

Towards a Resource Efficient Ireland

Ireland's National Waste Prevention Programme Annual Report for 2016



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.

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Ireland's National Waste Prevention Programme

Annual Report for 2016



**Roinn Cumarsáide, Gníomhaithe
ar son na hAeráide & Comhshaoil**
Department of Communications,
Climate Action & Environment



Acknowledgements

The EPA acknowledges the following for their support in the ongoing development and implementation of the National Waste Prevention Programme in 2016:

- Denis Naughten, TD, Minister for Communications, Climate Action & Environment for providing finance from the Environment Fund and for ongoing support. Also the advice and guidance of his Department staff, particularly Bernie Kiely & Jean Clarke;
- The National Waste Prevention Committee who have provided their time and collective knowledge to the programme;
- The Board and staff of the EPA, in particular the Resource Efficiency Unit: Shane Colgan, Jane Brogan, Odile Le Bolloch, Keiron Phillips & Abigail Murphy;
- The many local authority staff who have contributed significantly to the development of the programme;
- The consultants and partners who work with the EPA to progress many of the projects, in particular the Clean Technology Centre at Cork Institute of Technology.

Cover photos: Dun Laoghaire People's Park market; Circular Economy Workshop; Upcycle Challenge Winner; Farm Hazardous Waste Collections.

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Foreword

In the foreword to the sixth State of the Environment report published by EPA in 2016, the Director General, Laura Burke, stated: *'We must now, with a greater sense of urgency, make the transition from a society and economy dependent on fossil fuels and wasteful consumption of natural resources to one that uses renewable clean energy and one that takes much greater care of our precious and non-renewable natural resources. Transformational change is urgently needed across our entire economy and society, change that will affect how we work, how we live, travel, heat our homes, produce our food and use our purchasing power as consumers and citizens.'* Limited only by scale, the National Waste Prevention Programme (NWPP) is playing an important enabling role in that necessary transformational change by supporting businesses, households and the public sector to be more resource efficient.

There are many challenges confronting us. In a world of finite resources and a growing population it has never been more important to evolve our national economy and society to become sustainably competitive. This requires us to become efficient in how we produce and consume, moving our material flow economy from a linear to a circular one in which materials are captured for reuse at the end of a product's productive life. In support of this, the NWPP will need to continue to be innovative and respond to emerging policy challenges.

One such challenge relates to food wastage where one of the UN Sustainable Development Goals is to 'halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains by 2030'. In Ireland, it is estimated that one million tonnes of food waste is generated per annum, and that food waste costs each householder €700 per year. The NWPP's Stop Food Waste campaign has been at the forefront of food waste prevention since 2009 and has been promoting behavioural change through provision of information, training, local champions and peer example. Two further welcome initiatives in this area are: 1) the recent launch of Ireland's Food Waste Charter by Minister for Communications, Climate Action & Environment, Denis Naughten, and EPA Director General, Laura Burke; and 2) the establishment by the Minister of a Food Waste Action Group in the retail sector.

This is just one example of the innovative work of the NWPP and there are many other creative initiatives across the business, home, community and public sectors where NWPP is supporting the development of the low-carbon economy in Ireland.

To conclude, I would like to thank the members of the National Waste Prevention Committee who give freely of their time and energy in providing oversight of the development and implementation of the NWPP as well as my dedicated staff at EPA and our project partners without whom we would not achieve so much.



Dr Tom Ryan
Chair, National Waste Prevention Committee

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Department of Communications,
Climate Action & Environment

NWPP Highlights 2016



BUSINESS

GreenBusiness.ie

€1.2 million savings identified in **42** businesses

199 delegates at **6** workshops

New on-line tool for SMEs to measure resource efficiency and identify actions

SMILE Resource Exchange

75 successful synergies
12,000 tonnes of material diverted from landfill

€2 million cost savings to businesses
Pakman Waste Prevention Business Award Winner

Smart Farming

Over 1,000 farmers shared learnings from **52** on-farm resource efficiency assessments since 2014

More than **€5,000 cost savings** identified on average per farm
Carbon Accounting Tool piloted

Green Enterprise

Over **€3 million funding** to **63** Green Enterprise projects since 2012 to develop innovative & sustainable solutions for businesses and communities

HOME & COMMUNITY

Stop Food Waste

400 householders trained to take action on food waste

10,000 social media followers

60,000 annual website hits

20,000 prevention tools distributed

Community Reuse Network Ireland

16 members, diverted **47,000 tonnes** of materials to both reuse and recycling
Publication of a Policy Paper on 'Making Reuse & Recycling Happen'
Hosted the National Reuse & Recycling Conference

FreeTrade Ireland

13,098 items exchanged

460,000 website hits

129 tonnes waste diverted

100 entries to the first Upcycle Challenge Competition

Live Green

New website launched for householders with tips for sustainable living

11,236 LiveGreen website hits

Fast-growing community of Facebook & Twitter followers

PUBLIC SECTOR

Green Healthcare

Water Benchmarking programme for healthcare facilities

4 case studies on water conservation

Guidance on reclaiming water from reverse osmosis systems

Local Authority Prevention Network

23 local authorities received grant aid of **€280,000** for sustainability and waste prevention projects

Focus areas included: Fostering a Repair Culture, Greening Festivals, Promoting Reuse and Raising Awareness of Household Hazardous Waste

OTHER NWPP AREAS

Farm Hazardous Waste

10 collection centres in 2016

Since 2013, **800 tonnes** of hazardous farm waste brought by **7,000 farmers** to **36** collection centres - including...
61t of pesticides; 40t of veterinary medicines; 359t of waste oil; 43t of paints; and 226t of WEEE & batteries

Waste Statistics

Ireland **met all statutory waste targets**; however, some areas are at risk for future targets

Commenced national municipal waste characterisation study to support measuring progress on EU waste and recycling targets

Published **five waste data releases**

Sustainable Communities

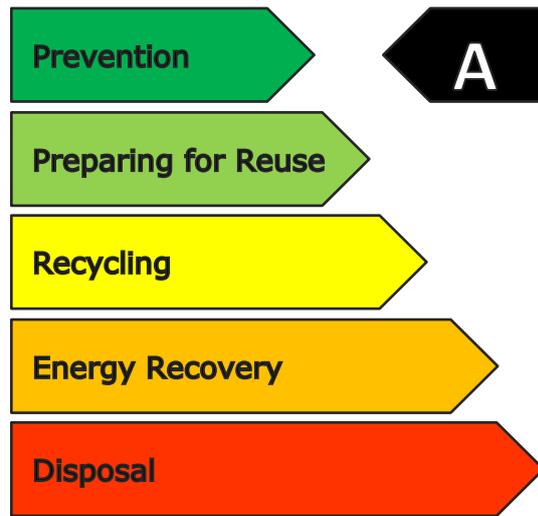
New Guides published for community and voluntary groups, in association with The Wheel:

Handbook on sources of funding from government and other organisations

Resource book on governance and working effectively as an organisation

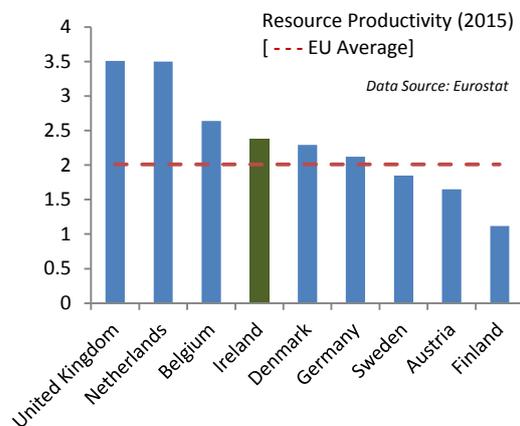
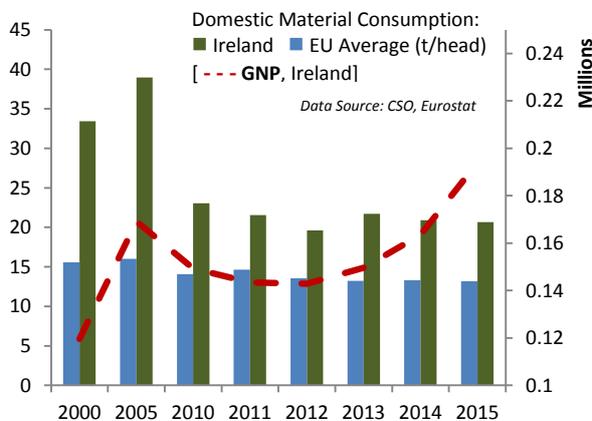
1. Introduction

Irish and EU waste policy is guided by the waste hierarchy, which accords the highest priority to Waste Prevention followed by Preparing for reuse; recycling; and energy recovery; with disposal being the least desirable option. Since 2013, EU Member States have been required to have a national waste prevention programme (NWPP) in place to provide leadership on decoupling economic growth from the environmental impacts of waste generation. Ireland’s well-established NWPP has operated since 2004 and is seen as an exemplar programme. The current cycle of Ireland’s NWPP is called *Towards a Resource Efficient Ireland* and it runs from 2014-2020. Over the course of 2016, activities continued in the National Waste Prevention Programme and these are described within this report.



By way of an overview on Ireland’s performance with regard to consumption and resource efficiency, data released by Eurostat and the Central Statistics Office during the year provides some insight. The data confirm recent positive trends for Ireland in terms of a generally stable trend on material consumption (as measured by Domestic Material Consumption (DMC)) in the context of a growing economy. Due to difficulties with using Gross Domestic Product (GDP) as a

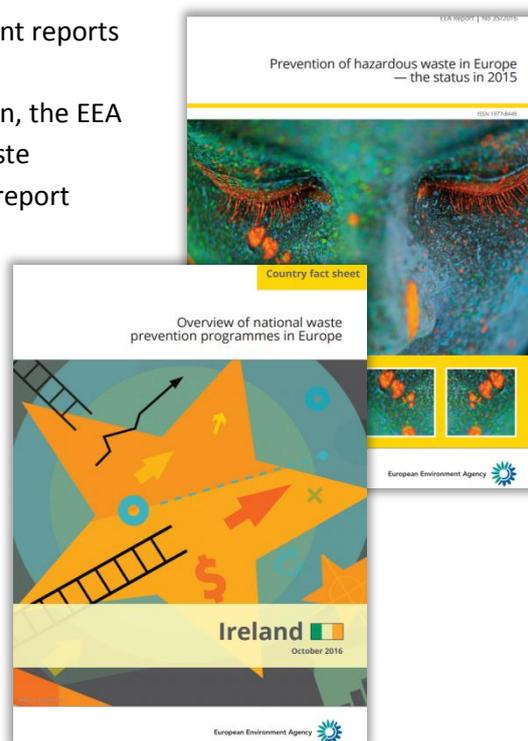
measure of activity in Ireland’s economy, the chart below presents DMC changes in recent years for Ireland, the EU, overlaid on Gross National Product (GNP) growth. The second chart presents a comparison of Ireland’s Resource Productivity performance versus an EU average and a selection of comparator countries. In this case, there are again encouraging signs as Ireland’s performance exceeds EU averages for the first time.



The European Environment Agency also issued relevant reports over the course of the year covering aspects of waste prevention. In a review of hazardous waste prevention, the EEA found that close to 4% of the 2.5 billion tonnes of waste generated in the EU-28 is classed as hazardous¹. The report examined waste prevention measures across EU member states and found that most of the measures in programmes are linked to production regulations, including bans on toxic materials. The prevention of hazardous waste was mostly covered by the national waste prevention programmes, although some countries, including Germany, preferred to deal with it separately.

In addition, the EEA published a series of country factsheets providing details of national activities on waste prevention². The factsheet for Ireland gives a useful synopsis of the nature and scale of the NWPP. The content material and data for this factsheet was provided by EPA during 2016. The factsheets and the hazardous waste reports represent part of an ongoing series of reviews of Europe's waste prevention programmes which also includes overview reports published for 2013 and 2014.

Another major development in 2016 of strong relevance to the work of the NWPP was the publication in January of the UN Sustainable Development Goals (SDGs). Adopted unanimously by 193 Heads of State the 17 SDGs and the 169 related targets are intended to guide actions in all nations across economic, social and environmental areas. Of particular relevance to the NWPP is Goal 12 and its associated targets, which are shown below:



SDG 12: Responsible Consumption & Production

- | |
|---|
| 12.1: Implement the 10-year framework of programmes on sustainable consumption and production |
| 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 |
| 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle |

¹ <https://www.eea.europa.eu/publications/waste-prevention-in-europe>

² <https://www.eea.europa.eu/themes/waste/waste-prevention/countries/>

12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities
12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
12.A: Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
12.B: Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
12.C: Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions

As in previous years, the intention of this report is to provide an update on the progress on Ireland's NWPP, '*Towards a Resource Efficient Ireland*'³. The overarching objective of the Programme is to implement EU and national policy on resource efficiency to break the link between economic growth and environmental impact. The specific objectives are to:

- Reduce wasteful consumption of material, water and energy resources by changing behaviours in businesses, households and the public sector;
- Enhance competitiveness and reduce business costs by delivering programmes that stimulate resource efficiency and the circular economy;
- Support sustainable growth and employment in the green economy - including re-use enterprises;
- Minimise generation of hazardous wastes through efficient practices and use of safer alternatives;
- Manage hazardous substances in products through efficient regulation;
- Inform and influence evidence-based decision-making by compiling and publishing high quality data on waste.



³ <https://www.epa.ie/pubs/reports/waste/prevention/TowardsAResourceEfficientIreland.pdf>

1.1 The Circular Economy

The ongoing development of the 'Circular Economy' as a priority area was a dominant factor throughout the year, which also saw an increasing focus on preventing food waste. The circular economy concept is intended to reduce the loss of value to economies and communities that can arise through the rapid transition of resources to waste typically following a single, short use-phase. By preventing waste; reusing products already in circulation; and recycling materials into new products, a circular economy can stem the leakage of resources from the economy and reduce demand for virgin raw materials. Particular focus is warranted on materials with high environmental burden associated with their extraction; and those with acute rarity (the so-called Critical Raw Materials). In economic and social terms, it is expected that the circular economy will create jobs across Europe – especially in repair, maintenance and service industries; providing improved prosperity and economic resilience. The diagram (right) from the European Environment Agency illustrates the key points of the circular economy.

