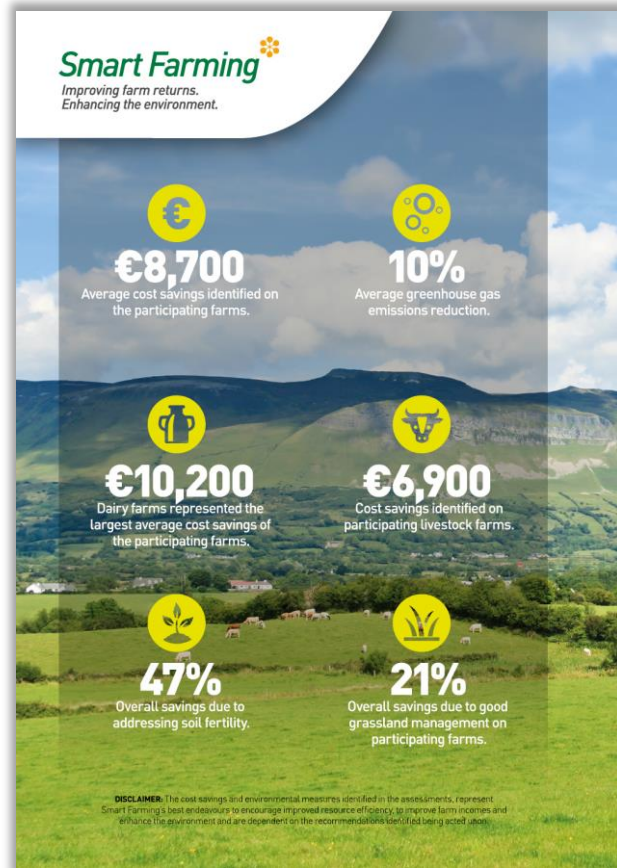
Soil tests are also taken and a nutrient management plan for each participating farm is completed, using the Teagasc Nutrient Management Plan Online tool. Maps are generated, indicating the existing soil fertility levels, and liming and fertiliser requirements.

The quality of the water from the domestic water well and quality of the silage is also analysed. Recommendations are provided regarding feed management strategies arising from the results of the silage tests.



Smart Farming results for 2017

In October 2017, Smart Farming's *Progress Report 2017*¹⁶ was published. A summary of the results is provided in the figure below, with the average cost savings target of €5,000 being exceeded by 74% and the target to identify greenhouse gas emissions reductions of 5-7% also being exceeded.



Smart Farming - what to expect in 2018.

Smart Farming will continue to focus on improving farm returns and enhancing the rural environment in 2018. The objectives will be to:

- Conduct 50 on-farm REAs and share the learnings with up to 1,000 farmers through local discussion groups.
- Identify overall cost savings of at least €250,000 on participating farms.
- Identify a 10% reduction in greenhouse gas emissions.
- Continue the focus of improving resource management and water quality, by providing nutrient management plans and water tests on participating farms.

¹⁶ <https://smartfarming.ie/progress-report-2017/>

- Collaborate with agencies such as the Local Authority Waters and Communities Officers to identify and report on ways to break the pathway between run-off and impact on water courses.
- Continue the development of a decision support tools to assist farmers interpret the results of water quality tests.
- Integrate biodiversity into the Smart Farming work programme.

Publish more case studies on the website, www.smartfarming.ie.

4.5 Green Enterprise

Green Enterprise challenges organisations & companies to produce goods and provide services in more environmentally friendly ways and to minimise emissions through cleaner production methods. Since its inception, Green Enterprise has funded 159 projects to the value of €9.35m.

The Green Enterprise programme differs from the EPA research programme in that it primarily supports demonstration projects that are conceived and led by businesses and other organisations and not necessarily ‘research’ institutions. The long-term aim of Green Enterprise is to normalise environmentally focused consumption and production behaviours and activities, particularly within the context of the Circular Economy.

A call opened in May 2017 for the tenth cycle of the programme. This was advertised on the EPA website, circulated via NWPP networks and through EPA Research communication channels. The EPA invited proposals that were relevant to key national policies including A Resource Opportunity; Food Harvest 2020 and Delivering Our Green Potential, as well as relevance to the EU Circular Economy Package. Projects were particularly encouraged on marine plastics; construction & demolition waste, WEEE and batteries, food waste; and reuse in the circular economy, particularly with an emphasis of added value to marginalised and disadvantaged societal groups.

Funding

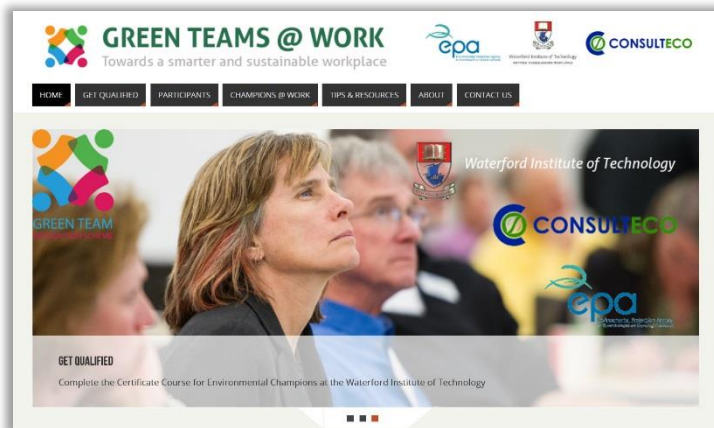
For 2017, funding of €200,000 was allocated for new projects - up to a maximum of €60,000 per organisation, at a typical 75% funding rate. The following projects were approved for funding:

Project Title	Organisation
Large Water Users Community of Practice – Phase 4	Central Solutions
Food for Ireland	Foodcloud
Service model to improve bulky item reuse	Community Reuse Network
Your Local Food Network & the Simple Food Pledge	Local Food Network
Minimising Fish Waste	Irish Fish Cannors

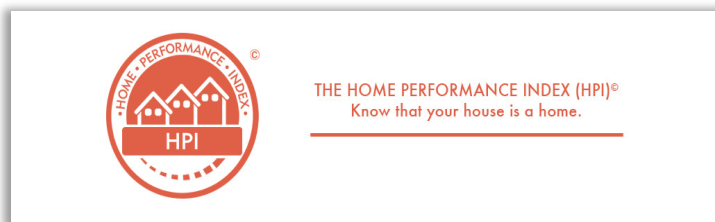
In 2017, a new structure was proposed to encourage participation by “not for profit” organisations classed as public benefit entities (PBE). These are organisations defined as “an entity whose primary objective is to provide goods and services for the general public, community or social benefit and where any equity is provided with a view to supporting the entity’s primary objectives rather than with a view to providing a financial return to equity providers, shareholders or members”. It was decided to fund these applications at a rate of 95%.

Featured Projects

One of the projects underway in 2017 was the Green Teams Recognition Project, operated by Consulteco Ltd. in conjunction with Waterford Institute of Technology. This project developed formal accredited training forming part of continuing professional development, in various environmental, operational and business-related disciplines appropriate to green teams. By developing a formal structure and accreditation, the Green Teams become more effective and gain a higher profile and recognition within their own organisations. The project is delivered by a combination of workshop and on-line learning, and is currently being rolled out to over 100 participants over the next 3 years. Phase 1 of the extended programme includes Brown Thomas and Roscommon County Council.



Another innovative project by the Irish Green Building Council (IGBC) called “Delivering a Residential Sustainability rating system to Market” concluded in 2017. This project focuses on developing a Home Performance Index (HPI) for new housing developments, incorporating environmental, quality of life and sustainability factors into the planning and construction of new builds.



This would ensure that issues such as low energy use, water conservation and access to public transport would be considered. The project was trialled with a number of developers and three developments were certified.

These were Maxwell Crescent, Rathmines, Silken Park and a passive house in Cork. The IGBC are promoting the initiative to other developers, and have demonstrated the HPI at 15 events and conferences, as well as over 30 developers. See more at www.homeperformanceindex.ie.

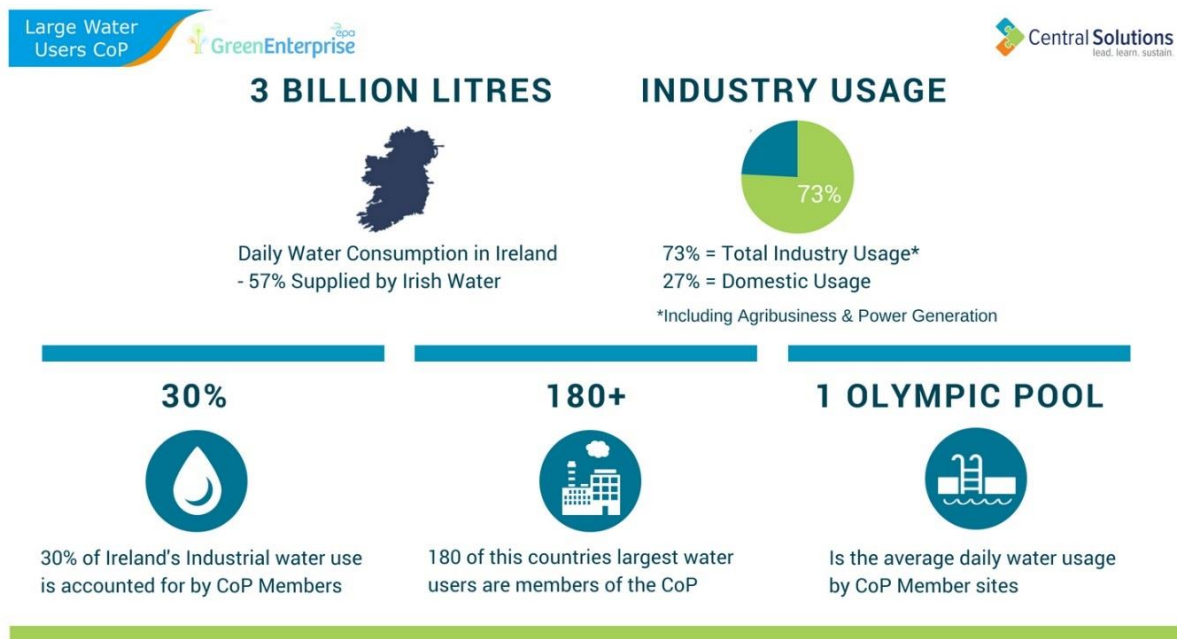
4.6 NWPP Special Interest Groups

Large Water Users Community of Practice

Despite Ireland being a water-rich nation, managing this national resource poses major challenges from economic, environmental and social standpoints. However, if effectively managed, Ireland’s water resources also offer compelling advantages for broader society and to further enhance Ireland’s credentials as an investment location for industry, agriculture and tourism.

It is well recognised that increasing industrial development is the key underlying driver for the water shortages faced both nationally and internationally. To put it in context, an average pharmaceutical production or dairy processing site might typically use 1 to 1.5 Olympic swimming pools of water a week to keep its operations going. As the economy continues to grow, this presents significant societal challenges. Mechanisms to encourage better corporate water stewardship and reward and incentivise good corporate water stewardship behaviours becomes an imperative.

The EPA-funded Community of Practice (CoP) for Large Water Users was established in December 2013. It has a rapidly growing membership (180 in 2017) and increasing international recognition for the work it is undertaking. The membership is drawn from the food & beverage, pharmaceutical and other key sectors on a purely voluntary basis. The establishment and ongoing operation of the initiative is managed by Central Solutions, a Limerick based firm recognised internationally for its contribution to Corporate Water Stewardship best practice development. The CoP for Large Water Users website (www.leanwater.ie) provides a range of tools and supports including water mapping, training, standards gap analysis service, water management workshops, advice on finance and funding and development of data management. In 2017 a promotional video on water stewardship was developed¹⁷.



The true value of this initiative is that it provides an independent and expert platform for collective action by industrial water users to address a critical societal challenge. The CoP allows members to share best practice, develop novel water stewardship approaches and technologies, mitigate water risks at their sites, build staff awareness & training and drive better corporate water stewardship behaviour initiatives. In 2017, member firms have identified over €3 million in potential water and related resource efficiency savings across their sites and successfully delivered in excess of €1.1 million in verified savings. Over 30 member firms completed Water Stewardship training. Members such as Bulmers, Guerbet, GSK Sligo and others have completed detailed water mapping at their sites and the flagship Lean Utilities Programme went from strength to strength.

¹⁷ <https://www.youtube.com/watch?v=zYt258n0Xg0&t=34s>

Mattresses

The EPA has supported or funded several mattress recycling/reuse projects across the country. These are Eco-Mattress Recycling in Dublin, Boomerang in Cork and Galway Traveller Movement in Galway. Mattresses are a significant bulky waste stream and one that might lend itself to a more formalised mechanism of collection/treatment.

A small working group has been established consisting of representatives from the projects, various sections of the DCCAE, the EPA and the Regional Waste Authorities. Discussions with the mattress projects themselves were also held and invitations sent to some manufacturers and retailers to enter a dialogue.

The report commissioned at the end of 2016 from RPS Ltd. was received in late 2017 and a final draft agreed by the working group. Some key findings and recommendations of the report include;

- Between 400,000 and 800,000 mattresses are disposed of per annum in Ireland representing up to 20,000 tonnes of material.
- Most mattresses go to landfill or waste-to-energy, but 100% of the components CAN be recycled if they are dry.
- Consideration of whether a legislatively backed system or an industry led or voluntary approach for end-of-life mattresses would be appropriate, leading to increased recovery, decreased disposal to landfill and reduced illegal dumping may yield significant environmental, social and economic benefits.

The DCCAE considers this issue to be of particular importance and the report and its recommendations may inform national strategy to address this waste stream.

Industrial Symbiosis

The Industrial Symbiosis Working Group consists of representatives from SMILE, Ibec, academia, Local Enterprise Offices, DCCAE, Regional Waste Offices and industrial partners. Its role is to identify barriers and obstacles as well as opportunities, to improve the visibility, and amount of under-utilised resources that can re-enter the value chain. This can involve discussing technical as well as legislative issues, and identifying opportunities for dissemination of case studies.

A Small-Scale Study was commissioned by EPA from University College Cork to assess the current situation and the forward potential of industrial symbiosis moving forward¹⁸. The report was carried out by Professor Don Lyons. Some key findings include:

- Cost and environmental benefit were cited by companies as key drivers gained from participating in industrial symbiosis.
- Potential confidentiality issues and lack of legislative clarity were perceived as barriers.
- Reduction of waste disposed to landfill is one of the best added value elements for the Irish economy.

¹⁸ <http://www.smileexchange.ie/news/evaluating-the-potential-for-industrial-symbiosis-in-ireland>

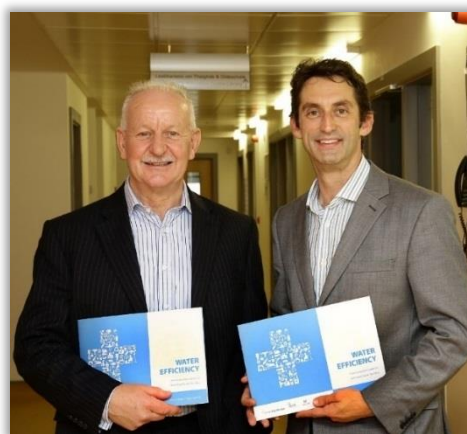
5. Public Sector

5.1 Green Healthcare Programme

Green Healthcare continues to work closely with the HSE's National Health Sustainability Office (NHSO). The HSE launched its Sustainability Strategy for Health in 2017¹⁹. Green Healthcare supported the NHSO's implementation of the strategy in terms of on the ground work which contributed directly to many of the Strategy's actions. Similarly, Green Healthcare has given input to the NHSO's own reporting on its implementation of the Strategy. The Strategy specifically includes collaboration with the EPA (and other national bodies) as one of its aims, along with references to the work of the Green Healthcare programme itself.

Water Conservation for the healthcare sector

The HSE is the largest customer of Irish Water, spending over €8 million per year on water. Following on from producing the Best Practice guidelines for efficient water use in the healthcare sector²⁰, an inaugural HSE Water Workshop was held at the Midlands Regional Hospital in October 2017 to officially launch the Guide. The workshop, attended by over 80 key-people from across the health service, was hosted by the NHSO, with organisational support from Green Healthcare. The event focused on efficient water use in the healthcare sector, showcasing the best practice guide produced by Green Healthcare and featured a comprehensive input from Irish Water. Case studies from Irish hospitals, presented at the event included:



- Recovering and reusing water from reverse osmosis in renal dialysis
- Leak detection and repair
- The use of sub-metering when assessing water use.