The European Commission's circular economy initiative is based around an action plan of measures to promote and support the circularity; and an associated set of legislative proposals to drive behavioural and technological changes. Over the course of 2016, a number of measures have been initiated and/or progressed to support the circular economy, as reported by the European Commission⁴.

Overall, Ireland supports the circular economy initiatives being led by the Commission and recognises that the proposed actions will contribute to "closing the loop" of product lifecycles. It is clear that although certain elements of the waste legislative package may prove challenging, it represents a valuable opportunity to build a sustainable economy.

From a government point of view, implementation of the circular economy requires a response across policy areas beyond 'Environment' - including Enterprise, Community Development and Social Protection. The engagement and collaboration of relevant public bodies, including local and regional authorities, will also be critical.

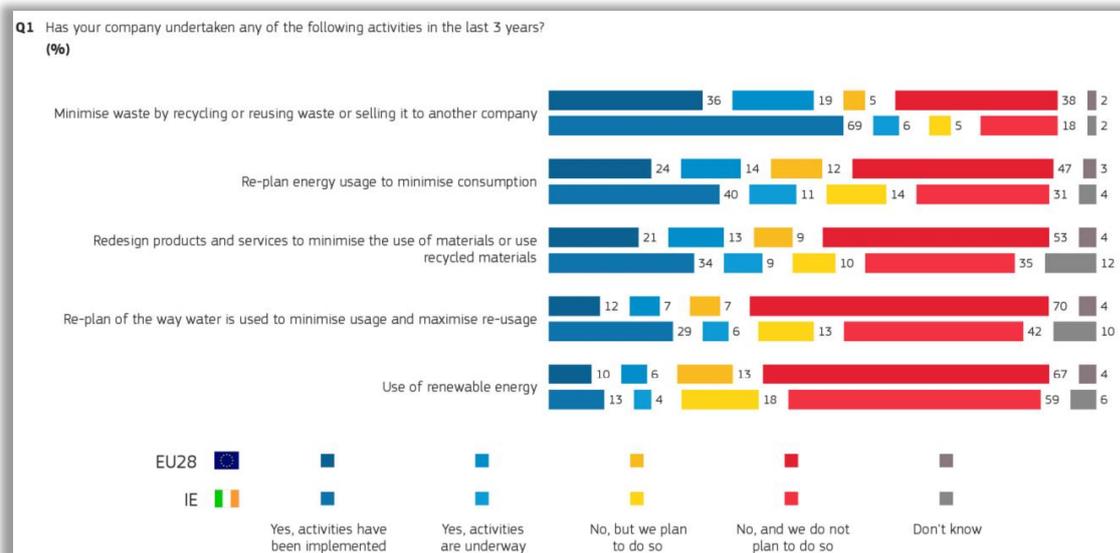
During the year, the European Commission conducted a Eurobarometer flash survey to explore SMEs activities in relation to the circular economy, including issues regarding financing activities in this area⁵. In terms of barriers to taking action on the circular economy, those identified (across Europe) were: a lack of clear ideas about costs and benefits or improved work processes (27%); a lack of clear



⁴ http://ec.europa.eu/environment/circular-economy/implementation_report.pdf

⁵ http://data.europa.eu/euodp/en/data/dataset/S2110_441_ENG

ideas about the investment required (27%); or a lack of expertise to implement activities (26%). For Ireland, the survey found that 89% of the 400 companies contacted reported that they had undertaken some activity related to the circular economy in the last 3 years. The chart below is an extract from the factsheet for Ireland and provides some further detail on the type of activities undertaken.

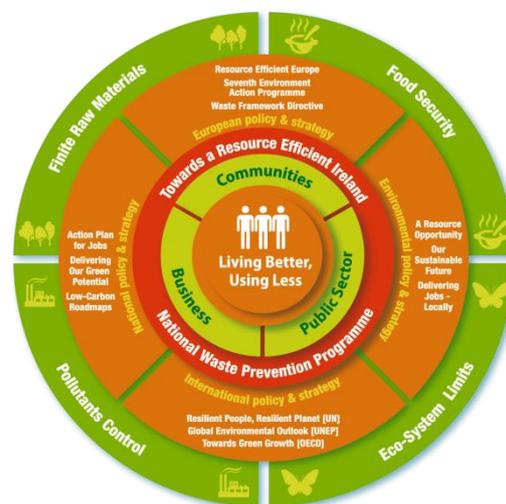


1.2 NWPP Report

This report provides details of the achievements and activities underway through the support of the NWPP. The approach of the programme is to work in partnership with other bodies to deliver effective solutions and interventions. These working relationships include informal collaborations; grants and sponsorship awards and contracted service deliveries, as described in the report.

The report is structured around three major chapters covering the three delivery pillars of the NWPP: *Business*; *Homes & Communities*; and the *Public Sector*, with the cross-cutting actions on *Waste Statistics* and *Hazardous Waste Management* reported in following chapters.

The report also includes information regarding waste prevention activities of other relevant organisations such as the Regional Waste Management Offices and REPAK.



2. Business

2.1 Green Business

The Green Business Programme has been managed by the Clean Technology Centre since June 2011 and during this time Green Business has visited 240 companies and identified more than €8.75 million potential cost savings for businesses. In 2016 Green Business visited a range of sectors including: food processing, retail, hospitality, finance/office and engineering sectors. €1.2 million worth of cost savings opportunities were identified in 42 companies. This includes €96,000 identified through a Green Retail Pilot programme in 12 retailers.

In 2016, Green Business identified 30% of the overall savings in the Finance/Office sector, 18% in the Services sector and 18% in the Retail Sector. The total number of employees in the businesses visited by Green Business in 2016 was 6,580. The potential savings identified per employee was €179/employee.

	SECTOR	EMPLOYEES	POTENTIAL SAVINGS	SAVINGS/EMPLOYEE
	Finance/Office	4,671	€286,497	€61
	Services	137	€116,203	€848
	Hospitality/ Tourism	317	€123,509	€390
	Retail	400	€174,366	€436
	Manufacturing	725	€322,355	€445
	Shipping	30	€56,650	€1,888
	Healthcare	160	€55,000	€344
	Fish/Food	110	€25,000	€227
	Energy	30	€20,000	€667
	TOTAL	6,580	€1,179,580	€179

Green Business Clusters

In 2016, Green Business has successfully promoted Resource Efficiency to a number of business clusters. These clusters included:

A) The Green Retail Pilot Programme

Green Business and Sustainable Energy Authority of Ireland (SEAI) rolled the “*Green Retail Pilot Programme*” for small retailers with the support of Convenience Stores & Newsagents Association (CSNA) and Small Firms Association (SFA). (This programme was initiated by a working group on energy management for SMEs established by the Department of Jobs, Enterprise, and Innovation (DJEI) in 2016). 12 retail businesses attended a half day resource efficiency workshop and received a Resource Efficiency Assessment (REA) by assessors from Green Business and SEAI. The total savings opportunities identified for the 12 stores was €96,000 or an average of €8,000 per store.



B) The Green Fleadh Business Programme

In 2016, Green Business assisted the Ennis Fleadh Cheoil to establish a Green Fleadh Business Programme. This programme promoted resource efficiency to a wide range of businesses in Ennis involved in hospitality and retail. 4 businesses received an REA, including 2 hotels, a bakery and a restaurant. Over 40 businesses have signed up to the Green Fleadh Business Programme which continues into 2017.

Guidance Documents and Tools

In 2016, Green Business produced a number of new guides and tools. These include:

A) Tool for REsource Efficiency (TREE)

This new online tool⁶ was officially launched by An Taoiseach Enda Kenny and Mr. Gerard O’Leary from the EPA. This online tool allows businesses of all sizes to obtain a Resource Efficiency (RE) Score and receive a RE Action Plan tailored for their business.

An Taoiseach suggested that “All SMEs should avail of this service and capitalize on the ‘Green Agenda’ which is crucial for the sustainability of business and our economy.”



⁶ <http://greenbusiness.ie/sme-efficiency-and-cost-reduction-questionnaire/>

B) Case study book

A **Green Business Case Study** Book was produced in 2016. The book includes 17 Green Business case studies. This is also available online⁷.

C) Green Business Office Guides

The average office employee produces 2 tonnes of CO₂; uses 12,500 litres of water; and produces 250 kg of waste every year. Over a million employees have an office space in Ireland. So our collective environmental impact is huge. Green Business is encouraging changes towards more sustainable office workplaces by providing businesses and employees with a suite of Green Office Guides. These include (a) Green Office information booklet; (b) A handbook with 60 actions towards greener offices designed for management; and (c) a 'Green Your Office' wall chart with 50 Top Tips for Staff⁸.



D) Videos and Animations

Green Business compiled four Videos and an animation which were uploaded to the website home page⁹. In the four videos, managers from Glenillen; ABP; RTÉ; and The Square Town Centre describe their experience with Green Business and the benefits realised.

E) Green Business Seminars

In 2016, Green Business hosted a total of 6 Green Business Seminars, which were attended by a total of 199 delegates. The seminars took place in Limerick, Dublin, Wexford, Tipperary, Galway and Donegal. This seminar series was entitled 'Sustainable Business in a Changing World' with a theme that sustaining businesses is a challenge in a world which is changing quickly in terms of climate change, limited resources and the expectations of governments and customers for businesses to be sustainable. All delegates who attended the Green Business seminars were asked to fill in an evaluation forms. Of the delegates who completed the evaluation forms 96% indicated that their overall assessment of the seminar was either of 'good' or 'excellent' quality.

⁷ <http://greenbusiness.ie/case-study/green-business-resource-efficiency-case-studies-book/>

⁸ <http://greenbusiness.ie/wp-content/uploads/2017/03/Office-Guide-Tips-Poster-Large.pdf>

⁹ <http://greenbusiness.ie/>

2.2 The Role of Green Business in Ibec

The role of the Green Business executive in Ibec is to promote resource efficiency to the member companies of both Ibec and the SFA. 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.

Ibec is connected to all Green Business operations with the following three key activities undertaken in 2016; the development of a resource efficiency tool aimed at small and micro companies; organising morning seminars for members and organising the Ibec Environment Awards.

Online tool for SMEs

As outlined above, Green Business has developed TREE, an online tool developed to help businesses review and implement best practice Resource Efficiency (RE). During 2016, pilot and testing phases were conducted by Ibec member companies. The pilot survey was sent to the Environment Policy Committee member companies and approximately 50 completed the survey, providing feedback on a range of aspects of the tool such as the user experience; the sectors shown on the registration page; the specific questions asked; and the information contained in the action plan report. Member companies of the SFA national council were also asked to pilot the survey (13 member companies) along with previous winners of the sustainable energy category of the SFA Awards. Very practical feedback and recommendations were received and amendments were made to the tool following the pilot phase. Green Business launched the free online resource in October 2016.



Energy Efficiency event

In February, Ibec hosted a free energy efficiency investment event for members. This event was organised jointly by the Green Business executive and the Ibec energy policy senior executive. The theme for the event was *'Energy efficiency investment - are you missing out on the chance to cut energy use and save money?'*

The half day event investigated the key drivers that lead people to invest/not to invest and how to choose the right technology for your business. The event was aimed at the key decision-makers of a business; business managers, accountants, financial controllers, production managers as well as those interested in reducing their energy bills. The event was aimed at (but not limited to) companies with an annual energy spend ranging from €33,000 - €500,000.

The morning event was well attended with 62 delegates participating. The morning finished with a panel discussion with five companies (Dublin Airport Authority (DAA), Aurivo Dairy Ingredients,

Castlecool Ltd., Masonite and Kerrigan Mushrooms) detailing how and why they have invested in energy efficiency projects.

Green Hospitality/ Ibec Networks event

In April, Ibec Networks sector hosted a free energy efficiency workshop for their hotel members. This event was organised jointly by EPA and the Ibec networks executive. The free morning workshop was run in conjunction with the Green Hospitality programme and Maurice Bergin presented the three hour workshop.

The theme of the workshop was '*Reducing energy consumption provides obvious environmental benefits, but also makes good business sense*'. The event was aimed at the SME hospitality and accommodation sector, e.g. smaller hotels and nursing homes. The workshop focused on three main areas: 1) procurement and how to get the best rates from your energy provider; 2) monitoring, metering and setting targets for the energy you use on site; and 3) good practise energy efficiency examples. It was attended by 22 SME companies and feedback from attendees was very positive.

Ibec Environment Awards

The Ibec Environment Awards¹⁰ recognise Irish companies that combine innovation, financial savings and environmental concerns.



GlaxoSmithKline, a pharmaceutical company based in Dungarvan, Co. Waterford employing 750 people, won the overall environmental excellence award for the 2015/2016 edition. GSK Dungarvan was chosen as the winner based on their organisation wide involvement, embedded process improvement and robust metrics. In addition to the overall award, three category award winners were announced.

<i>Process Award winner</i>	<i>GlaxoSmithKline Dungarvan</i>
<i>Environmental Management Award winner</i>	<i>Intel</i>
<i>Product and Services Award winner</i>	<i>Kilkenny Cooling Systems</i>

The awards are held every two years with the winners and runners-up moving forward to represent Ireland at the EU level of the awards. As national coordinator of the Irish nominees, Ibec ensures that the Irish entrants are of excellent quality and give a true representation of large, medium and small companies. The companies representing Ireland showcase resource efficient activities that are undertaken by Irish businesses to a pan European audience.

¹⁰ <http://www.ibec.ie/0/environment-awards>

Case Studies of Ibec Members Practicing Resource Efficiency



One of the largest waste streams at Abbott's diagnostics manufacturing facility in Sligo is high density polyethylene plastic (HDPE) packaging. The waste comprised mostly of empty unclean containers that previously held liquids. On review of the waste stream, the company installed equipment to granulate, wash and dry the waste HDPE plastic. This process has transformed a contaminated waste stream into a non-hazardous recyclable material and also reduced the need for storage space of empty packaging. The equipment has processed and diverted on average over 23,000 tonnes of HDPE yearly between 2014 and 2016 and has reduced waste costs by €50,000 annually.

Baxter Baxter Healthcare in Castlebar, Co. Mayo is a global provider of life saving IV therapy products. As part of the *Viaflo* Carbon Footprint Reduction programme, the manufacturing process was streamlined to reduce energy and water consumption resulting in a reduction of 540 tonnes of carbon emissions every year. In parallel, the IV products were also redesigned to reduce wood consumption by 53 tonnes, save between 12% and 25% on packaging, reduce transportation frequency, reduce energy consumption and deliver a further 141 tonnes of carbon emissions every year. The project has contributed to savings of over €650k, which is being used to fund other sustainable programmes within the organisation.

2.3 SMILE Resource Exchange

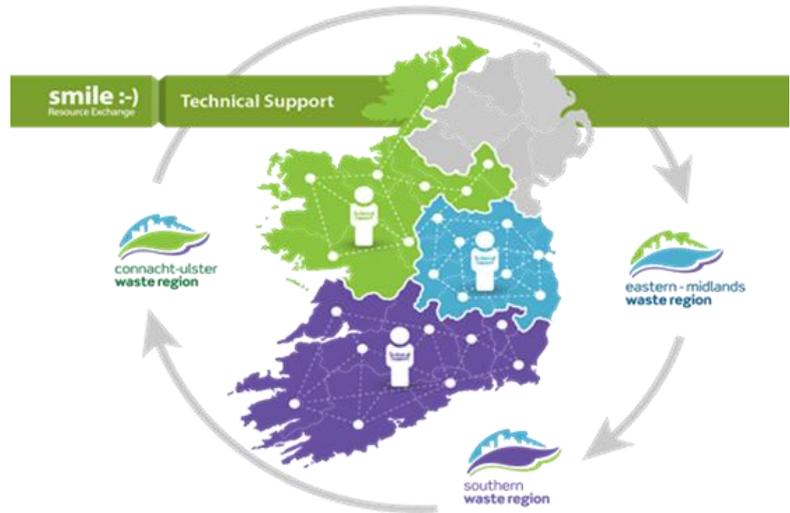
SMILE Resource Exchange is Ireland's national industrial symbiosis programme providing a free platform for businesses to connect and identify 'synergies' - where a waste in one business can be a resource in another. Potential synergies are identified through an online exchange platform (www.smileexchange.ie) or through facilitated technical support. The SMILE programme has been assisting businesses since 2010 with preventing waste, increasing reuse and closing the loop to ensure a move towards a circular economy.

The SMILE programme is managed by Macroom E and in 2016 was primarily funded by the Environmental Protection Agency, with support also from Local Enterprise Office, South Cork, Cork County Council, the Southern Region Waste Management Office, and the Eastern-Midlands Region Waste Management Office. The SMILE Resource Exchange approach has developed over the years and is now delivered through a website and technically assisted programme. Today, the continued provision of the SMILE Technical Support Consultants forms a core element of the programme. SMILE is now focused on identifying larger synergies with the aid of the technical consultants, while promoting smaller synergies through the website.

- ✓ **75 successful synergies in 2016.**
- ✓ **Cost savings of €1,964,700.**
- ✓ **11,741 tonnes of material diverted for reuse & recycling**

SYNERGY DEVELOPMENT – Technical Support & Website

In 2016, SMILE directly supported 281 potential synergies and of these, 75 were recorded as being successful synergies. This equates to approximately 11,741 tonnes of material actually diverted from landfill, diverted to recovery/recycling or diverted from recycling/recovery to reuse or remanufacturing. The 75 synergies combined represent costs saving for businesses of approximately €1,964,700. It is more complex to ascertain the revenue generated by members from products produced out of the resources received. Of the 281 synergies identified 137 are still being followed up with and the remainder have been recorded as either being unsuccessful or as an unknown outcome, due to the companies involved not advising the SMILE team of the status of a synergy.



Technical Support – SMILE Technical Support Consultants continued to identify and support synergies in 2016, with 140 potential synergies identified and of these, **63** were successful.

Website & SMILE Team – 141 potential synergies were identified through the SMILE website or phone calls in 2016. It is difficult to ascertain how many of these have been successful; however at least 12 case studies have been created.

In total, to date SMILE has directly supported 1,559 synergies, 850 have been recorded through the SMILE website and 709 were identified by the SMILE team and through the external Technical Support Consultants. Of these, 374 have been recorded as definitely successful: 192 through the SMILE team, and 182 through the assistance of the Technical Support Consultants. To date, the successful synergies represent 22,172 tonnes of waste diverted from landfill, with cost savings to businesses valued at approximately €4,439,021.

Examples of Synergies 2016

LABEL LINER: Over 40 tonnes of label liner diverted from landfill by establishing an international path to closed-loop recycling between Ireland and Austria.

- Over €3,000 saved by Irish companies on landfill gate fees so far.
- Closed-loop recycling enables ongoing future remanufacturing of label liners from this waste stream.
- Potentially 2,000 tonnes per year may be diverted to recycling in future.

POWDER PAINT: Surplus powder paint from global manufacturing operation being reused by local paint company.

- €5,760 saved on annual disposal charges.
- 32 tonnes of powder paint diverted from landfill on an annual basis.
- The recipient company has a continuous supply of paint, and has saved approximately €4,400 on purchasing.

HOTEL FURNITURE: Following rebranding, furniture cleared from a hotel was diverted from landfill to direct reuse.

- The White Horse Hotel collected 186 items, representing 3.9 tonnes.
- Private Home Care collected 350 items for reuse, representing 7.6 tonnes.
- Over €2,000 was saved on disposal costs, and at least €6,000 was saved on the purchase of new furniture.
- Furniture from three more hotels will be re-used in 2017 through this synergy.

Networking & Communications

The SMILE team continued to further develop the programme by increasing the membership by 99 in 2016 through communication activities and by monitoring and maintaining the website.

The SMILE website www.smileexchange.ie acts as a platform for businesses to connect and explore potential synergies. Businesses can register for free and upload resources that they have to offer or resources that they are looking for and make enquiries on the resources posted. Following the introduction of the Technical Consultants, the website primarily supports smaller type synergies which the SMILE team continues to support. In the last 12 months there have been 8,630 unique visitors to the SMILE website, with 66% accounted for as new visitors. To date there has been 298,197 website hits.

SMILE continues to focus much effort on communications and awareness campaigns which generates positive PR and increases the SMILE profile. The following communication activities took place in 2016:

SMILE was announced as winner of the “Waste Prevention Business Award” at the Pakman Awards which are run by Repak. The awards seek to recognise excellence in environmental approaches within businesses and organisations. The awards were attended by over 400 representatives from leading businesses, organisations and community groups.



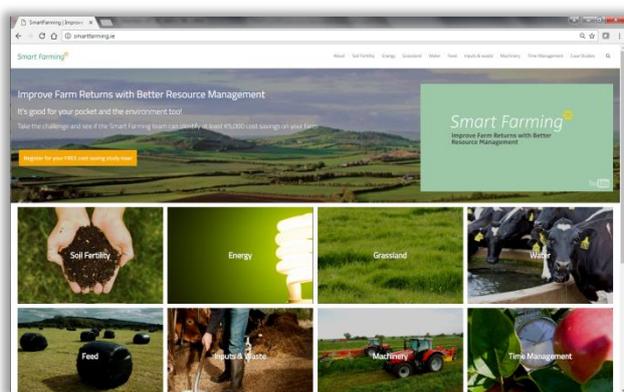
Two further video animations were produced in 2016. The first highlighted the role of the Technical Support Consultants¹¹ and the second showcased the story of Gannon Eco¹², a SMILE member, who has been involved in a number of successful synergies and who has also received support from the TSCs. Through cost-effective video advertising online on Twitter and Facebook, these videos reached a combined total 126, 212 people.

Newsletters and mailshots continue to be an effective way of communicating with our databases which currently holds 6,000 + subscribers across Ireland. 6 newsletters and 4 mailshots were distributed in 2016. These were also distributed via the SMILE Facebook and Twitter pages, which have over 2,000 combined followers. The website has also had over 300,000 hits to date, with two thirds of these representing new visitors.

2.4 Smart Farming

Smart Farming, the voluntary on-farm resource efficiency initiative that focuses on improving farm returns and enhancing the environment through better resource management, continues its national roll-out. The *Smart Farming* initiative is led by the Irish Farmers Association in conjunction with the EPA. It brings together the knowledge and expertise of Teagasc, UCD, SEAI, Clean Technology Centre, Farm Tractor and Machinery Trade Association, Fertiliser Association of Ireland, Grassland Association of Ireland, and the National Federation of Group Water Schemes and demonstrates the financial and environmental benefits of better resource management on farms.

During 2016, there was a strong emphasis on communicating the *Smart Farming* resource efficiency message across new and existing platforms. Website redevelopment was undertaken; the website (below) was refreshed, redesigned and made compatible across various communication platforms



such as desktops and mobile devices (see www.smartfarming.ie).

A concise 4 minute video was also developed and uploaded to YouTube¹³. This video outlines the background to the *Smart Farming* initiative, refers to the collaborating partners and sets out the steps involved in completing a resource efficiency cost saving assessment. Contributors to the video include farmers that have previously

participated in the initiative; Karina Pierce from University College Dublin; Jane Brogan from the EPA; Eileen O' Leary from the Clean Technology Centre; and Harold Kingston from the Irish Farmers' Association. As of February 2017, the Smart Farming video was viewed over 1,000 times.

¹¹ SMILE Technical Support Consultants Video: <https://www.youtube.com/watch?v=2oF62wTTy7E>

¹² SMILE Gannon Eco: <https://www.youtube.com/watch?v=SlulrBDCMfo>

¹³ Smart Farming initiative: https://www.youtube.com/watch?v=_aXWsgbvGo

In addition to the general *Smart Farming* video, separate and shorter videos were developed and uploaded onto YouTube for specific resource efficiency areas such as energy, grassland management, feed and soil fertility.

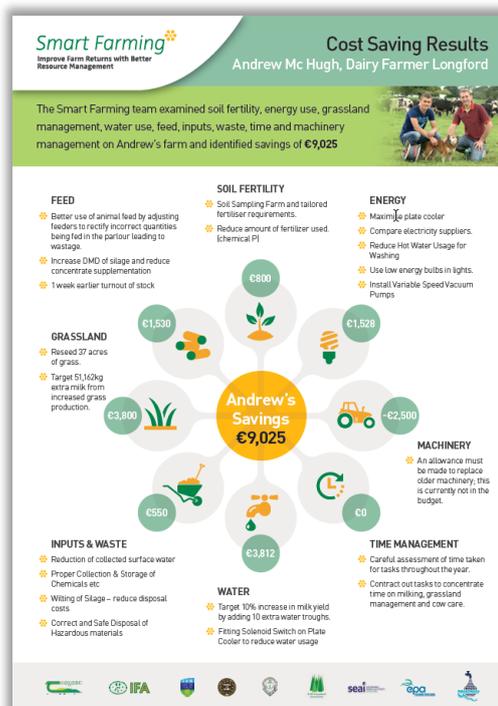
The emphasis on cost saving through better resource management continues. A number of case studies were uploaded onto the Smart Farming website (<http://smartfarming.ie/case-studies/andrew-mchugh/>), for example Andrew McHugh’s (below). The cost savings identified on Andrew’s farm by adopting the *Smart Farming* savings were over €9,000. Approximately 40% of these savings came from better nutrient and grassland management planning.

Capturing the environmental dividend was also a priority during 2016. *Smart Farming* is focused on having an enduring impact on the farmers who participate in the initiative. This is delivered based on the “ECO-nomics” concept, which emphasises the delivery of the double-dividend of improving farm returns while enhancing the environment.

Average cost savings identified for each of the participating farms are approximately €5,000 each year, by adopting the *Smart Farming* resource efficiency measures. In addition, 2016 saw an increased focus on capturing and recording the inherent environmental dividend. The farm carbon navigator, developed by Teagasc and Bord Bia, was piloted across a number of the Smart Farming participating farms. This carbon navigator is a decision support tool, which is used to help reduce greenhouse gas emissions from livestock production.

In 2017, the pilot phase of the use of the farm carbon navigator will be scaled up and applied to all 50 participating farms. In addition Teagasc’s newly developed on-line nutrient management planning tool will also be used on participating farms to deliver a useful colour coded farm map which will provide field by field advice on farm nutrient status, lime, slurry and fertiliser application requirements.

Many of the measures identified in the *Smart Farming* studies are symbiotic in terms of saving money and enhancing the environment such as prevention of nutrient loss to waters and climate mitigation actions. The table below shows an example of the results of a carbon assessment that was provided as part of a *Smart Farming* resource efficiency assessment for a suckler to beef operation.



Measure	Action	GHG Change
Grazing season - suckler cows	Turnout 2 weeks earlier and house 2 weeks later	-2.8%
Grazing season - yearlings/followers	Turnout 2 weeks earlier and house 1 week later	-1.6%
Age at first calving	On target of 24 months	0
Calving rate	Almost 20% of target	-13.3%
Live weight performance	On target – 1270 g/day of age	0
N efficiency	Surplus N feed	-2.0%
Slurry spreading timing	Increase % spring application by 10%	-0.6%
Total		-20.3%

2.5 Green Enterprise

The Green Enterprise Programme is designed to grant aid projects to develop sustainable products, services or to raise awareness. The project call sought project applications that were aligned with the Circular Economy Package which was re-launched in December 2015. The Programme still sought applications from the Construction and Demolition sector, particular emphasis was placed in Social Enterprise and marine litter in the project call.