An on-site tour was given of the reverse osmosis water recovery system at Midlands Regional Hospital Tullamore. The tour, which was very well received, was led by the staff member who had designed the system and implemented the project.

The capacity event attracted a varied audience including HSE estates, hospital maintenance/facilities management, technical services, renal services, emergency planning and catering management. In addition to the workshop there was also an exhibition area where information on all aspects of water conservation was made available. This included external service providers and leak detection companies. Green Healthcare was also involved providing several case studies of Irish hospitals

¹⁹ <https://www.hse.ie/eng/services/news/newsfeatures/healthsustainabilityoffice/hse-sustainability-final.pdf>

²⁰ <http://www.greenhealthcare.ie/topics/water/>

making cost savings through water conservation measures, along with a 'How to guide' on recovering water from RO. Printed copies of these were made available on the day.

Continued benchmarking of hospital water use

As in 2016, further gathering of data was carried out during 2017 for benchmarking water use in acute and community hospitals in terms of litres of water per bed-day. This will help to continue to identify the hospitals that have higher use.

If the top acute hospitals users in the group of hospitals for which we have gathered data could reach the "Irish Average" of 730 litres of water per bed-day, there would be savings approaching €600,000 per year.

The Green Healthcare programme are now working directly with Irish Water to gather and collate water consumption data. While local authorities are still reading water meters, water bills throughout the country are now managed by Irish Water. Working directly with Irish Water will streamline the process of gathering water data consumption.

Once water data has been gathered through Irish Water for the full registry of HSE hospitals it is envisaged that a system will be in place where, annually, benchmark data can be made available automatically from the Irish Water system. This will provide an excellent basis for the on-going monitoring and targeting of water conservation initiatives.



Water use per bed day in an acute hospital ward block

The on-going, longer-term water usage monitoring programme in a ward block at Connolly Hospital continues. Data has now been recording for six months via the newly-installed sub-meters. There are three water sub-meters: one on each of the feeds to the ward block from the tanks at the top of the building, namely the hot water tank, the fresh (cold) water, and the flushing/sluice water tank. The background flows are currently examined by Connolly Maintenance department. In addition, as more data is gathered, a series of benchmarks will be generated and this work will continue through 2018.

More importantly, this will be the first time there will be such a measure of use in a typical Irish hospital ward block, having excluded water use for various other significant hospital users like

kitchens, theatres, out-patient departments, office blocks, utilities and so on. Crucially, this can also be used to show what potential savings there could be through retrofitting fixtures.

Food Waste

The work programme for 2017-2018 has included examining the potential, and possible production, of a self-assessment tool for catering staff to help identify measures for food waste reduction. This tool could then be rolled out across all catering departments in all hospitals to self-assess in relation to reducing food waste.

The first draft content of this is to be trialled in a couple of settings – starting with an institutional canteen in March 2018. While its focus is food waste, on reflection during compilation of the tool’s questions, the sustainability of food is something that is an ideal opportunity to add on.

Unfortunately the topic of food waste is often difficult to engage people with. Certain tenets of a sustainable diet are in many cases synonymous with a healthy diet. Thus, addressing not just food waste but other issues like green procurement, local sourcing, seasonal menus, correct portion sizes, increased fruit & vegetable, increase vegetarian/vegan options, could add to the engagement process. The tool could also include other sustainability issues within catering, like energy, water, recycling, and use of single use items. Healthy Ireland (run by HSE, and who CTC has met with before) would of course be approached for any involvement/input, as needed.

Preliminary consultations have been carried out regarding capturing food waste reductions implemented in two hospitals. These are to be documented in 2018, with the aim of completing two case studies.

5.2 Local Authority Prevention Network

The Local Authority Prevention Network (LAPN) programme, which started as a pilot in 2005, is now a well-established network involving all local authorities in Ireland. LAPN provides funding, training, technical support and networking to local authority staff with a view to supporting sustainability and waste prevention initiatives at the local level. The wide scope of activities undertaken by LAPN participants work towards creating more sustainable communities in Irish society. The following is an overview of the LAPN activities undertaken by local authorities during 2017.



Preventing Food Waste



Food waste prevention is a major focus of LAPN with numerous different projects carried out in 2017. These included running and facilitating Stop Food Waste Challenges, hosting food waste prevention events with chefs including Catherine Fulvio, working directly with food producing businesses and developing promotional materials and adverts. Some of the key outputs include a cinema advert produced by Waterford and Wexford County Councils²¹ as well as radio ads developed by Laois County Council. South Dublin County Council also developed a training programme for the Stop Food Waste Challenge where 15 people have been trained who will now run Challenges in their local communities.

Festivals and Events



LAPN is very active in this area with many projects involving both local events and national festivals including:

- Greening of Fleadh Cheoil na hEireann continued this year in Ennis with a report that chronicles experiences - to be shared with future Fleadh committees.
- An assessment by Westmeath County Council of waste generation and water use at Body and Soul music and arts festival produced some interesting findings that are being used this year to refine the systems used on site.
- Greening the Ballykeeffe Amphitheatre, in conjunction with Kilkenny County Council.

Working with Households and Communities



The members of LAPN traditionally have very close ties with communities throughout their counties. Working directly with groups of householders and wider communities, LAPN members also designed and ran specific prevention campaigns that spread across a variety of media platforms. Monaghan County Council addressed the issue of single use plastics through a number of community seminars. Roscommon surveyed 500 households as part of a waste awareness campaign. Galway County Council continued to run its household Hazardous Waste Prevention Programme.

Schools



Working directly with schools many local authorities used the Stop Food Waste 'Bin it Better' game to promote the new recycling list as well as introduce the concept of prevention. An interactive game for national schools was developed by Wicklow County Council and a collaborative project between Mayo, Roscommon and Galway City and County Councils is producing materials to support the new junior cert home economics curriculum. Galway County Council engaged with 12 secondary schools on food waste prevention as part of this work.

²¹ <https://www.youtube.com/watch?v=vGEw5KW6HCQ&list=PL1f5MJNSFF0UHNdvwMrMnJcM1EAMk2UCg&index=7&t=0s>

Businesses



Working directly with local business communities is a core aspect of LAPN. This year a number of collaborative initiatives with Green Business were run throughout the country. Clare, Carlow, Galway City and County, Mayo, Dun Laoghaire Rathdown and Leitrim County Councils all hosted events designed to promote resource efficiency to local SMEs. Other innovative initiatives included a roundtable debate hosted by Monaghan County Council, the Greening of Knock Shine with Mayo County Council and the development of a Food Waste Aware eco-label award by Roscommon County Council. As part of this an online food waste calculator was produced which will be formally launched during 2018.

Hazardous Household Materials



In addition to the ongoing promotion of hazardous waste prevention that was carried out by many of the LAPN members, new materials were also developed to support alternatives to green cleaning products with labels promoting eco-friendly recipes that can be stuck on existing plastic containers. In addition, five 'how to' YouTube videos to support the different recipes were developed²². Westmeath County Council, in conjunction with a local community, trialled a number of eco-friendly alternatives to hazardous weed killers. Based on these trials, labels have been produced to send out through local community networks.

Promoting a Local Repair Culture



As a follow on from the local repair directories that were developed during previous years, Monaghan County Council lead a collaborative project to take this information online www.repairmystuff.ie is now live with the database being continually added to. A formal launch will occur during 2018 with numerous local authorities already promoting it through their local communities.

Waste Surveys



A core aspect of any successful prevention project is having quantitative data that support a particular intervention. During 2017, a number of waste and litter surveys were carried out by various local authorities. This work identified specific problem waste streams or issues with existing waste management services. Based on the results from litter surveys carried out in Limerick, Kerry, Kilkenny and Carlow the Conscious Cup Campaign and Refill.ie are now being promoted. Local councils in Dun Laoghaire Rathdown and Cork City and County supported waste assessments with a view to streamlining waste management and ultimately preventing key waste streams.

²² <https://www.youtube.com/channel/UCKK3LjHdbQR-W7hzzSWLMWw>

CTC Technical Support



In addition to supporting the EPA in its management of LAPN, CTC provide direct support to participating local authorities based on the individual needs of their projects. This support includes:

- On-site training (e.g. food waste assessments)
- Support with business resource efficiency projects
- Presentations to community groups, Tidy Towns seminars or business communities
- Development of online and physical promotional materials as well as online tools
- Green festival and event initiatives (e.g. carbon footprint)
- Input and co-ordination of working groups (e.g. coffee cup submission to DCCA)

Through collaborating closely with the individual local authorities, the three regional waste management offices and the EPA, CTC work to continually foster the spirit of openness and reciprocity that has led to the continued success and innovation engendered by LAPN.