A diverse range of organisations including companies, educational establishments, state bodies, charities and consultants were amongst the applicants, and this is reflected in the awards. A total of 24 qualifying applications were received, and 10 projects were funded. One of these projects (Zero Waste Cashel) was funded as a pilot for an EPA initiative on Sustainable Communities. With nine Green Enterprise projects being completed in 2015, there are currently 30 projects underway. The successful 2016 projects are listed below:

Applicant	Project Name
Irish Green Buildings Council	Environmental Product Declaration for Ireland
Carey Building Contractors	Cradle to Cradle Building Materials
University of Limerick	Green IT at UL
The Rediscovery Centre	Paint Re-Use Scheme
Central Solutions	EPA Lean Water Community of Practice Phase 3

Community Re-Use Network Ireland	Q-Mark for ReUse
Macroom E	Netmap
Re-Create	All Heads Together – (Heads –Up Phase 2)
Cyber-Colloids	A new look at Carrot Waste
VOICE	Zero Waste Cashel

Project Highlights

A number of projects completed in 2016 had interesting results or significant achievements.

“Heads-Up” (ReCreate) worked with Trinity College, Dublin, to investigate the effectiveness of learning outcomes through creative play, using re-used play materials. The results were extremely encouraging, and are outlined in a beautifully presented Final Report booklet¹⁴. This project will continue, in 2017 building on the results and lessons learned to develop accredited teaching resources.

“Inisbofin – A new type of tourism” (Eco-Tourism Ireland)¹⁵ aimed at getting a collection of tourism businesses on the island certified, and the island marketed as a low impact destination. This proved extremely successful and was covered in an episode of Eco-Eye.

Macroom E and University College Cork produced an extremely comprehensive on-line tool, “Evaluator”¹⁶ which helps organisations design and measure behavioural change projects. It is ideal for local authorities, community groups and companies to generate a framework for these types of project.

2.6 Other Green Business Initiatives

GreenSave Wexford

This is a partnership project involving Eco-merit, Wexford Local Enterprise Office, and Wexford Chamber of Commerce. In 2016, Wexford County Council also became an active project participant. GreenSave takes a similar approach as the Local Enterprise Office Mentoring Scheme, which supports



¹⁴ <http://recreate.ie/heads-up-project/>

¹⁵ <http://www.ecotourismireland.ie/inishbofin/>

¹⁶ <http://evaluator.ie/>

small businesses in specialist areas such as marketing, IT, trade-marking, amongst others. This project uses a similar approach, and provides the businesses with a three to six month environmental support programme consisting of the services outlined below:

- An on-site review visit to examine current environmental performance and to identify zero- and low-cost environmental improvements which will yield savings in energy, waste and water costs.
- A follow-up visit to discuss the findings and develop an implementation plan to achieve the desired results.
- Assistance with developing an environmental policy, if desired.
- A final review visit at the end of the plan to evaluate the results, measure the improvements, give additional help and guidance as needed, and assistance with EcoMerit certification (optional) if wanted.
- Assistance with SEAI grant applications, if applicable.

The aim is to build on the work already carried out in the county, and to move from 'single event' initiatives to more of a steady year-round approach. To date, the small businesses participating in the Greening Wexford Business project have identified average annual savings exceeding €3,000 each using the GreenSave programme.

One member, Wexford Enterprise Centre was able to use their Eco-Merit certification to gain SEAI funding to implement a significant energy efficiency project involving, insulation, solar panels, re-bulbing and double glazing. The centre will save approximately €15,000 per annum on its running costs. In 2016, the EPA grant-aided the Project to expand to neighbouring Kilkenny, using the same model, and it is hoped the same success will be achieved.

Boomerang Mattress Recycling

Boomerang is a social enterprise based in Cork, who recycle and re-use mattresses. The main aim of the project is to encourage the diversion of bulky goods from landfill and dispose of them in an environmentally friendly manner. Boomerang provides local employment for a project manager and for a minimum of six Tús-scheme workers. Boomerang also provides for the up-skilling and training of its employees, while researching means to re-use and recycle fabrics.

The project is a start-up managed by Cork Environment Forum and supported by the EPA, Cork City and County Councils, SMILE Resource Exchange, Cork City Partnership, the Health Action Zone and community members. Following on from a successful Green Enterprise Programme, the EPA awarded some further funding to extend their Green Enterprise project in 2016.

Mattresses are difficult to handle and take up considerable space in landfill. Each mattress takes up approximately 1m² of space with an equivalent value of €360. Boomerang disassemble mattresses into their basic components and try and find a use for them.

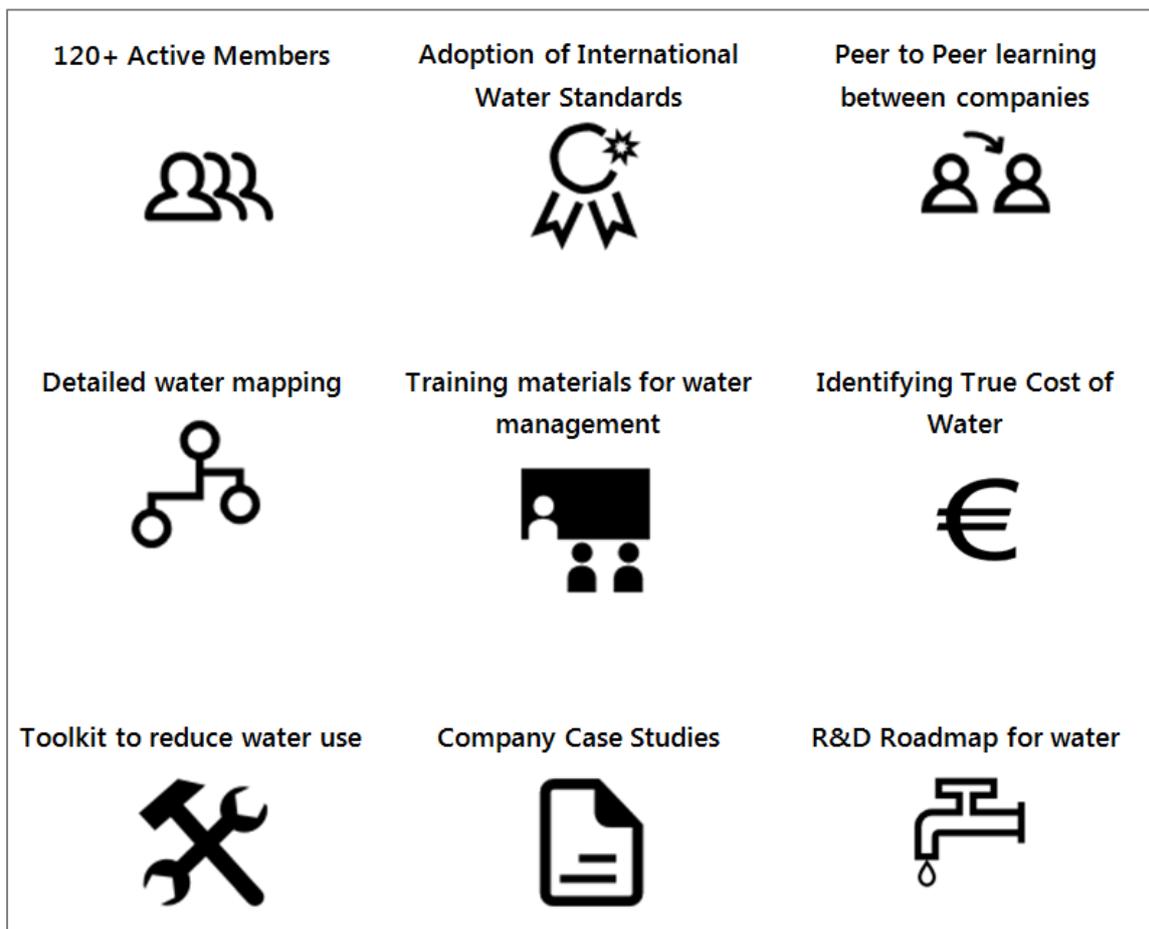
Whilst springs are readily sold for scrap, the mattress material is more difficult to find a use for. The simplest option is for it to go for Refuse Derived Fuel, however, this is a cost burden to the project. With this in mind, Boomerang has constantly sought to operate as high in the waste hierarchy as possible. Key achievements in 2016 included;

- 1) 8704 mattresses processed (an increase of 41% on 2015).
- 2) 14 placements at Boomerang went on to find full-time work.
- 3) With a partner, 436 mattresses have been recovered to a high quality and re-sold.
- 4) Trials carried out on the insulation properties of mattress material.
- 5) Research carried out with DIT on 14 different properties of mattress material.

Large Water Users Community of Practice

The Community of Practice for Large Water Users is comprised of over 120 of the largest production and service facilities across Ireland along with key national stakeholders and development agencies with a focus on addressing the challenges of sustainable water management at their sites.

The initiative was originally established in December 2013 with support from the EPA under the 2013 Green Enterprise Call.



The focus is large water users as a catalyst for change in terms of water management practices along the supply chain and the collaborative development of specialised management tools and Water Stewardship roadmaps.

The membership is drawn from the Food & Beverage, Pharmaceutical and other key sectors. The establishment and ongoing operation of the initiative is managed by Central Solutions, an Irish firm recognised internationally as a leader in the area of water stewardship programmes and tools for both public and private sector clients.

In 2016, under various project strands member firms identified €2.5 million in potential water and related resource efficiency savings across their sites and successfully delivered €1 million in verified savings in the first six months of the year. Over twenty five member firms completed Water Stewardship training and member firm ABP became the first beef processor in the world to achieve gold certification status under the EWS international water stewardship standard. Other projects undertaken in 2016 included: - mapping of water lifecycles at member sites, development of a Water Risk Model for the Pharmaceutical Sector with IRCSET support, Multi-site EWS Standard Development with Enterprise Ireland support and the rollout of a comprehensive range of Water training programmes under the linked LW&E Skillnet initiative.



Repak's Prevent and Save Programme helps Irish businesses to optimise their packaging systems and to reduce packaging waste. The programme contains a number of measures, with an emphasis on promoting best practice examples to a wider audience. Many Repak members including some major international companies continue to produce innovative and transferable methods in reducing and eliminating their packaging waste. This 'stop waste before it happens' approach is an integral part of how Irish industry now approaches packaging decisions—avoiding over-packaged, disposable, and non-reusable or non-recyclable products where possible.

Measures that have been taken as part of the initiative aim to reduce packaging waste and to ensure that packaging systems are optimised at all stages in the supply chain. The solutions are also designed to ensure that the products contained within the packaging systems are not compromised through reduced levels of packaging and an increase in returnable packaging.

Packaging audits, while accessible to all Repak members, are targeted at Repak's larger clients. This maximises the effectiveness of any changes or reductions in packaging that results from the surveys. Savings achieved can number in the thousands or even hundreds of thousands of Euro depending on the levels of control a producer has over their packaging levels.

2016 saw a renewed focus on Repak's Prevent and Save programme. Dedicated packaging technologists are now working exclusively on delivering the programme to Repak members and updating their media platforms with the latest best practice information available.

Current Tasks on the Programme

- Free onsite Packaging Surveys assist Repak members in looking at options to prevent packaging waste by optimising their packaging systems. Many Repak members availed of the packaging optimisation survey programme during 2016 from across the Fast-Moving Consumer Goods (FMCG), Retail and Hardware sectors. A technical helpdesk for packaging related queries has also been reintroduced to all Repak members.
- During 2016, Repak embarked on a programme to update and rebrand Prevent and Save publications. This included developing new look Prevent and Save programme media with information about the programme and relevant contacts.
- Work also commenced during 2016 on a Prevent and Save case study publication targeting packaging waste prevention within the hotel sector.
- An updated webpage has been dedicated to prevention measures on the Repak website and contains updated tips and publications on designing packaging in order to optimise packaging systems in order to prevent waste.
- 2016 also saw the beginning of a Prevent and Save education programme aimed at educating students about packaging and packaging waste. The first of a lecture series on this topic took place in conjunction with IT Sligo in November 2016.

2.7 NWPP Special Interest Groups

As part of the work of the National Waste Prevention Programme, on occasion, the EPA will seek to gather opinion, guidance or technical expertise on issues of particular interest. This is usually achieved by commissioning projects or studies, or setting up small Groups which include stakeholders who might have particular interest or knowledge on an issue.

Mattresses

The EPA has supported or funded a number of mattress re-cycling/re-use projects across the country. These are Eco-Mattress Recycling in Dublin, Boomerang in Cork and a new initiative getting underway in Galway. The establishment and growth of these projects identifies mattresses as 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 Department of Communications Climate Action and Environment (DCCA), 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. As a result, a report was commissioned from RPS Ltd. taking the form of a scoping document, looking at the size of the issue, and potential mechanisms to deal with end-of-life mattresses. This report is due in mid-

2017, when the working group will consider its recommendations and potential routes forward on this issue.

Industrial Symbiosis

The EPA is the main funder of Ireland's national industrial symbiosis project, SMILE Resource Exchange. However, it is recognised that it is important to take a strategic view of how industrial symbiosis should move into the future. The Industrial Symbiosis Working Group consists of representatives from SMILE, Ibec, Academia, Local Enterprise Offices, DCCAE, Regional Waste Offices and key 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 solving technical as well as legislative issues, and also provides opportunities for dissemination of case studies and best practice.

Open Practices

The transition towards Sustainable Development in Ireland demands behaviour change at individual, household, community, business and policy levels. Given the recent insights emerging from the behavioural sciences on the factors that drive human decision making, there has been a clear desire among governments around the world to apply these in policy making, public service design and regulation.

The first phase of Open Practices explored the potential for the EPA to apply behavioural insights when co-designing services and other non-regulatory interventions. While much of the work on behavioural science and behavioural economics is focussed on individual decision making, this research addressed what could be achieved with businesses and sustainable communities.

Business Behaviour Change

The research with businesses involved a series of interviews and site visits to businesses around Ireland that are involved in existing EPA programmes and services, workshops with national service providers.

Based on the findings from this research, a number of principles that can underpin the design of future interventions were proposed. These include, **removing frictions** or 'friction points' in service or bureaucratic procedures, **simplifying information**, exemplifying, leading through example, **public commitments**, designing interventions around **key moments of change** (regular reporting periods) or **increased salience** (e.g. following media coverage of climate change or flood events), **framing** resource efficiency as an investment rather than cost saving as the cost saving can be uncertain and low compared to overall cost base.

A summary briefing report is available online:

<http://www.openpractices.net/sustainable-behaviour/>

Sustainable Communities and Behaviour Change

The community related research involved a desk study on existing sustainable community initiatives, surveys of sustainable community practitioners as well as in-depth case studies of initiatives.

The research found that communities face a number of common challenges when undertaking sustainable initiatives. These include lack of **internal capacity** (skills, knowledge, finance), a lack of a **critical mass of committed individuals**, low **social capital, connectedness and influence**, lack of **specialist knowledge** around the practical or technical potential of ideas.

There are also a number of common success factors such as: A **common cause** (e.g. tackling rural decline), **collaboration & shared commitment** (getting things done), a **strategically focused hierarchy** (decision making, governance, finance), organising in a way that allows for **autonomy & creativity** and **quick wins which build confidence**, motivation and positive feeling within community.

Based on the case studies, interviews and workshops and insights from the behavioural sciences, a number of principles can underpin the design of future interventions with communities. These include, working with **intrinsic motivations** of individuals, creating connections and **building social capital**, supporting **reciprocation** and public **commitments** as well as **removing frictions**.

A summary briefing report is available online:

<http://www.openpractices.net/sustainable-communities/>

The next stage of the Open Practices project is focussed on implementation and will be working with EPA staff to design a new programme or intervention specifically addressing sustainable communities and community initiatives in Ireland.

3. Home & Community

3.1 Stop Food Waste

The Stop Food Waste programme is designed to promote food waste prevention across all sections of society and support those working on this issue in communities throughout Ireland. Since it started in 2009, Stop Food Waste has been active in every local authority in the country. It has



endeavoured to build capacity locally while promoting its messages nationally. Through this approach, Stop Food Waste has become a recognised brand, both nationally and internationally.

The branding for the Stop Food Waste programme was refreshed during 2016. As part of this process the logo has been updated and many of the existing materials are being amended accordingly. The new logo allows more flexibility in its use across the broad range of topics and media that Stop Food Waste is involved in.

The Stop Food Waste programme has a team of people around the country that work together to continually develop the programme as well as contacts and collaborations with local authorities and community groups. In 2016, the Stop Food Waste team continued to collaborate on community led local initiatives through working with local authorities, local development companies and directly with communities throughout the country. It also significantly enlarged its national presence through increased social media activity.

Stop Food Waste Challenges

The Stop Food Waste Challenge is a facilitator led, participant driven programme that introduces householders to all aspects of food waste prevention in the home. The programme involves four 1 hour meetings held over 4-6 weeks and employs a range of activities, tools and media to train and support participants. Since its development and trialling in 2014, the Stop Food Waste Challenge has continued to be promoted throughout the country. The majority of facilitators continue to be Environmental Awareness Officers and members of the Stop Food Waste team. In 2016, 13 Challenges were facilitated. This took the total number of households that have participated to over 1,000 with food waste reductions levels of between 25 – 50% typically measured. Based on average reductions of ~2kg per week this equates to annual food waste reductions of ~100 tonnes for those households involved to date.



Many of the groups that have been involved in the Challenge have continued to work on community food initiatives. One such example is the 2017 Stop Food Waste Community Calendar which was

developed by householders in Dun Laoghaire Rathdown in conjunction with DLR CC and with LAPN funding.

In addition to the existing facilitators, a number of other networks have been engaged, including Local Development Companies (LDCs), HSE Healthy Ireland, transition year teachers and third level institutes. As each of these groups has a slightly different focus, a number of Challenges are planned for 2017 with these groups. These targeted trials will be used to assess how best to run and promote the Challenge with different audiences nationally.



Social Media

Improving the social media presence of Stop Food Waste is a major focus of the new framework. The website currently averages over 200 hits a day with 83% of the traffic attributed to new users. This is a 50% increase in daily activity since 2015.

There has been a significant increase in social media activity in the past year. The number of Facebook followers has increased from 1,700 to over 5,200. Twitter followers have increased from 3,200 to over 4,300. These increases can be attributed to the development of a dedicated social media plan which provides a structured outline for the year in terms of social media campaigns and monthly messages. In addition, the team has been much more proactive in connecting with the different community groups and organisations that we work with through the social media platforms used. This has the benefit of increasing exposure of the programme to a much broader audience through availing of existing local and national networks.

Master Composter Programme

A core part of the Stop Food Waste community engagement model is based on the Master Composter Programme. Since the first programme in Frenchpark, Co. Roscommon in 2009, they have been hugely successful in terms of community engagement and follow-on projects and activities.

Three Master Composter Programmes were run in 2016 in Cork, Westmeath and Waterford. Over 70 volunteers were trained during these programmes on all aspects of home composting and food waste prevention. The outreach work associated with these programmes has continued with Master Composters assisting in local initiatives throughout the country (e.g. counties Carlow, Offaly, Laois, Wexford, Cork, Clare).

In addition to these full programmes, a number of shorter compost training programmes were run during 2016. These typically entailed 1-2 days of training with a mixture of theory and practical demonstration. These have been particularly effective in addressing the needs of smaller community groups that have specific issues they wish to address; for example, grass cycling, community composting and Tidy Towns initiatives.

Support to Local Authorities:

Local authorities are the main national partners of Stop Food Waste. The programme promotes and supports the work of local authorities on food waste prevention, providing advice and support as requested and collaborating on training initiatives. In addition, the Stop Food Waste team procures and produces materials for local authorities to use in local promotion and this year we ordered and distributed 20,000 portion measures (spaghetti and rice) and 10,000 fridge magnets. In 2016, local authorities were assisted in the following main areas:



- i. **Festivals and events** – promoting the Stop Food Waste message using the various materials and tools like food measures, as well as demonstration aids like the ‘bin it better’ game and the demonstration kitchen.
- ii. **Master Composter Training and follow up projects** – implementing local projects like community SFW Challenges, local composting schemes, and wormeries in collaboration with Green Schools.
- iii. **Local talks and seminars** – on all aspects of food waste prevention and composting and to different audiences.
- iv. **Community green waste prevention** – specific local projects like grass-cycling and local leaf mould programmes.

3.2 Community Reuse Network Ireland

The 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. The aims of the network are set out its current strategy as:



- Promotion of reuse
- Support for members
- Communication – internal and external
- Membership drive
- Policy input
- Research (including market research)
- Networking and Links (including European links)

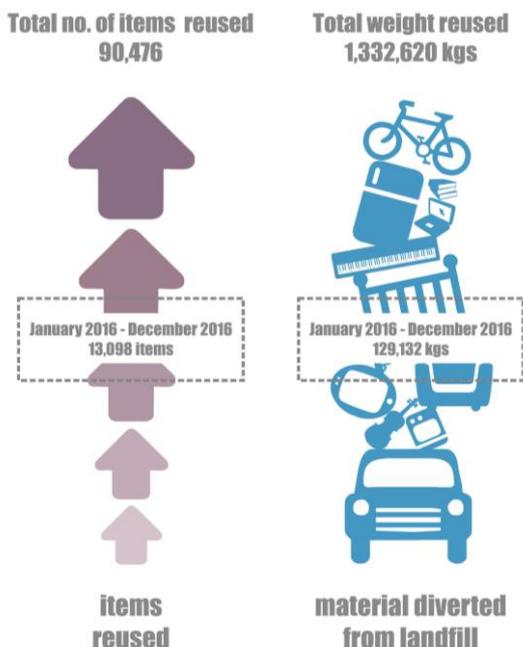
2016 was another important year in raising the organisation's profile at a national level. The promotion of reuse is a core function of the network and opportunities to present and/or exhibit were availed of at events such as Bloom in the Park, Electric Picnic, DJEI's CSR Forum and the National Waste Summit. Events such as these give CRNI the chance to deliver the message about reuse and recycling to different audience types.

The CRNI website was thoroughly revamped and updated to make it more attractive and user friendly; the regular publication of a members-only newsletter and a quarterly bulletin to subscribers all helped to raise the profile of the organisation.

The first Reuse Month, arranged by the three regional waste authorities, saw extensive cooperation and involvement by both CRNI and its members in events, such as upcycling workshops, fashion shows, library talks and radio interviews, nationwide.



In continuing to support its members and deliver value for their participation in the network, CRNI held four network meetings, one of which focused on how to access funding. 2016 saw visits made to all members nationwide by the newly-appointed co-ordinator and many CRNI members were award winners in various environmental and social competitions. The website was revamped during the year to better showcase individual members and their activities. Three new organisations joined the network but 2016 was a mixed year which also saw the departure of three other members; two member business ceased to trade or felt they could not afford membership, the other business is now being run by its founder from Australia.



3.3 FreeTrade Ireland

National & regional waste management policy takes a strategic approach to the managing of wastes by viewing waste streams as valuable material resources. This approach contributes to the development of a circular economy. FreeTrade Ireland is a service which facilitates reuse and has been identified as a leading case study of a resource efficient service which meets national and European waste policy objectives.

FreeTrade Ireland is an important tool in the delivery of Ireland’s resource efficiency objectives, given the large number of visits and great scope for growth, while also being able to quantify reuse and provide Environmental Performance Indicators for Ireland in

the race against waste. FreeTrade Ireland continues to offer homes, schools, communities and businesses a convenient outlet for the reuse of materials. It also serves as a potential route for charities to provide support to the vulnerable in society by the creation of a link whereby items offered for reuse can be directed to those in need.

As our need to reuse materials grows in order to realise the benefits to the environment, the economy and society, it is important that we embrace systems to manage our materials better so reuse options can develop. It is important that as the economy grows that Ireland breaks the link between economic growth and waste generation. FreeTrade Ireland enables its users to adopt and implement healthier and greener lifestyle choices.

In 2016, FreeTrade Ireland diverted 13,098 items, amounting to more than 129 tonnes of high quality materials away from landfill to users of the service. This means materials are being used for longer and the resource value is being maximised. The use of the service resulted in CO2 savings of approximately 1,162 tonnes and significant financial savings for users of the service. In excess of 113,000 items have been reused since the inception of FreeTrade Ireland, resulting in carbon savings in excess of 12,000 tonnes.

The membership base continued to grow in 2016 with 2,796 new members signing up to use the service. The overall number of members now using the service stands at over 57,700. The website remains a hub of activity with 458,100 visits to the website in 2016 from over 166,000 unique visitors.



In 2016, FreeTrade Ireland managed the ‘Upcycle Challenge’; a competition challenging people to take old, unwanted items and upcycle them to give them a new lease of life. The challenge ran from May to September with a total of 100 entries – almost 1 entry per day! The entries were judged on 5 criteria: level of reuse, functionality, innovation, sustainability and finish. The competition was a complete success and demonstrated that upcycling is not just a niche activity for the artistic but something that anyone can engage in.

A strategy document has been produced outlining how FreeTrade Ireland proposes to strengthen the links with charities and provide functionality to donate items directly to charity and how to deliver items to those in need.

FreeTrade Ireland was nominated for the Green Technology Award at the 2017 Green Awards in recognition of its positive contribution to the environment and its achievements in waste prevention and resource efficiency.

EPA CSR-Activities

During 2016, the EPA had an opportunity to “practice what it preaches” by donating end-of-life vehicles to social projects. The EPA operates a small fleet of vehicles, typically 4-wheel drive jeeps and a few small vans in support of air and water sampling operations, and site visit to areas such as landfill sites. As much of this type of work can be seasonal in nature, old vehicles can have relatively low mileage for their ages.



In this case, the EPA Dublin office in Clonskeagh had a Ford Transit and a Mercedes Vito, whilst the Wexford office had an Opel “Combi”, following their “retirement” from duty. The EPA undertook to get these vehicles roadworthy again and re-home them with charity partners the EPA were already working with through its “Green Enterprise” Programme.

The Transit went to Boomerang Enterprises, the Vito is with Recreate and the Combi has started duty with the Rediscovery Centre in Ballymun. Hopefully, these vehicles will provide years more of useful service in support of these worthy projects.

3.4 Live Green

In March 2016, the EPA launched the LiveGreen web resource for householders & families which provides tips, advice & guidance on a range of environmental & health matters. The launch included an EPA press release, an article on LiveGreen which issued in the EPA newsletter also an article issued through BellTIME magazine. The EPA commenced a public relations campaign to promote the LiveGreen web resource with the establishment of Facebook and Twitter accounts followed by a series of weekly posts/messages covering topics on living green using content from the LiveGreen webpage. In September, a Facebook competition was launched to increase the number of followers and to drive traffic to Livegreen.ie. The winning prize was an upcycled bicycle sourced through the Rediscovery Centre. The competition post reached over 56,100 people, over 2,500 entries and 688 new likes to the page. Currently LiveGreen has 1,198 Facebook followers and 216 Twitter followers.



Targeting parents and children during back to school time and in the run up to Christmas there were two media releases offering tips & advice on how to 'LiveGreen' as part of Back to School (Aug/Sept). The Back to School release received great coverage in the Captain Crunch column of The Irish Sun. The Captain Crunch column provided tips and advice on how to save money around going back to school. The back to school campaign release also ran online in Schooldays.ie and Rollercoaster.ie.

The back to school campaign received a very positive response. Avoiding Christmas Excess was the second media release which outlined environmentally-friendly gift ideas, such as home-made craft gifts, and encouraged readers to re-gift presents that they have no use for. Included in the article was five top tips on going green for Christmas such as teaching children about recycling batteries and getting kids involved in cooking leftovers from surplus Christmas food. This release got strong coverage in the Irish Examiner Feel Good Supplement.

Again focusing on young mothers a Mummy Pages online campaign was launched in (Dec 2016). This campaign ran over 4 days before Christmas focussed on living green and reducing waste over the festive period. The campaign included Top Recycling Tips for Christmas, articles covering Food Wastage (bargain hunt or bad habit) & Upcycling (trash or treasure). The MummyPages campaign resulted in 973,191 impressions across website ads, the MummyPages e-zine, and social media shout-outs. Key performance indicators for LiveGreen in 2016 are:

- Food wastage editorial – 17,889 unique users
- Upcycling editorial – 18,116 unique users
- Infographic Top Recycling Tips – 10,016 views

3.5 Sustainable Communities Handbooks

Starting late in 2015, EPA partnered with The Wheel to produce two handbooks to provide up to date advice on funding and governance for community-led groups throughout Ireland. The Wheel is a support and representative body connecting community and voluntary organisations and charities across Ireland.