EPA Waste Prevention Award in the Tidy Towns Competition



The EPA, via LAPN, continued its support of steps being taken by local communities towards sustainability through its sponsorship of the EPA Waste Prevention Award in the national Tidy Towns competition. The award recognises community activities to reduce energy, water, and material use, as well as waste generation. The winners in 2017 included Raheny Tidy Village Group, Dublin (National Award Winner), Ballyleague Village Renewal & Tidy Towns Committee, Co. Roscommon (Highly commended) and Coiste Forbartha Charraig Airt, Co. Donegal (Highly commended).

An additional award was given to Carlingford Tidy Towns in Co. Louth for innovation in their 2017 project promoting reusable cups. Reusable plastic cups, called green goblets, were used for sporting events and by community groups to replace disposable plastic or paper cup/disposable single use plastic bottles. These were used for a variety of events including Carlingford Half Marathon, the Cooley Coast Run, The Carlingford Wild Run and the Carlingford Land of Legends Olympic Triathlon. These cups have served to increase awareness about waste prevention locally and Carlingford Tidy Towns hope that all small running /sporting events can move to reusable cups in a shift towards a zero waste Ireland.

6. Other Prevention Activities

6.1 Regional Waste Management Offices

Recycling List Ireland Campaign

The national recycling awareness campaign ‘Recycling List Ireland’ was initiated in September 2017 following discussions and agreement between the DCCA, the Irish Waste Management Association, Repak and the Regional Waste Offices on the official list of materials suitable for collection at kerbside in Ireland.

The campaign aimed at householders is part of an overarching strategy to encourage individuals to participate in more sustainable actions. The campaign aims to reduce the levels of contamination in kerbside mixed dry recyclable collections, increase the quality of the material collected and in doing so stimulate Ireland’s transition from a linear to a circular economy where waste is no longer waste but becomes a resource that is entirely recyclable and/or reusable.

The target audience for the campaign is the Irish public; therefore, a multidimensional approach has been adopted within the campaign strategy to deliver a clear message across the nation. Consideration has been given to the varying demographics and geographic to ensure all sectors of the community are exposed to the campaign through Radio, TV, Press, Social Media and Out of House material nationwide. In addition, the campaign is supported by the delivery of a series of local workshops. The messaging aims to deliver a clear message across the nation focussed on “Your New Recycling List”.



Recycling Ambassador Programme

To specifically address contamination and source segregation, the DCCA commissioned a nationwide Recycling Ambassador Programme (RAP) which was officially launched by Minister Naughten in November. The programme is managed and overseen by the three regional waste

management offices and delivered by environmental NGO Voice Of Irish Concern for the Environment (VOICE).

RAP has one simple purpose – to train citizens to become more knowledgeable on current recycling practice and to impart their knowledge within the wider community. A national target of 15,000 people has been set for Recycling Ambassadors to engage directly with citizens through attendance at workshops but it is anticipated that the reach of the project will be far wider as those attending the workshops will be encouraged (& incentivised) to impart knowledge within their social circle & neighbourhood.

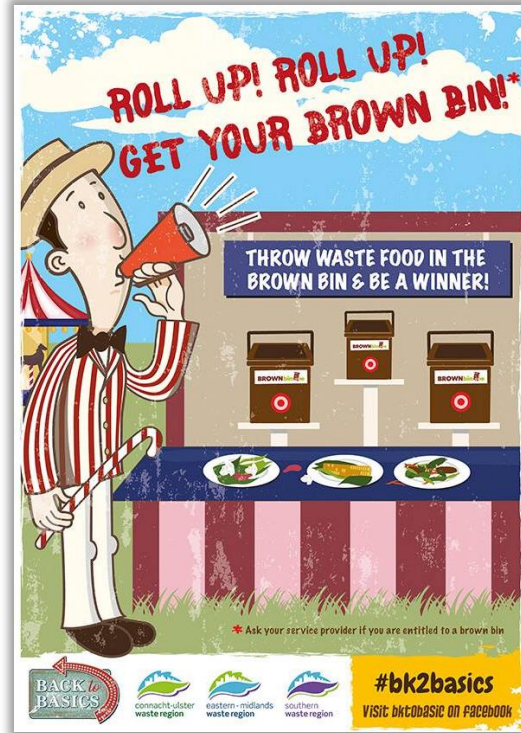


Brown Bin

Ireland currently has commercial and household food waste regulations in place and compliance with those regulations is a priority action for the Waste Enforcement Regional Lead Authorities in 2018.

In order to aid food waste reduction, the Regional Waste Management Offices launched a very simple yet effective campaign which took a two-pronged approach: firstly encouraging householders to get a brown bin; and secondly to use it correctly.

Rather than this message being a straight forward one which informed the householder of the policy changes and how to use the brown bin, it played on this message. In order to encourage an uptake in the usage of the brown bin the campaign delivered its message in a way that engaged a little more by using the tagline *“Brown is the new Black”*. The campaign also wanted to get the message across that householders have the potential to save money by using their brown bin through the message: *“Throw food waste in your brown bin & be a winner”*.



For the second part of the message the RWMOs looked at what the barriers were when it came to using the brown bin - as usage in those households with brown bins can be as low as 50%. The main reasons that identified by householders was that it is complicated; messy; and smelly.

Conscious Cup Campaign

Across Europe, there is a slow but steady move towards a zero waste society and this is currently driven by the consumer. With the introduction of legislation enforcing correct waste segregation people have become



more aware of how much unnecessary waste is being produced and many want to limit this as much as possible. One quick and easy way to achieve this is to cut out disposable drinks cups and carry a reusable cup for drinks on the go. When cafés facilitate this small change, they can create customer loyalty. The Conscious Cup Campaign [CCC] is Ireland's first national voluntary network inviting purveyors of hot & cold drinks to help Ireland achieve EU targets, reducing waste going to landfill while also promoting a circular economy in a move away from the disposable cup.

The CCC is an initiative that has taken its inspiration from similar projects from all over the world which aim to reduce the use of disposable cups. The CCC had seen that there are many cafés around the country who want to move away from disposable cup usage, and so offer incentives to customers for bringing their own cups. This incentive is being offered as a monetary reduction or in the form of a reward such as extra loyalty stamp or a free treat. The CCC saw there was potential to

tap into this already emerging trend and so the idea to create a distinctively branded network came about.

Presently almost 1,000 cafes have signed up to offer customers bringing their own cup an incentive, many of these cafes have contacted the CCC directly or have been approached by individuals or tidy town committees which shows just how well this campaign has been embraced. The CCC is a partnership between the three Regional Waste Management Offices & VOICE and is supported by the DCCA.E.

Reuse Month

Reuse Month 2017 was a great success with a larger and more diverse range of events nationwide. The regional waste management offices compiled a register of organisations and individuals that offer workshops encompassing the topics of reuse and waste prevention. This resource is applicable beyond Reuse Month for local authorities providing activities and events as part of the waste prevention at local level initiatives funded by the 15c/inhabitant budget.

A calendar of events was publicised in each region.

Almost 100 events took place nationwide working with various community groups and organisations, events such as; workshops on furniture upcycling, reuse workshop, displays of reuse in the community, repair cafes, zero waste pop ups also book swap boxes were distributed to each local authority and displayed in public spaces such as libraries.

Each region hosted a flagship event:

Connacht Ulster Region - A flag ship 'Regional Up Styling Competition' ran throughout the month. The competition received extensive coverage throughout the region and participants produced excellent examples of up styled clothing.

Eastern Midlands Region – A flagship event ran for the full month. This event took place in the Dublin Food Coop. Throughout the month there were repair cafés held, a library of things was put in place, and clothes swap shops took place along with talks on how to repair, reuse and recycle. At the end of the month a Zero Waste Festival was held with upcycling workshops and talks took place throughout the day.

Southern Region - The flagship event was a collaboration with Cork Environmental Forum to showcase the best of reuse across Cork City and County Council. Over 600 people attended the lifestyle event which culminated in a fashion showcase of pre-loved clothes from the charity and vintage sector in the city.