The funding book provides details of sources of funding from government and other organisations and also provides guidance on how to maximise success in making funding applications. It also covers other fundraising activities that can be considered by community groups.

The governance guide takes the form of a workbook and provides templates for maintaining appropriate controls and for working effectively as an organisation. It is intended to enable organisations to comply with governance requirements from funders and from bodies such as the Charities Regulator.

The two handbooks were launched in October 2016 and have received a positive reception. Over 1,000 copies of each were distributed by The Wheel to appropriate contacts in community groups across the country, and they are also available to download¹⁷.



¹⁷ <http://www.wheel.ie/download-free-sustainable-communities-guidebooks>

4. Public Sector

4.1 Green Healthcare Programme

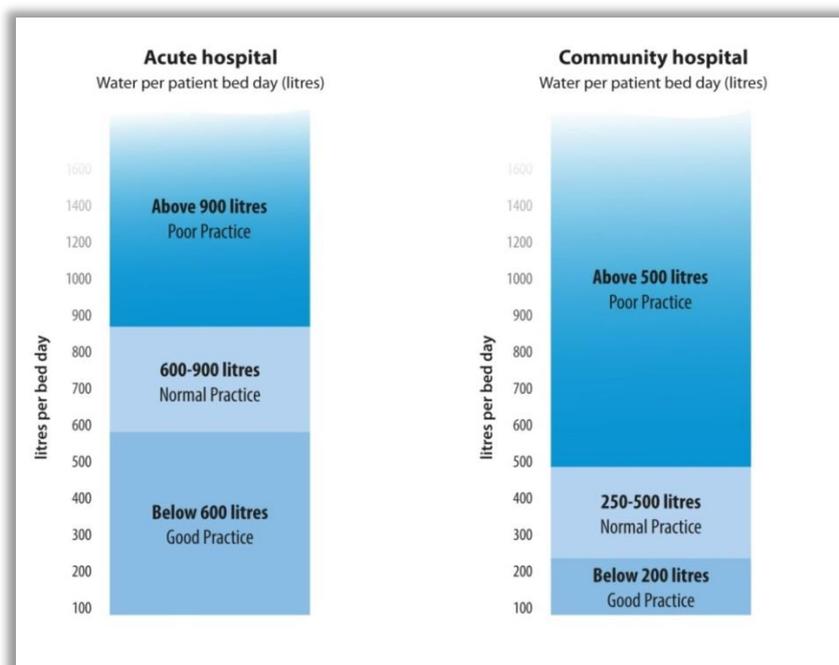
Water Conservation for the healthcare sector



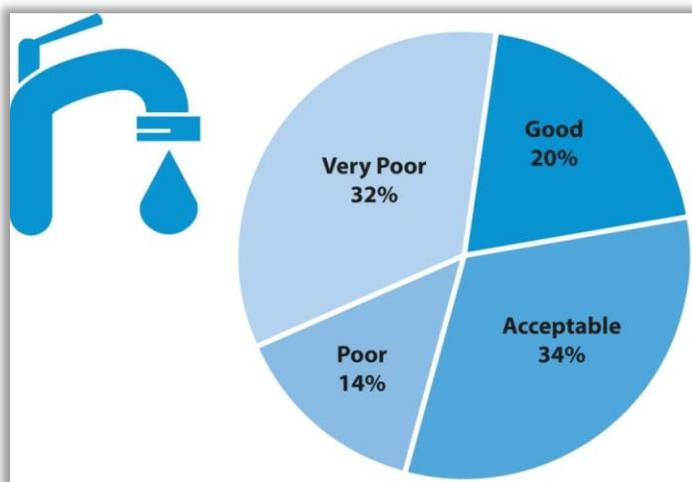
The Green Healthcare programme has produced **Best Practice guidelines** for efficient water use in the healthcare sector. This guide covers benchmarks for water use in both acute and community hospitals, leak detection, daily use profiles, surveying main users, as well as recommended best practice for fixtures and fittings. This guide has been developed through consultation with various individuals working towards efficient water use within the sector.

Continued benchmarking of hospital water use

Further benchmarking activities during 2016 added to the dataset for water use in Irish hospitals, both for acute and community hospitals. The figure below shows the normal and good practice for Irish hospitals in terms of water use per bed day. This is based on data for 30 acute and 70 community hospitals. We will continue to add to the dataset during 2017, as we obtain additional data from acute and community hospitals. A benchmarking fact sheet has also been prepared.



Water fixture surveys – potential for savings through low flow rate fixtures

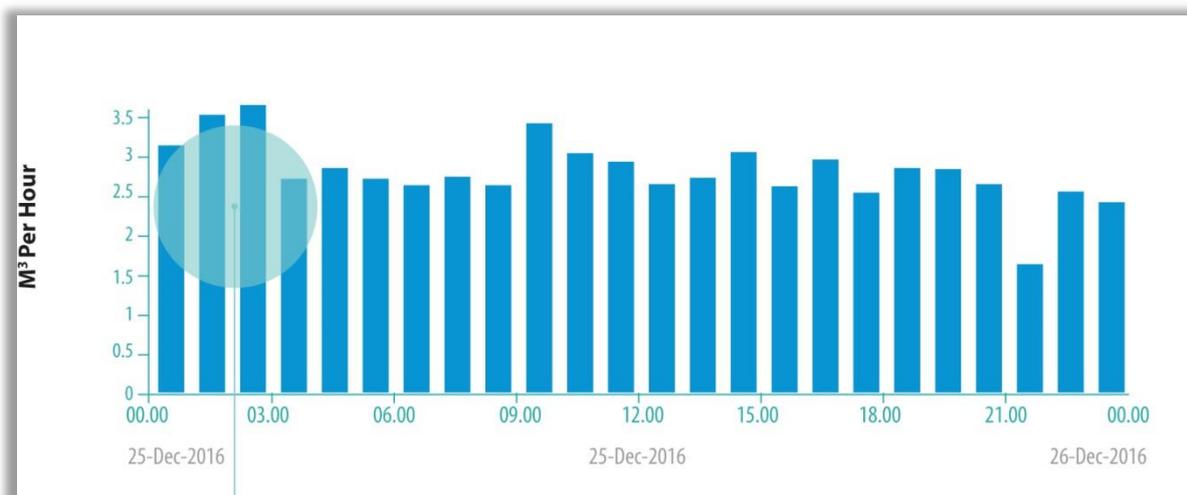


This graphic shows the results for surveys of fixtures and fittings at a Dublin acute hospital carried out during 2016. The potential annual savings associated with this one hospital alone are estimated as €24,000 through reducing the flow rates of taps in the main hospital building. A second such survey was also carried out at another large acute hospital outside Dublin during 2016 indicated potential annual savings of the order of €20,000.

An ongoing, long-term project being run under Green Healthcare involves the measuring and quantification of water use in wards in an acute Dublin hospital on a per bed day basis. This is at the stage of tenders being received for the internal sub-meters.

Establishing profiles for hospitals – examining potential for reducing background use

Through the use of data loggers, usage profiles have been established for a number of hospitals. As an example, the graphic below shows background use for a Dublin acute hospital on Christmas Day 2016. The data collected show there is constant background water use of 2.4m³ per hour at this facility. If this is entirely due to leaks/losses, it corresponds to wastage of 21,000m³ per year, representing a cost of over €40,000. Prompted by such findings, investigations are underway to identify and address high background water usages.



4.2 Local Authority Prevention Network

Introduction

The Local Authority Prevention Network (LAPN) programme has been championing prevention and sustainability issues in local communities since 2005. The primary tenet of LAPN is that prevention and sustainability actions need to occur at a local level. The myriad activities undertaken by LAPN participants are all working towards creating more sustainable communities in Irish society. Some innovative work and models have come out of LAPN, such as:

- work with local hospitals which eventually evolved into the Green Healthcare programme (now co-funded by the HSE);
- work with local farmers and hazardous waste collections, now operated on a national level by the EPA; and
- work on reducing food waste which has culminated in the Forum on Food Waste and associated Food Waste Charter recently launched by the Minister.

The following is an overview of the LAPN activities undertaken by local authorities during 2016.



Festivals



Clare County Council undertook significant work to help green Fleadh Cheoil na hÉireann, held in Ennis in 2016. The Fleadh is to be held there again in 2017. Meanwhile Cork City Council used LAPN funding to green Glow Cork, a Christmas festival that takes place in the city. Donegal County Council took steps to help green the Clonmany Agricultural Show and the Inishowen Food Festival, while Leitrim County Council worked with the Taste of Carrick, and the

Manorhamilton and Ballinamore Agricultural Shows. Longford County Council focussed on greening the Lanesboro Fishing and Food Festival. Both Cork County Council and Tipperary County Council worked on greening various County festivals in 2016.

Working with local business



Limerick City & County Council is undertaking innovative work with a group of local crèches and childcare facilities to see where these businesses can save resources and money. Clare County Council undertook similar work with local Ennis businesses in conjunction with Green Business as part of greening the Fleadh. While done as part of its work under the Fleadh, the aim is to help local businesses make environmental improvements and cost savings beyond the lifetime of the Fleadh. Monaghan County Council continued its long tradition in working on food waste through a programme identifying waste and cost savings with food service companies. This work was also carried out collaboratively in Leitrim and Roscommon. Galway County Council continued its work in helping Galway businesses throughout 2017.

Fostering a repair culture



Individual repair directories have been compiled for Limerick and Roscommon. Wicklow and Galway County are also compiling such directories. A national on-line repair directory is now also being developed. This is being led by Monaghan County Council, in conjunction with Limerick, Galway County, Roscommon, South Dublin, Meath and Wicklow, among other local authorities.

Working with households & communities



Mayo County Council carried out a door-step household food waste survey, as part of its brown bin awareness campaign. Dún Laoghaire-Rathdown County Council ran a series of community food waste workshops and produced an associated calendar with tips for reducing food waste. Donegal County Council is looking at highlighting waste prevention through a waste services app. Galway County Council continued to run its household Hazardous Waste Prevention Programme, while Roscommon County Council produced greener cleaning materials for householders.

Promoting Reuse and Reusable items



Meath County Council worked with car dealers and local coffee retailers promoting reusable cups. Leitrim County Council produced reusable bags for the county, with proceeds to local initiatives. Roscommon is working with the ICA on upcycling and redesign workshops.

Working with Schools



Wicklow County Council ran hazardous waste detectives workshops with schools. Cork County Council is running reuse workshops with schools. Galway County Council is running a schools waste prevention module. Kerry County Council has a textiles upcycling programme with schools. Laois County Council is running a reuse seminar for schools.

Assisting Charity shops



Roscommon County Council is undertaking work with local charity shops to upskill workers on repair and upcycling.

Working to Reduce Food Waste



Food waste has been a signature theme of LAPN for a number of years now and is still of primary importance. LAPN and the Stop Food Waste programme works closely together with local authorities to get the food waste prevention message out to Irish householders and business, as well as implementing Stop Food Waste challenges. A large number of local authorities were undertaking work in relation to food waste in 2016. In particular, a cinema advertisement was produced by Dublin County Council and South Dublin County Council, while Carlow County Council ran a food waste initiative with Clonegal Tidy Towns.

Working with Tidy Towns



Monaghan County Council ran a regional Tidy Towns seminar that focussed in on the waste prevention and sustainability aspect of the Tidy Towns competition. Donegal County Council also ran a Tidy towns seminar for the county on the Sustainable Waste and Resource management category of the competition. Mayo County Council worked with local Tidy Towns groups promoting reusable cups, while Laois County Council had a reuse project with local tidy towns.

Local authority in-house actions



Local authorities continue to take actions in-house to green their day-to-day activities. Leitrim County Council, Mayo County Council, Galway City Council, Galway County Council, and Tipperary County Council have all been working on in-house measures during 2016.

CTC technical support

CTC also continued its technical support to LAPN throughout 2016 – this is summarised in the graphic below.



Waste Prevention in Local Authority Headquarters and at Civic Amenity Centres

Leading by example through the reduction of waste in the Local Authority head quarter buildings (county buildings) is an important policy action within the RWMPs.

B.2.4 Policy action	Maintain, develop and integrate waste prevention measures and systems into all local authority offices and operations to best practice standards.
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The objective is to reduce waste created within local government buildings by 10% over the lifetime of the plan but also to showcase best practice to the community particularly the commercial sector. Each RWMO began piloting distinctive approaches to this task during 2016, with a view to finding the most effective system for the reduction and prevention of the common streams generated; paper, food and green waste, WEEE, bulky waste and general waste. To date the work has included liaising with respective local authority facilities management and gathering baseline data on waste arisings within local authority buildings as well as harmonising proper segregation and use of the three bin system across all local authorities.

Many local authorities are also piloting reuse initiatives at Civic Amenity Centres such as paint and furniture reuse initiatives. An innovative **Reuse Cottage** was established by Limerick City & County Council to promote the reuse of household goods.

Waste Prevention Initiatives in the Regions

A number of waste prevention initiatives were conducted by the WMRs under the common overarching vision articulated in the three Regional Waste Management Plans as well as in specific policy actions contained within those plans, namely:

<p>Policy action B.2.1</p>	<p>Collaborate regionally on prevention initiatives and programmes targeting priority areas to raise awareness of the benefits of prevention and deliver campaigns with more impact and better value for money.</p>
<p>Policy action C.1.3</p>	<p>Engage with the Community Reuse Network Ireland and other similar networks to develop a network of reuse/upcycling activities and promotional events.</p>



Montage of reuse events and initiatives across the three Waste Regions - Eastern-Midlands Waste Region, Connacht-Ulster Waste Region and Southern Waste Region

Reuse Month- October 2016

Reuse Month is a collaborative regional awareness initiative which commenced in October 2016. It was carried out in collaboration with many reuse stakeholders including Community Reuse Network Ireland, Voice of Irish Concern for the Environment Ireland, the Cork Environmental Forum, the Irish Charity Shops Association, Dublin Community Growers, Share Ireland and WEEE Ireland.

The Reuse Month initiative is rooted in both the common overarching vision articulated in the three Regional Waste Management Plans as well as in specific policy actions contained within those plans. The initiative aimed to promote reuse and repair of end of life products and secondary material to as wide an audience as possible. It is intended to run this campaign annually until 2021.

A high profile launch and an aggressive promotion campaign with a cinema advert and the use of a dedicated hashtag (#reuse16) over a number of social media platforms saw Reuse Month trend into the mainstream. The Twitter reach for the #reuse16 hashtag was 55,000. A cinema advert was produced and reached an audience of 388,000 viewers.

Reuse Month was one of the most successful initiatives the sector has ever seen. The awareness raised and the resulting increase in public interest is a significant step towards a more resource-efficient, low carbon society.
Sarah Miller
Rediscovery Centre.

Reuse Month Metrics

Region	Connaught Ulster	Eastern Midlands	Southern
No of Participating Local Authorities	9	12	10
No of Events	35	72	58
No of attendees	1200	2500	2000
No of social Media posts/reach	200 posts	70,000 reach	500 posts

Towards Zero Waste Cashel, Co Tipperary



In 2016 VOICE, a member-based Irish environmental charity, developed a proposal to pilot an Irish Zero Waste community. A number of communities were identified as being suitable and after an initial round of interviews Cashel, Co Tipperary was chosen. Funding for this 18 month pilot has been secured from the EPA Green Enterprise Programme & the DCCAIE. The SRWMO is a lead mentor to the pilot. Project concepts were developed early in 2016 and this involved consulting widely with the local community to gather support and interest in pursuing the following initiatives:

- Set a goal of waste reduction of 25% within one year,
- 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.

Green Christmas

In November and December 2016, the EMWRO led on a Green Christmas campaign to encourage the public to reduce waste and boost recycling rates through better planning, more mindful shopping and by incorporating reuse into their Christmas food preparation and gifting.

Preventing Hazardous Waste

Policy action B.4.1	Promote the prevention of hazardous wastes to households, communities & small businesses building on effective initiatives and disseminating best practice throughout the region.
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Raising awareness on hazardous waste and providing information on non-hazardous alternatives was a priority for the RWMOs and the local authorities in 2016.

Fifteen household hazardous waste collection days were organised in Cork City, Donegal, Dun Laoghaire-Rathdown, Galway City, Galway County, Kilkenny, Limerick, Longford, and Wicklow. The collection days themselves provided the opportunity for education and awareness to the public attending the events. Promotional material used in conjunction with the collection days addressed awareness of the correct method of disposal as well as dealing with prevention e.g. use of non-hazardous alternatives, greener DIY guides and resources such as paint calculators.

5. Managing Hazardous Wastes

5.1 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 Act 1996 as amended. The EPA will carry out a mid-term review of the revised NHWMP in 2017 using data from the National Waste Reports and with the input of the National Waste Prevention Committee (NWPC).

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 key to achieving the Plan's objectives is effective implementation. Some of the key priority areas implemented to date include:

- The inclusion of relevant hazardous NHWMP recommendations within the Regional Waste Management Plans, regional planning guidelines and regional and area development plans in accordance with Sections 22(8) and 26(6) of the Waste Management Act 1996, as amended.
- Organisation and completion of a further 10 farm hazardous waste bring centres during 2016.
- Operation of one-day household hazardous waste collections at 9 civic amenity sites organised through the Regional Waste Management Offices.
- Continuous engagement with priority sectors (pharmaceutical, health, agricultural and household) and communities (e.g. via Local Authority Prevention Network) on hazardous waste prevention activities as detailed in the Plan. A sub-group of the NWPC was established in 2016 to address some of the key issues on hazardous waste prevention.

5.2 Farm Hazardous Waste Collections

In 2016, EPA continued its collaboration with DCCA, Teagasc, and the Department of Agriculture, Food & the Marine to deliver the fourth year of the pilot Farm Hazardous Waste Collection Scheme. The collection events were organised and operated in association with an appointed hazardous waste contractor (ENVA), local authorities, WEEE Ireland and the European Recycling Platform. The campaign was also supported by Bord Bia, IFA, ICMSA, IFFPG, mart owners and agricultural co-operatives & merchants.

Farm Hazardous Waste COLLECTION CENTRES
Protect yourself, your family AND your farm!
 Make your farm a safer place by using these low cost hazardous waste collection centres for the safe disposal of your farm hazardous wastes.

OCTOBER & NOVEMBER 2016

€2/KG (incl. VAT 13%)
 Pesticides and bioherbicides
 Veterinary medicines
 Stains, oils, solvents
 Dry clean & mastic tubes
 Needles and syringes
 Waste paints
 Aerosols
 Corrosives (acids, detergents)
 Oil and air filters
 Oil wastes
 Brake fluid
 Brake pads
 Antifreeze
 Adhesives
 Coolants
 Grease cartridges
 Creosote

FREE
 Waste engines and hydraulic oil
 WEEE (Electrical & Electronic Equipment)
 TNA
 Computers
 Fridges
 Power tools, bottles
 Fluorescent lamps & CFLs

€4/KG (incl. VAT 13%)
 All empty plastic & metal containers whether contaminated or not. Space will include:
 - 1 litre
 - 5 litre
 - 10 litre
 - 20 litre
 - 25 litre
 - 200 litre

FREE
 All items not including tractor, car, fence, portable

Collection centres will open from 9.30am to 3.30pm

Wicklow
 Curlew Mart
 21st October 2016

Cork (West)
 Salsburgh Mart
 26th October 2016

Cork (North)
 Fermoy Mart
 2nd November 2016

Kildare
 Kilsheen Mart
 9th November 2016

Kerry
 Miltown Mart
 17th November 2016

Limerick
 Drumshanbo Mart
 14th November 2016

Roscommon
 Roscommon Town Co. Council (2nd Moyneen Mart)
 11th November 2016

Westmeath
 Derrin Mart
 22nd November 2016

Monaghan
 Ballyboy Mart
 25th November 2016

Meath
 Drummonds Yard, Navan
 20th November 2016

For queries
 LoCall: 1890 33 55 99
www.epa.ie
 or contact your local Teagasc office

Since 2013, almost 7,000 farmers have used the 36 hazardous waste collection centres. Farmers have paid €2/kg for the disposal of hazardous waste, and wastes collected included expired pesticides, veterinary products, machine oil, lead batteries and WEEE. 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.

For 2016, the main hazardous waste types presented at the bring centres were: Engine & Hydraulic Oils (359 tonnes); Pesticides (61 tonnes, which includes 1,526 kg of Persistent Organic Pollutants), Paint (43 tonnes); Veterinary Medicines & Needles (40 tonnes); Contaminated Empty Containers (35 tonnes); Oil Filters

(21 tonnes); and Corrosives (7 tonnes). Smaller quantities of other hazardous wastes were also collected such as aerosols, adhesives, coolant, grease cartridges, creosote (11 tonnes in total).

To date, this pilot to date has facilitated the removal of 800 tonnes of hazardous waste from farms, and demonstrated a viable approach for assisting farmers in disposal and appropriate management of these wastes. The campaign has received strong support from farmers who demonstrated their willingness to contribute financially to the environmentally sound management of their waste when presented with a practical and accessible opportunity to do so.

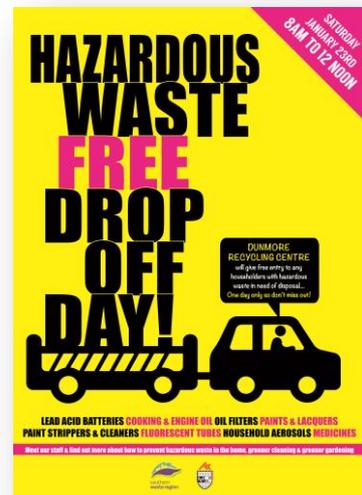
The campaign has also confirmed that there are substantial quantities of farm hazardous waste present on farms (both legacy and current) which pose a potential risk to farmers, their livestock, their livelihood, and the environment. There is clear evidence following the 4 years of collections at 36 centres across the country that there is a requirement for a suitable, sustainable, equitable and affordable national scheme for the collection of farm hazardous waste. Following the success of the pilot scheme, the relevant stakeholders are assessing long term solutions for the provision of such a scheme.



5.3 Household hazardous waste collections

As reported in Chapter-4, the three Regional Waste Management Offices hosted one-day household hazardous waste collections in selected counties - funded by DCCAE. Over 55 tonnes of potentially hazardous waste was collected in 9 counties. Wastes collected include: paint, waste oil, herbicides, pesticides and out of date medicines.

Householders and small businesses can be unaware of the types of hazardous waste they produce or how it should be managed and they should be informed through on-going information campaigns of the hazardous waste collection services available in their area. Awareness raising campaigns, utilising various media platforms, were conducted by the regions in the lead up to, during and after the one-day collections. It is expected that funding will be made available during 2017 to run further collections for householders.



6. Waste Reporting & Statistics

The EPA supports the successful implementation of the National Waste Prevention Programme through the publication of national waste statistics.

6.1 EU Waste Targets

The EPA produces statistics on the generation and management of waste. See www.epa.ie/pubs/reports/waste/stats/ for the latest published data.

In 2014 (the most recent reference year for which data have been submitted to the European Commission), Ireland achieved targets under various EU Directives:

- **End-of-life vehicles (ELVs).** Ireland met the ELV Directive targets in 2014, with 82% reuse and recycling and 91% reuse and recovery of ELVs. Higher targets came into effect in January 2015. Ireland is at risk of not achieving the higher targets based on current treatment of ELVs.
- **Waste Electrical and Electronic Equipment (WEEE).** Ireland met the WEEE Directive targets for collection, reuse, recycling and recovery in 2014. 7.2kg household WEEE was collected per person in Ireland in 2014. 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 2014. The EU's Circular Economy legislative proposals currently under negotiation propose higher recycling targets for waste packaging.
- **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 2014.

Data for reference year 2015 is currently being compiled by the EPA. Most reporting deadlines for reference year 2015 fall on 30th June 2017.

6.2 Waste Statistics Regulation

Every two years, Member States are obliged to report on waste generated across all NACE economic sectors and households and on waste finally treated within the State. The latest reference year reported is 2014. The EPA works with the Central Statistics Office on the Waste Statistics Regulation reporting obligation (No. 2150/2002). It is estimated that 15 million tonnes of waste was generated and 10 million tonnes of waste was finally treated in Ireland in 2014. Some wastes are exported for final treatment due to the lack of treatment infrastructure in Ireland (e.g. paper mill, smelter, hazardous waste incineration). It should be noted however that much glass and metal waste reaches

end-of-waste status under published EU end-of-waste criteria and therefore these wastes are now counted as recycled in Ireland and exported as a product, whereas previously they were exported as waste. Eurostat publishes the data for all Member States on their Environmental Data Centre on Waste <http://ec.europa.eu/eurostat/web/waste>.

6.3 Municipal Waste Characterisation

A new national municipal waste characterisation study commenced in December 2016 through the support of the DCCAÉ. It is anticipated that a final report on the study will be published by Spring 2018. The last study was carried out in 2008, so the need for this new study was well recognised.

6.4 Hazardous Waste

Because of the potential impacts on environmental and human health, hazardous waste is subject to strict regulatory control. The prevention and reduction of hazardous waste generation and to strive for self-sufficiency in its management are objectives on Ireland's National Hazardous Waste Management Plan. To support the NHWMP, the EPA published a data release on hazardous waste management in Ireland in 2014. In that year, 328 ktonnes of hazardous waste was managed; 44% was exported, 27% was treated on-site of generation and 29% was sent to commercial hazardous waste treatment facilities in the State. Waste solvents, waste oils and sludges and waste containing minerals accounted for more than three quarters of hazardous waste treated in Ireland. For further details, please see www.epa.ie/pubs/reports/waste/stats/.

7. Communicating & Networking

7.1 Communicating the Outputs

Communication continues to be essential for the continued success of the many programmes under the NWPP. Each programme continues to engage audiences through a wide range of digital media and peer-to-peer learning's in order to maximise outreach. The NWPP ensures information from programmes is readily available and easy to engage with; providing the tools, information, support and technologies necessary to enable best practice resource efficiency.

7.2 BeGreen.ie and media

In 2014 the EPA developed the BeGreen umbrella which enables easy access to the diverse programmes of the NWPP. BeGreen portal provides a one-stop area for all programme users from public sectors, agriculture, businesses, home owners and communities. Programmes within the NWPP provide ample tools, support and resources so that users can easily get involved in implementing waste prevention activities.

In 2016 the NWPP expanded the BeGreen digital presence by teaming with EPA Waste Statistics to deliver timely information on waste statistics and prevention programmes. The @EPAWasteRes¹⁸ twitter account was created along with an EPA Waste & Resources YouTube channel¹⁹. Videos are excellent tools for engaging audiences and continue to grow in popularity across all digital media platforms.

A key part of our on-going outreach includes sponsorship of the 'EcoEye' television series. In 2016 Series 14 focused on key topics such as 'economic and environmental benefits of using invaluable resources wisely'²⁰. The EPA continued to issue press releases on waste prevention in 2016 and many of the programmes continued to be covered through articles in national and regional papers as well as through TV & radio coverage²¹.