6.2 Towards Zero Waste Cashel

Zero Waste Cashel is managed by VOICE and was launched at the Rock of Cashel in March 2017. This 18-month project receives funding from the NWPP and is also supported by the Southern Waste Region and Tipperary County Council. It is piloting community-wide waste prevention initiatives, and aims to achieve the following:

- Waste reduction of 25% during the pilot,
- Engage and work together with local groups/businesses/schools/households,
- Organise town meetings/school assemblies to instil the importance of zero waste,
- Establish sharing and reuse enterprises,
- Plan repair and upcycling workshops, and
- Educate on effective recycling and composting.



The project has a part-time project manager stationed in the centre of the town who engages with the community providing local support and guidance on waste prevention initiatives. Since its launch Zero Waste Cashel has promoted the 'Zero Waste' initiative through partaking in local events (Arts Festival, St. Patrick's Day Parade), sponsoring prizes for the Best Use of Recycled Materials and launched an online resource for the local community www.zerowastecashel.ie.

The project holds focus group discussion with representatives from local business, community groups (Scouts, Tidy Towns, Men's Sheds etc.) and homeowners to engage locals on the project initiatives and promote the goals. The pilot has encouraged local cafés and restaurants to provide incentives for the community to reduce waste by offering discounts with reusable cups and free water refills. Several local businesses have completed a Resource Efficiency Survey with GreenBusiness.ie. A recycling initiative was launched as a fundraiser with the local Cashel Playground Development which aims to demonstrate local recycling and reuse.

Many local events were organised during Reuse Month in October 2017 and a waste characterisation study was also carried out to determine the levels of contamination in householders recycling, organic and residual municipal waste, these were supported by the Southern Region Waste Management Office.

The project has engaged community groups in talks and workshops on waste management and recycling such as Tidy Towns, Active Retirement Group, School Staff and Students, Scouts etc.

On-street recycling bins have been installed in the town centre and around the Rock of Cashel.

A zero waste map of Cashel²³ was created to highlight the various zero waste initiatives implemented by businesses and community groups. Signs for displaying on shop shelves promoting zero waste products were created in association with service users of the Brothers of Charity.

Cafes have switched to using compostable cups and takeaway containers. A Zero Waste Festival was organised to coincide with Earth Day with information stands, talks on Zero Waste Lifestyle, Waste Management and Recycling, No Waste Cooking Demo, Workshops on how to make homemade cleaning products, healthcare and beauty products and reusable beeswax cloths. A Master Composting Training Course was also held in the community Spafield Family Resource Centre.

6.3 Repak Prevent & Save



2017 saw the further development of the Prevent and Save Programme with Repak's packaging technology team supporting Repak members; large and small across numerous industry sectors. Through the site survey programme Repak helped to identify opportunities to optimise packaging, reduce costs and prevent packaging waste.

Repak also expanded its education programme in 2017 through the Prevent and Save programme and there was a continued focus during the year on Ireland's third level institutions to both support membership and educate Ireland's future engineers and scientists.

The 2017 programme included the following:

- Renewed member participation in a free onsite packaging optimisation survey programme and the introduction of more extensive projects to assist the retail sector on packaging waste prevention projects with a particular focus on plastic.
- Development of case study publications targeting packaging waste prevention within various sectors and covering various themes. Sectors targeted were the hospitality and pharmacy sector and case studies were developed around the theme of packaging reuse. 2017 also saw the development of a revised Packaging Optimisation Toolkit to include new and updated member case studies. See www.preventandsave.ie for more information.
- Guest lectures and seminars took place at some of Ireland's leading institutions and included University College Cork, Dublin City University, IT Sligo, Cork Institute of Technology and IT Tallaght that focussed on the current and future challenges of dealing with Ireland's packaging waste.

²³ <https://www.google.com/maps/d/viewer?mid=14mQeq1pxe8wNjgGhvQpHOTPAk4fdO-CF&ll=52.515736376625945%2C-7.886737776412929&z=16>

7. Managing Hazardous Wastes

Hazardous Waste Prevention and Management

The revised National Hazardous Waste Management Plan (NHWMP) (2014-2020) was published in June 2014. The plan was developed in accordance with Section 26 of the Waste Management Acts 1996 as amended.

The NHWMP is a strategic level document designed to provide overall direction to decision and policy makers involved in the prevention and management of hazardous waste. The main components of the National Hazardous Waste Management Plan 2008-2012 remain intact in the revised plan. The key objectives of the revised plan are:

- To prevent and reduce the generation of hazardous waste by industry and society generally;
- To minimise the environmental, health, social and economic impacts of hazardous waste generation and management;
- To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste; and
- To strive for self-sufficiency in the management of hazardous waste and minimise hazardous waste export.

The EPA have begun the progress of reviewing the status of recommended actions outlined in the NHWMP (2014-2020) using data from the National Waste Statistics team with the input of the NWPC and its hazardous waste sub-group. Considerable progress is being made in a range of areas, for example in waste prevention through resource efficiency programmes such as Green Business, LAPN, Smart Farming and Green Enterprise, the EPA promotes the use of cleaner technologies and encourages the adoption of sustainability practices.

Waste solvent generation has been in general decline since 2006, falling by ca. 11.4% in the period 2006-2014. CSO data show production volumes and turnover in the pharmaceutical industry are increasing. This would suggest that a shift from solvent-based chemistry to water-based chemistry in the biopharma industry. In the waste collection area, producer responsibility initiatives continue to assist with increased collections of WEEE and batteries and one-off collections of household and farm waste have resulted in controlled management of specific hazardous waste streams. In the regulatory area, the EPA led market surveillance campaigns carried out in the period 2014-2017 has monitored compliance with the RoHS Directive, and POPs and REACH Regulations respectively. The NHWMP review will assist in prioritising actions for the remaining period of the plan.

Farm Hazardous Waste Collections

Since 2013, the EPA has collaborated with the DCCAE, Teagasc, the Department of Agriculture, Food & the Marine and local authorities to deliver a series of Farm Hazardous Waste (FHW) Collections. A comprehensive report on the operation of the pilot project 2013-2017 is due for publication in 2018.

Forty-six collections centres were operated over the five-year period of the pilot programme including a further 10 collection events held in 2017. Overall, 9,000 farmers used the 46 collection centres and the total quantity of hazardous wastes collected was approximately 1,000 tonnes. Among the pesticides collected were substantial quantities of highly toxic and persistent substances such as DDT, Lindane and Endosulfan which are recognised as posing serious risks to both human health and the environment and have been banned from use for in some cases for decades.

Farm Hazardous Waste
COLLECTION CENTRES & LOCATIONS OCTOBER & NOVEMBER 2017

Low cost disposal of your hazardous waste is in the follow counties...

For further information...
LoCall: 1890 33 55 99
www.epa.ie

County	Location	Date
Mayo/Sligo	Mayo/Sligo Co-Op, Ballina	Friday, 17th November
Galway	Athenry Mart	Friday, 24th November
North Tipperary	Nenagh Mart	Wednesday, 25th October
South Tipperary	Cahir Mart	Tuesday, 14th November
Kerry	North Kerry - Listowel Mart	Saturday, 4th November
Cork	Bandon Recycling Centre	Wednesday, 18th October
Meath	Kells Recycling Centre	Tuesday, 28th November
Offaly	Tullamore Mart	Tuesday, 21st November
Kilkenny	Kilkenny Mart, Cillin Hill	Wednesday, 8th November
Wexford	WFC Enniscorthy Mart	Friday, 27th October

This campaign has confirmed that substantial quantities of farm hazardous waste still remain on farms (both legacy and current) which pose a potential risk to farmers, their livestock, their livelihood, and the environment. These farm hazardous waste collections probably represent the largest ever voluntary bulk removal of highly toxic pollutants out of the Irish environment in such a concentrated period of time.

This pilot has confirmed the necessity and feasibility of a scheme for the collection and safe disposal of FHW. An overarching point is that dealing with FHW has two distinct components: a) Wastes

routinely generated through agricultural activity which will continue to arise at some rate into the future; and b) 'Legacy' waste consisting of substances stockpiled in farmyards, often for decades, that require urgent removal from the rural environment. Some key conclusions arising from this work are:

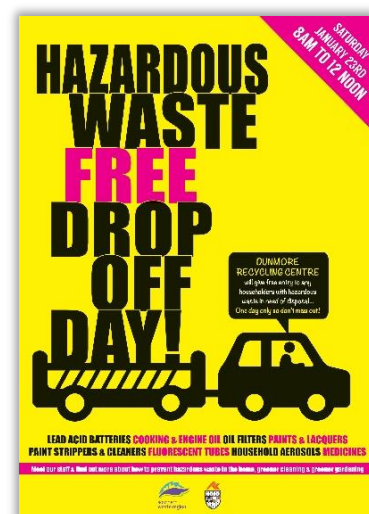
- The pilot programme has demonstrated that it is logistically possible to operate FHW collection centres that accept a comprehensive range of hazardous wastes for disposal/recovery.
- A long-term and affordable national scheme for the collection of FHW should be established. Various models of operation should be considered including the campaign approach trialled in this pilot; permanent bring-centres; or direct collection from farms.
- Additional funding will be required to continue and expand the collections. Currently most of the funding comes from farmers and the government (via the NWPP). Additional mechanisms such as levies on products placed on the market (ring-fenced for FHW collections) should be considered.
- Pesticide and veterinary medicine producers should contribute financially and operationally to FHW collections across the country, in adherence with the guiding principles of corporate social responsibility and producer responsibility.
- Waste prevention practices need to be promoted and implemented on all farms to minimise arisings of hazardous waste.



Household hazardous waste collections

DCCAIE invited applications from the three RWMOs to host one day household hazardous waste collections in selected counties. In 2017, over 69 tonnes of potentially hazardous waste was collected. Waste collected included: paint, waste oil, herbicides, pesticides and out of date medicines.

Further to both farm and household hazardous waste collections, paint waste remains to be a problematic hazardous waste for both households and businesses. Standardised awareness raising campaigns, utilising various media platforms, were conducted by the RWMOs in the lead up to, during and after the one-day collections. Funding has been made available for 2018 to run further collections for householders between March and August 2018. It is planned to carry out a small paint characterisation study as part of the 2018 campaign. The characterisation study will be



complimented by a prevention and awareness campaign aimed at paint identification, consumption and alternate solutions to waste paint management such as reuse. Funded by the DCCA, Eco-Eye filmed an episode in December 2017 focussing on household hazardous waste management with assistance from the RWMOs, EPA and the Rediscover Paint reuse project.

Hazardous waste collections through targeted campaigns have proven to be very successful in terms of outcome, however priority consideration needs to be given to up-scaling such collections through the provision of a more permanent and suitably located public infrastructure to enable frequent collection and proper management of hazardous waste from households and small businesses.

8. Waste Reporting & Statistics

The EPA also supports the successful implementation of the NWPP through the production and publication of national waste statistics.

National Waste Statistics web resource



As part of the EPA's commitment to better provision of online, up-to-date and accessible information on the environment to our stakeholders, a new web resource for National Waste Statistics has been launched (www.epa.ie/nationalwastestatistics). This provides:

- One online location for national waste statistics for Ireland;
- Accessible content, so that users can perform their own analysis;
- Easy to use interactive charts.

The National Waste Statistics web resource will be updated regularly and replaces the EPA's biennial National Waste Report as the primary source of waste statistics in Ireland.

EU Waste Targets

Ireland has statutory targets for recovery of waste, in particular for waste streams subject to producer responsibility initiatives. Ireland is achieving the targets for all Directives except the End-of-Life Vehicle Directive:

- **End-of-life vehicles (ELVs).** Despite an upward trend in the reuse, recycling and recovery of ELVs in recent years, Ireland didn't achieve the higher targets under the ELV Directive which came

into effect in January 2015. Ireland achieved 83% reuse and recycling (85% target) and 92% reuse and recovery (95% target).

- **Waste Electrical and Electronic Equipment (WEEE).** Ireland met the WEEE Directive targets for collection, reuse, recycling and recovery in 2015. 8.6 kg household WEEE was collected per person in Ireland in 2015. New ambitious targets come into effect in 2016 under the WEEE Directive recast.
- **Waste Packaging.** Ireland met the Packaging and Waste Packaging Directive targets for the recovery of waste packaging and the recycling of various waste packaging materials (plastic, paper & board, wood, metals, glass) in 2015. The EU's Circular Economy legislative proposals propose higher recycling targets for 2030.
- **Batteries and Accumulators.** Ireland met the Battery & Accumulator Directive targets for the collection of portable batteries and recycling efficiencies of different battery & accumulator types in 2015 and 2016.

Data for reference year 2016 is currently being compiled by the EPA. Most reporting deadlines for reference year 2016 fall on 30th June 2018.

Municipal Waste Characterisation

The new national municipal waste characterisation study which commenced in December 2016 through the support of the DCCAIE continued throughout 2017. It is anticipated that a final report on the study will be published by Q3-2018. The last study was carried out in 2008, so the need for this new study was well recognised. It is anticipated that changes in consumer behaviour, in products placed on the market and in waste policies and legislation (for example the food waste regulations and battery and accumulator regulations) will have impacted on the composition of municipal waste since 2008.

Hazardous Waste

Hazardous waste is subject to strict regulatory control because of the potential impacts on the environment and human health. The prevention and reduction of hazardous waste generation and to strive for self-sufficiency in its management are objectives on Ireland's NHWMP.

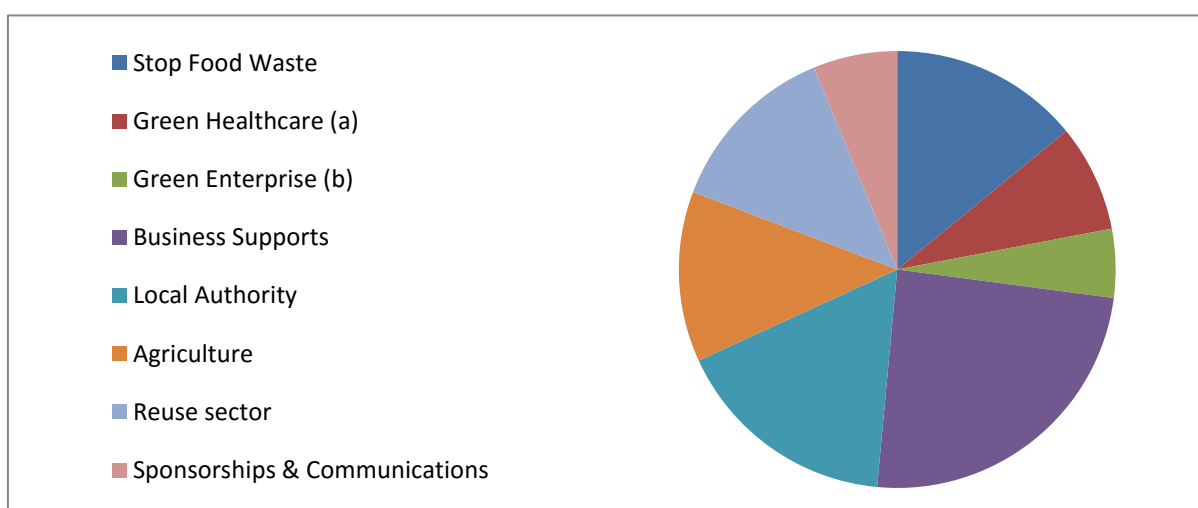
To support the NHWMP, the EPA publishes national waste statistics on hazardous waste management in Ireland. In 2016, 409 ktonnes of hazardous waste was managed; 18% higher than in 2015 due to the increase in contaminated soil arising for treatment, an indicator of increased activity in the construction & demolition sector in Ireland. For further details, please see www.epa.ie/nationalwastestatistics.

9. Governance & Finances

Funding for the projects supported by the NWPP is provided by DCCAE through the Environment Fund. Good governance is a fundamental matter for the EPA in managing the NWPP. Within the Agency, the programme is implemented by the Resource Efficiency Unit, a team of staff based in EPA Headquarters, Wexford and the EPA Dublin Regional Inspectorate. The Board of the EPA reviews and approves the work of the Resource Efficiency Unit as required over the course of the year.

Technical oversight to the programme is provided by the National Waste Prevention Committee. Membership of the committee is shown in Appendix A. The Terms of Reference for the committee were reviewed and updated during 2017, and these are in Appendix B of this report. The group meets twice per year to review ongoing activities and to provide guidance on future priorities. Records of the meetings of this committee are made available via the EPA website²⁴.

In addition, quarterly meetings between EPA and DCCAE complements the NWPC process through ensuring a strong fit to policy at national and EU levels. A Memorandum of Funding Agreement was developed between EPA and DCCAE in 2016, and serves to define the nature of strategic collaboration & financial control in place between the two organisations.