¹⁸ <https://twitter.com/EPAWasteRes>

¹⁹ <https://www.youtube.com/channel/UCROj8BE7o4X-hBnGMB0GBxA>

²⁰ <http://www.rte.ie/player/ie/show/eco-eye-1112/10724873/?ap=1>

²¹ <https://www.youtube.com/watch?v=F7jHptAnRQE>

7.3 Sponsorships, Awards

The NWPP also looks to celebrate success and to spread the message of resource efficiency by sponsoring appropriate awards and events. Some of the initiatives supported in 2016 include:

National CSR Awards

Green Awards

Irish Charity Shops Association Annual Conference

EnviroCom Awards

Tidy Towns Waste Prevention Awards



7.4 Circular Economy Workshop

In September, the EPA hosted a workshop on the Circular Economy in Ireland in light of existing actions and interventions such as Towards a Resource Efficient Ireland 2014 - 2020, National Waste Prevention Programme and the new EU Circular Economy Package. The key aims were to co-create a shared document on current activities & potential actions while providing an opportunity to network and share experiences, explore possibility of future events, action plans regarding the Circular Economy in Ireland. The workshop involved 38 individuals from 27 national organisations including:

- Department of Communications, Climate Action and Environment
- Department of Jobs, Enterprise and Innovation
- Chambers Ireland
- Local Authorities (Dublin City, Galway and Clare County)

This workshop highlighted a number of issues with regards the transition to a Circular Economy in Ireland and the existing Circular Economy innovation system. For example, it highlighted that:

- There are were a number of relevant stakeholders already working on aspects of the Circular Economy in Ireland
- There is a strong focus on certain issues such as advocacy and awareness, knowledge exchange
- There is less of a focus on finance, enterprise support, skills and education.

Another key issue that the workshop highlighted was that while there is some research activity, mainly funded through EPA's Research Programme 2014-2020 and Horizon 2020, there were no dedicated research centres or centres of expertise on the Circular Economy.

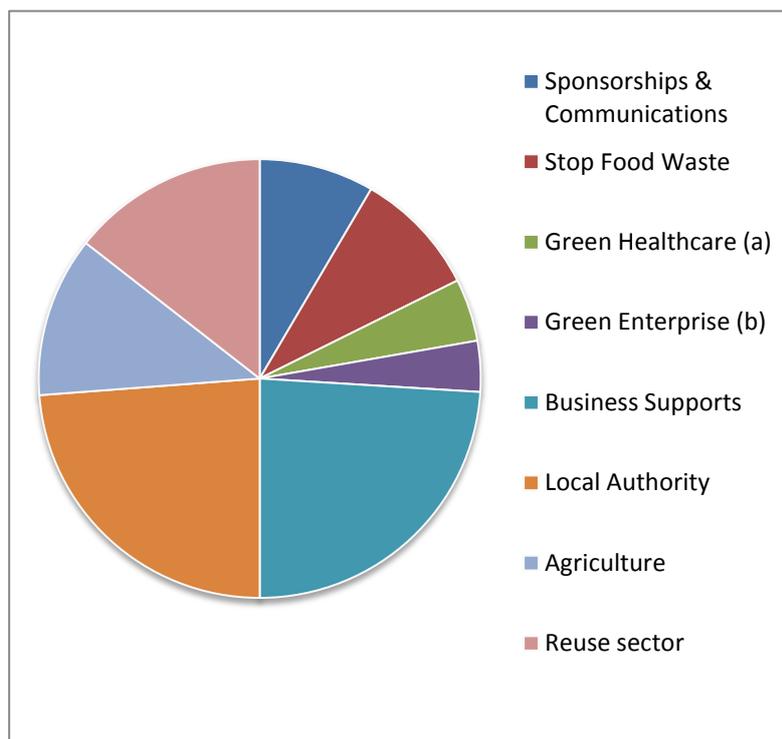
8. Governance & Finances

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, and the Terms of Reference are provided in Appendix B of this report. The group meets twice per year to review ongoing activities and to provide guidance on future priorities. The Agendas and Minutes of the meetings of this committee are made available via the EPA website.

In addition, regular contact 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 will be used from 2017 onwards 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 2016. 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 majority of funding for the Green Enterprise programme is provided by EPA's research programme.



In terms of financial probity, the public monies provided to fund the activities of 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 DCCAE 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.

Appendix A

National Waste Prevention Committee: Membership (2016)

- Environmental Protection Agency
- Department of Communications, Climate Action & Environment
- Department of Agriculture, Food & the Marine
- Department of Jobs, Enterprise & Innovation
- Chambers Ireland
- Chartered Institute of Wastes Management
- Clean Technology Centre
- Community Reuse Network Ireland
- Connacht-Ulster Waste Region
- Eastern Midlands Waste Region
- Engineers Ireland
- Enterprise Ireland
- Health Services Executive
- Ibec
- IDA Ireland
- Irish Farmers Association
- Irish Waste Management Association
- Small Firms Association
- Southern Waste Region
- VOICE / Environmental NGOs

Appendix B

National Waste Prevention Committee: Terms of Reference (2016)

- Monitor the development and implementation of the National Waste Prevention Programme;
- Monitor the implementation, by relevant public authorities, of National Hazardous Waste Management Plan recommendations;
- Advise and provide strategic direction to the Core Prevention Team in developing and driving the National Waste Prevention Programme;
- Provide input to the Environmental Protection Agency for the purpose of section 26(6) of the 1996 Waste Management Act;
- Identify priorities for action and make recommendations to relevant public authorities and private bodies;
- Consider and make recommendations to the Minister of Communications, Climate Action & Environment regarding appropriate policy and legislative initiatives;
- Have regard to national, European Union and international policy and legislation and best practice in relation to waste prevention and hazardous waste management;
- Facilitate, support and promote co-ordination and liaison between relevant bodies, public and private, on the National Waste Prevention Programme and the National Hazardous Waste Management Plan;
- Consider and make recommendations to relevant bodies regarding public awareness requirements in relation to hazardous waste and the prevention of waste;
- Monitor and evaluate new research and data on waste prevention, trends in hazardous and non-hazardous waste production and waste management practices;
- Consider and make recommendations to the Environmental Protection Agency and the Department of Communications, Climate Action & Environment on research priorities;
- Monitor progress in sectoral producer responsibility initiatives;
- Disseminate information on best practice in waste prevention and hazardous waste management;
- Consider and make recommendations to relevant bodies regarding the provision of funding to support implementation of the National Waste Prevention Programme and the National Hazardous Waste Management Plan; and
- Prepare and submit to the Minister of Communications, Climate Action & Environment an annual report outlining progress on the implementation of the National Waste Prevention Programme and the National Hazardous Waste Management Plan.

Appendix C: Progress towards EU waste recycling, recovery & diversion targets (January 2017)

Directive	Title	Article	Targets		Current progress to target in Ireland	Indicator	
			Target date	Specifics			
94/62/EC as amended	Packaging Directive ²²	6(1)	31-12-2011	60% as a minimum by weight of packaging waste will be recovered or incinerated at waste incineration plants with energy recovery.	88%	Achieved	
				55% as a minimum by weight of packaging waste will be recycled.	70%	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;	80%	Achieved	
				(ii) 60% by weight for paper and board;	79%	Achieved	
				(iii) 50% by weight for metals;	79%	Achieved	
(iv) 22.5% by weight for plastics, counting exclusively material that is recycled back into plastics;	40%	Achieved					
(v) 15% by weight for wood.	82%	Achieved					
2002/96/EC	WEEE Directive ²³	5(5)	(31-12-2006) 31-12-2008 ²⁴	Separate collection of > 4kg of WEEE from private households per person per year.	7.2 kg	Achieved	
		7(2)		For large household appliances:-			
				- recovery shall be increased to a minimum of 80% by an average weight per appliance; and	83%	Achieved	
				- component, material and substance reuse and recycling shall be increased to a minimum of 75% by an average weight per appliance.	83%		
7(2)	For small household appliances:-						
	- the rate of recovery shall be increased to a minimum of 70% by an average weight per appliance; and	88%	Achieved				
- component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance.	81%						

²² 2013 data, most recent reported to European Commission.

²³ 2014 data, most recent reported to European Commission.

²⁴ Ireland secured a two-year derogation.

Directive	Title	Article	Targets		Current progress to target in Ireland	Indicator
			Target date	Specifics		
2002/96/EC	WEEE Directive ²³			For IT and telecommunications equipment:- <ul style="list-style-type: none"> - the rate of recovery shall be increased to a minimum of 75% by an average weight per appliance; and - component, material and substance reuse and recycling shall be increased to a minimum of 65% by an average weight per appliance. 	95%	Achieved
				For consumer equipment:- <ul style="list-style-type: none"> - the rate of recovery shall be increased to a minimum of 75% by an average weight per appliance; and - component, material and substance reuse and recycling shall be increased to a minimum of 65% by an average weight per appliance. 	86%	Achieved
			(31-12-2006) 31-12-2008 ²⁴	For lighting equipment:- <ul style="list-style-type: none"> - the rate of recovery shall be increased to a minimum of 70% by an average weight per appliance; and - component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance. 	89%	Achieved
				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.	88%	Achieved
				For electrical & electronic tools:- <ul style="list-style-type: none"> - the rate of recovery shall be increased to a minimum of 70% by an average weight per appliance; and - component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance. 	91%	Achieved
			For toys, leisure and sports equipment:- <ul style="list-style-type: none"> - the rate of recovery shall be increased to a minimum of 70% by an average weight per appliance; and - component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance. 	92%	Achieved	
		84%				
For medical devices:- <ul style="list-style-type: none"> - the rate of recovery shall be increased to a minimum of 70% by an average weight per appliance; and - component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance. 	92%	Achieved				
			84%			

Directive	Title	Article	Targets		Current progress to target in Ireland	Indicator
			Target date	Specifics		
				For monitoring and control instruments:- <ul style="list-style-type: none"> - the rate of recovery shall be increased to a minimum of 70% by an average weight per appliance; and - component, material and substance reuse and recycling shall be increased to a minimum of 50% by an average weight per appliance. 	92%	Achieved
					84%	
				For automatic dispensers:- <ul style="list-style-type: none"> - recovery shall be increased to a minimum of 80% by an average weight per appliance; and - component, material and substance reuse and recycling shall be increased to a minimum of 75% by an average weight per appliance. 	86%	Achieved
					85%	
2000/53/EC	End of Life Vehicles Directive ²⁵	7(2)(a)	1-1-2006	Reuse and recovery to a minimum of 85% by average weight of vehicle and year.	91%	Achieved
				Reuse and recycling to a minimum of 80% by average weight of vehicle and year.	82%	Achieved
		7(2)(b)	1-1-2015	Reuse and recovery to a minimum of 95% by average weight of vehicle and year.	(91%)	Risk Due January 2015
				Reuse and recycling to a minimum of 85% by average weight of vehicle and year.	(82%)	Risk Due January 2015
2006/66/EC	Batteries Directive	10(2)	31-12-11	Minimum 25% collection rate for batteries & accumulators.	29% ²⁶	Achieved
			26-9-2016	Minimum 45% collection rate for batteries & accumulators.	(33%) ²⁷	Risk Due September 2016

²⁵ 2014 data, most recent reported to European Commission. Deadline for reporting 2015 data to European Commission is 30 June 2017.

²⁶ Collection rate for 2011, target year.

²⁷ 2015 data, most recent reported to the European Commission. Deadline for reporting 2016 data is 30th June 2017.

Directive	Title	Article	Targets		Current progress to target in Ireland	Indicator
			Target date	Specifics		
				Recycling processes shall achieve the following minimum recycling efficiencies:		
		12(4)	26-9-2011	(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;	90% ²⁷	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	78% ²⁷	Achieved
				(c) recycling of 50 % by average weight of other waste batteries and accumulators.	83% ²⁷	Achieved
1999/31/EC	Landfill Directive	5(2)	(16-7-2006) 16-7-2010 ²⁸	Biodegradable municipal waste going to landfills must be reduced to 75% of the total quantity (by weight) biodegradable municipal waste produced in 1995 (< 916,000 t)	860,000 t ²⁹	Achieved
			(16-7-2009) 16-7-2013	Biodegradable municipal waste going to landfills must be reduced to 50% of the total quantity (by weight) biodegradable municipal waste produced in 1995 (< 610,000 t)	380,800 t ³⁰	Achieved
			16-7-2016	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)	(366,000 t) ³⁰	On track Due July 2016
2008/98/EC	Waste Framework Directive	11(2)(a)	12-12-2020	Preparing for reuse and recycling of 50% by weight of household derived paper, metal, plastic & glass (<i>includes metal and plastic estimates from household WEEE</i>).	45% ³¹	On track Due December 2020
		11(2)(b)	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 waste (excluding natural soils & stone)	91% ³²	Achieved
		29	12-12-2013	Establishment of a National Waste Prevention Programme (NWPP)	NWPP established in 2004	Achieved

²⁸ Ireland secured a four-year derogation on first and second targets.

²⁹ Biodegradable Municipal Waste tonnage disposed to landfill in 2010.

³⁰ Pro-rata estimate of Biodegradable Municipal Waste tonnage disposed to landfill in 2016 based on Q1 and Q2 2016 data.

³¹ 2014 data, most recent reported to the European Commission.

³² 2012 data, most recent reported to the European Commission.

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: Soláthraimid 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 leasúcháin.
- 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 chomhshaoil 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.



Headquarters
PO Box 3000, Johnstown Castle Estate
County Wexford, Y35 W821, Ireland
Bosca Poist 3000, Eastát Chaisleán Bhaile Sheáin Contae Loch
Garman, Y35 W821, Éire

T: +353 53 9160600
F: +353 53 9160699
E: info@epa.ie
W: www.epa.ie
Lo Call: 1890 33 55 99

EPA Regional Inspectorate Dublin
McCumiskey House
Richview
Clonskeagh Road
Dublin 14
D14 YR62
Tel: 01-268 0100
Fax: 01-268 0199

EPA Regional Inspectorate Cork
Inniscarra
Co. Cork
P31 VX59
Tel: 021-4875540
Fax: 021-4875545

EPA Regional Inspectorate Castlebar
John Moore Road
Castlebar
Co. Mayo
F23 KT91
Tel: 094-9048400
Fax: 094-9021934

EPA Regional Inspectorate Kilkenny
Seville Lodge
Callan Road
Kilkenny
R95 ED28
Tel: 056-7796700
Fax: 056-7796798

EPA Regional Inspectorate Monaghan
The Glen
Monaghan
H18 YT02
Tel: 047-77600
Fax: 047-84987

E: info@epa.ie
W: www.epa.ie
LoCall: 1890 33 55 99