The pie-chart illustrates the breakdown of expenditure of €1.8m of Environment Fund monies on NWPP activities in 2017. In addition, two further supports to the NWPP should be noted: (a) the Green Healthcare project is also financed by the HSE in a co-funding agreement with EPA; and (b) the funding indicated for the Green Enterprise programme is a portion of the overall EPA support to the programme – with EPA Research providing the majority of the funding. In terms of financial probity, the public monies provided to fund the activities if the NWPP are expended at all times in accordance with best practices with respect to financial and procurement requirements. The NWPP is subject to audit from a number of bodies including the EPA Internal Audit Unit; the DCCAAE Internal Audit Unit; and the Comptroller and Auditor General. EPA responds fully to requests associated with such appraisals, and the recommendations that may arise afterwards.

²⁴ <http://www.epa.ie/waste/nwpp/committee/>

Appendix A

National Waste Prevention Committee: Membership

- Environmental Protection Agency
- Department of Communications, Climate Action and Environment
- Department of Agriculture, Food and the Marine
- Chambers of Commerce of Ireland
- Chartered Institution of Wastes Management
- Clean Technology Centre
- Community Re-Use Network Ireland
- Connacht-Ulster Waste Regional Office
- Eastern Midlands Waste Regional Office
- Engineers Ireland
- Enterprise Ireland
- Health Services Executive
- Ibec
- IDA Ireland
- Irish Environmental Network
- Irish Farmers Association
- Irish Waste Management Association
- Small Firms Association
- Southern Waste Regional Office

Appendix B

National Waste Prevention Committee: Terms of Reference

Purpose

The National Waste Prevention Committee (NWPC) draws together representatives of the main actors in the public and private sectors with an interest in waste prevention and the broader concept of resource efficiency including design. It acts as an advisory body to the Minister for Communications, Climate Action and Environment (the Minister), the Environmental Protection Agency (in relation to the National Waste Prevention Programme) and, where appropriate, the public. The NWPC will work in an evolving policy context taking account of Towards a Resource Efficient Ireland, the circular economy package, the Sustainable Development Goals (SDGs) and the National Mitigation Plan on climate change.

Membership

The Membership will be comprised of those persons appointed by DCCAE and will include representatives of the organisations set out in Annex 1. Membership will be for a three-year period renewable by appointment of DCCAE following proposals from EPA. Should an organisation not be represented for two consecutive meetings of the NWPC, the Chair will engage with the organisation to consider adequate representation.

Administration

- The EPA will provide the Chair and Secretariat to the NWPC
- The NWPC will meet in plenary at least twice per year where a quorum of 50% plus 1 is required
- The NWPC will draw up a rolling work programme to cover its term of office and reflecting emerging priorities
- The NWPC may create working groups for specific purposes reporting to the NWPC that are time bound, subject to review and they may draw on external expertise where appropriate

Specific Responsibilities:

- Provide strategic direction including advice on priority actions to the EPA regarding the National Waste Prevention Programme (NWPP) and the National Hazardous Waste Management Plan (NHWMP)
- Review actions completed under NWPP and make recommendations as to how the full value from these actions can be captured for the longer term
- Provide opinions regarding relevant policy and legislative initiatives to the Minister when requested
- Facilitate, support and promote co-ordination and liaison between relevant bodies, public and private, on the NWPP and NHWMP

- Be informed about policy and legislative developments nationally and internationally in relation to the circular economy, sustainable development and climate mitigation
- Promote behavioural change through appropriate messaging and the dissemination of information on best practice as identified by the respective programmes
- Promote and disseminate the outputs of the NWPP as good practice and innovation in resource efficiency and the circular economy
- Promote the outputs of the NHWMP as good practice in hazardous waste prevention and management
- Members of the NWPC will endeavour to share current waste prevention initiatives and to use their wider networks to disseminate information about NWPP activities and priorities
- Provide input to the EPA for the annual reports of the NWPP and NHWMP - prior to submission to the Minister

Appendix C

Progress towards EU Waste Recycling, Recovery & Diversion Targets (June 2018)

EU Directive	Target Date	Target Specifics	Reference Year	Rate	Indicator	
Waste Framework Directive (2008/98/EC)	12/12/2020	Preparing for reuse and recycling of 50% by weight of household derived paper, metal, plastic & glass (calculation method 1)	2014	45%	On track Due December 2020	
	12/12/2020	Preparing for reuse, recycling and other material recovery (incl. beneficial backfilling operations using waste as a substitute) of 70% by weight of C&D non-hazardous waste (excluding natural soils & stone)	2014	68%	On track Due December 2020	
	12/12/2013	Establishment of a National Waste Prevention Programme (NWPP)	NWPP established in 2004		Achieved	
Packaging Directive (94/62/EC as amended)	31/12/2011	60% as a minimum by weight of packaging waste will be recovered or incinerated at waste incineration plants with energy recovery.	2015	91%	Achieved	
		55% as a minimum by weight of packaging waste will be recycled.	2015	68%	Achieved	
		No later than 31 st December 2011 the following minimum recycling targets for materials contained in packaging waste will be attained:				
		(i) 60% by weight for glass;	2015	88%	Achieved	
		(ii) 60% by weight for paper and board;	2015	80%	Achieved	
		(iii) 50% by weight for metals;	2015	75%	Achieved	
		(iv) 22.5% by weight for plastics, counting exclusively material that is recycled back into plastics;	2015	34%	Achieved	
(v) 15% by weight for wood.	2015	85%	Achieved			

EU Directive	Target Date	Target Specifics	Reference Year	Rate	Indicator
End of Life Vehicles Directive (2000/53/EC)	01/01/2015	Reuse and recovery to a minimum of 95% by average weight of vehicle and year.	2015	92%	Not achieved Due January 2015
		Reuse and recycling to a minimum of 85% by average weight of vehicle and year.	2015	83%	Not achieved Due January 2015
Batteries Directive (2006/66/EC)	26/09/2016	Minimum 45% collection rate for batteries & accumulators.	2016	48%	Achieved
	26/09/2011	Recycling processes shall achieve the following minimum recycling efficiencies:			
		(a) recycling of 65 % by average weight of lead-acid batteries and accumulators, including recycling of the lead content to the highest degree that is technically feasible while avoiding excessive costs;	2016	86%	Achieved
		(b) recycling of 75 % by average weight of nickel-cadmium batteries and accumulators, including recycling of the cadmium content to the highest degree that is technically feasible while avoiding excessive costs; and	2016	85%	Achieved
	(c) recycling of 50 % by average weight of other waste batteries and accumulators.	2016	57%	Achieved	
Landfill Directive (1999/31/EC)	16/07/2020	Biodegradable municipal waste going to landfills must be reduced to 35% of the total quantity (by weight) biodegradable municipal waste produced in 1995 (427,000 t)	2016	390,000 tonnes disposed to landfill	On track Due December 2020
WEEE Directive (2002/96/EC)	31/12/2008	Separate collection of > 4kg of WEEE from private households per person per year.	2015	8.6 kg per person	Achieved

EU Directive	Target Date	Target Specifics	Reference Year	Rate	Indicator
	31/12/2008	<p>For large household appliances:</p> <p>Recovery shall be increased to a minimum of 80% by an average weight per appliance; and</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 75% by an average weight per appliance.</p>	2015	93%	Achieved
				83%	
	31/12/2008	<p>For small household appliances:</p> <p>Recovery shall be increased to a minimum of 70% by an average weight per appliance; and</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance.</p>	2015	93%	Achieved
				78%	
	31/12/2008	<p>For IT and telecommunications equipment:</p> <p>Recovery shall be increased to a minimum of 75% by an average weight per appliance; and</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 65% by an average weight per appliance.</p>	2015	94%	Achieved
				81%	
	31/12/2008	<p>For consumer equipment:</p> <p>Recovery shall be increased to a minimum of 75% by an average weight per appliance; and</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 65% by an average weight per appliance.</p>	2015	96%	Achieved
				87%	

EU Directive	Target Date	Target Specifics	Reference Year	Rate	Indicator
	31/12/2008	<p>For lighting equipment:</p> <p>Recovery shall be increased to a minimum of 70% by an average weight per appliance; and</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance.</p>	2015	94%	Achieved
				92%	
	31/12/2008	<p>For gas discharge lamps, the rate of component, material and substance reuse and recycling shall reach a minimum of 80% by weight of the lamps.</p>	2015	92%	Achieved
	31/12/2008	<p>For electrical & electronic tools:</p> <p>Recovery shall be increased to a minimum of 70% by an average weight per appliance;</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance.</p>	2015	93%	Achieved
				79%	
	31/12/2008	<p>For toys, leisure and sports equipment:</p> <p>Recovery shall be increased to a minimum of 70% by an average weight per appliance; and</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance.</p>	2015	94%	Achieved
				81%	
	31/12/2008	<p>For medical devices:</p> <p>Recovery shall be increased to a minimum of 70% by an average weight per appliance;</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance.</p>	2015	93%	Achieved
				79%	

EU Directive	Target Date	Target Specifics	Reference Year	Rate	Indicator
	31/12/2008	<p>For monitoring and control instruments:</p> <p>Recovery shall be increased to a minimum of 70% by an average weight per appliance; and</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance.</p>	2015	93%	Achieved
		<p>Component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance.</p>		78%	
	31/12/2008	<p>For automatic dispensers:</p> <p>Recovery shall be increased to a minimum of 80% by an average weight per appliance;</p> <p>Component, material and substance reuse and recycling shall be increased to a minimum of 75% by an average weight per appliance.</p>	2015	96%	Achieved
		<p>Component, material and substance reuse and recycling shall be increased to a minimum of 75% by an average weight per appliance.</p>		83%	

AN GHNÍOMHAIREACHT UM CHAOMHNÚ COMHSHAOIL

Tá an Gníomhaireacht um Chaomhnú Comhshaoil (GCC) freagrach as an gcomhshaoil a chaomhnú agus a fheabhsú mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaoil a chosaint ó éifeachtaí díobhálacha na radaíochta agus an truaillithe.

Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

Rialú: Déanaimid córais éifeachtacha rialaithe agus comhlionta comhshaoil a chur i bhfeidhm chun torthaí maithe comhshaoil a sholáthar agus chun díriú orthu siúd nach gcloíonn leis na córais sin.

Eolas: Soláthraímid sonraí, faisnéis agus measúnú comhshaoil atá ar ardchaighdeán, spriocdhírithé agus tráthúil chun bonn eolais a chur faoin gcinnteoireacht ar gach leibhéal.

Tacaíocht: Bímid ag saothrú i gcomhar le grúpaí eile chun tacú le comhshaoil atá glan, táirgiúil agus cosanta go maith, agus le hiompar a chuirfidh le comhshaoil inbhuanaithe.

Ár bhFreagrachtaí

Ceadúnú

Déanaimid na gníomhaíochtaí seo a leanas a rialú ionas nach ndéanann siad dochar do shláinte an phobail ná don chomhshaoil:

- saoráidí dramhaíola (*m.sh. láithreáin líonta talún, loisceoirí, stáisiúin aistrithe dramhaíola*);
- gníomhaíochtaí tionsclaíoch ar scála mór (*m.sh. déantúsaíocht cógaisíochta, déantúsaíocht stroighne, stáisiúin chumhachta*);
- an dionalmhaíocht (*m.sh. muca, éanlaith*);
- úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaithe (*OGM*);
- foinsí radaíochta ianúcháin (*m.sh. trealamh x-gha agus radaiteiripe, foinsí tionsclaíochta*);
- áiseanna móra stórála peitрил;
- scardadh dramhuisce;
- gníomhaíochtaí dumpála ar farraige.

Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Clár náisiúnta iniúchtaí agus cigireachtaí a dhéanamh gach bliain ar shaoráidí a bhfuil ceadúnas ón nGníomhaireacht acu.
- Maoirseacht a dhéanamh ar fhreagrachtaí cosanta comhshaoil na n-údarás áitiúil.
- Caighdeán an uisce óil, arna sholáthar ag soláthraithe uisce phoiblí, a mhaoirsiú.
- Obair le húdarás áitiúla agus le gníomhaireachtaí eile chun dul i ngleic le coireanna comhshaoil trí chomhordú a dhéanamh ar líonra forfheidhmiúcháin náisiúnta, trí dhírú ar chiontóirí, agus trí mhaoirsiú a dhéanamh ar leasúchán.
- Cur i bhfeidhm rialachán ar nós na Rialachán um Dhramhthrealamh Leictreach agus Leictreonach (DTLL), um Shrian ar Shubstaintí Guaiseacha agus na Rialachán um rialú ar shubstaintí a ídíonn an ciseal ózóin.
- An dlí a chur orthu siúd a bhreiseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaoil.

Bainistíocht Uisce

- Monatóireacht agus tuairiscí a dhéanamh ar cháilíocht aibhneacha, lochanna, uisce idirchriosacha agus cósta na hÉireann, agus screamhuiscí; leibhéil uisce agus sruthanna aibhneacha a thomhas.
- Comhordú náisiúnta agus maoirsiú a dhéanamh ar an gCreat-Treoir Uisce.
- Monatóireacht agus tuairiscí a dhéanamh ar Cháilíocht an Uisce Snámha.

Monatóireacht, Anailís agus Tuairiscí ar an gComhshaoil

- Monatóireacht a dhéanamh ar cháilíocht an aeir agus Treoir an AE maidir le hAer Glan don Eoraip (CAFÉ) a chur chun feidhme.
- Tuairiscí neamhspleách le cabhrú le cinnteoireacht an rialtais náisiúnta agus na n-údarás áitiúil (*m.sh. tuairiscíu tréimhsiúil ar staid Chomhshaoil na hÉireann agus Tuarascálacha ar Tháscairí*).

Rialú Astaíochtaí na nGás Ceaptha Teasa in Éirinn

- Fardail agus réamh-mheastacháin na hÉireann maidir le gáis cheaptha teasa a ullmhú.
- An Treoir maidir le Trádáil Astaíochtaí a chur chun feidhme i gcomhair breis agus 100 de na táirgeoirí dé-ocsaíde carbóin is mó in Éirinn.

Taighde agus Forbairt Comhshaoil

- Taighde comhshaoil a chistiú chun brúnna a shainiú, bonn eolais a chur faoi bheartais, agus réitigh a sholáthar i réimsí na haeraíde, an uisce agus na hinbhuanaitheachta.

Measúnacht Straitéiseach Timpeallachta

- Measúnacht a dhéanamh ar thionchar pleananna agus clár beartaithe ar an gcomhshaoil in Éirinn (*m.sh. mórphleananna forbartha*).

Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéil radaíochta, measúnacht a dhéanamh ar nochtadh mhuintir na hÉireann don radaíocht ianúcháin.
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as taismí núicléacha.
- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíochta.
- Sainseirbhísí cosanta ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

Treoir, Faisnéis Inrochtana agus Oideachas

- Comhairle agus treoir a chur ar fáil d'earnáil na tionsclaíochta agus don phobal maidir le hábhair a bhaineann le caomhnú an chomhshaoil agus leis an gcosaint raideolaíoch.
- Faisnéis thráthúil ar an gcomhshaoil ar a bhfuil fáil éasca a chur ar fáil chun rannpháirtíocht an phobail a spreagadh sa chinnteoireacht i ndáil leis an gcomhshaoil (*m.sh. Timpeall an Tí, léarscáileanna radóin*).
- Comhairle a chur ar fáil don Rialtas maidir le hábhair a bhaineann leis an tsábháilteacht raideolaíoch agus le cúrsaí práinnfhreagartha.
- Plean Náisiúnta Bainistíochta Dramhaíola Guaisí a fhorbairt chun dramhaíl ghuaiseach a chosc agus a bhainistiú.

Múscailt Feasachta agus Athrú Iompraíochta

- Feasacht comhshaoil níos fearr a ghiniúint agus dul i bhfeidhm ar athrú iompraíochta dearfach trí thacú le gnóthais, le pobail agus le teaghlaigh a bheith níos éifeachtúla ar acmhainní.
- Tástáil le haghaidh radóin a chur chun cinn i dtithe agus in ionaid oibre, agus gníomhartha leasúcháin a spreagadh nuair is gá.

Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an gníomhaíocht á bainistiú ag Bord lánaimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóirí. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig um Inmharthanacht Comhshaoil
- An Oifig Forfheidhmithe i leith cúrsaí Comhshaoil
- An Oifig um Fianaise is Measúnú
- Oifig um Chosaint Radaíochta agus Monatóireachta Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tá Coiste Comhairleach ag an nGníomhaireacht le cabhrú léi. Tá dáréag comhaltaí air agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair inní agus le comhairle a chur ar an mBord.



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